



# PACKAGE AIR CONDITIONERS

FORM NO. STZ-933

## TZAC-3\*\*JA SUPER HIGH EFFICIENCY 13-SEER SERIES NOMINAL SIZES 2-5 TONS [7.0-17.6 kW]



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

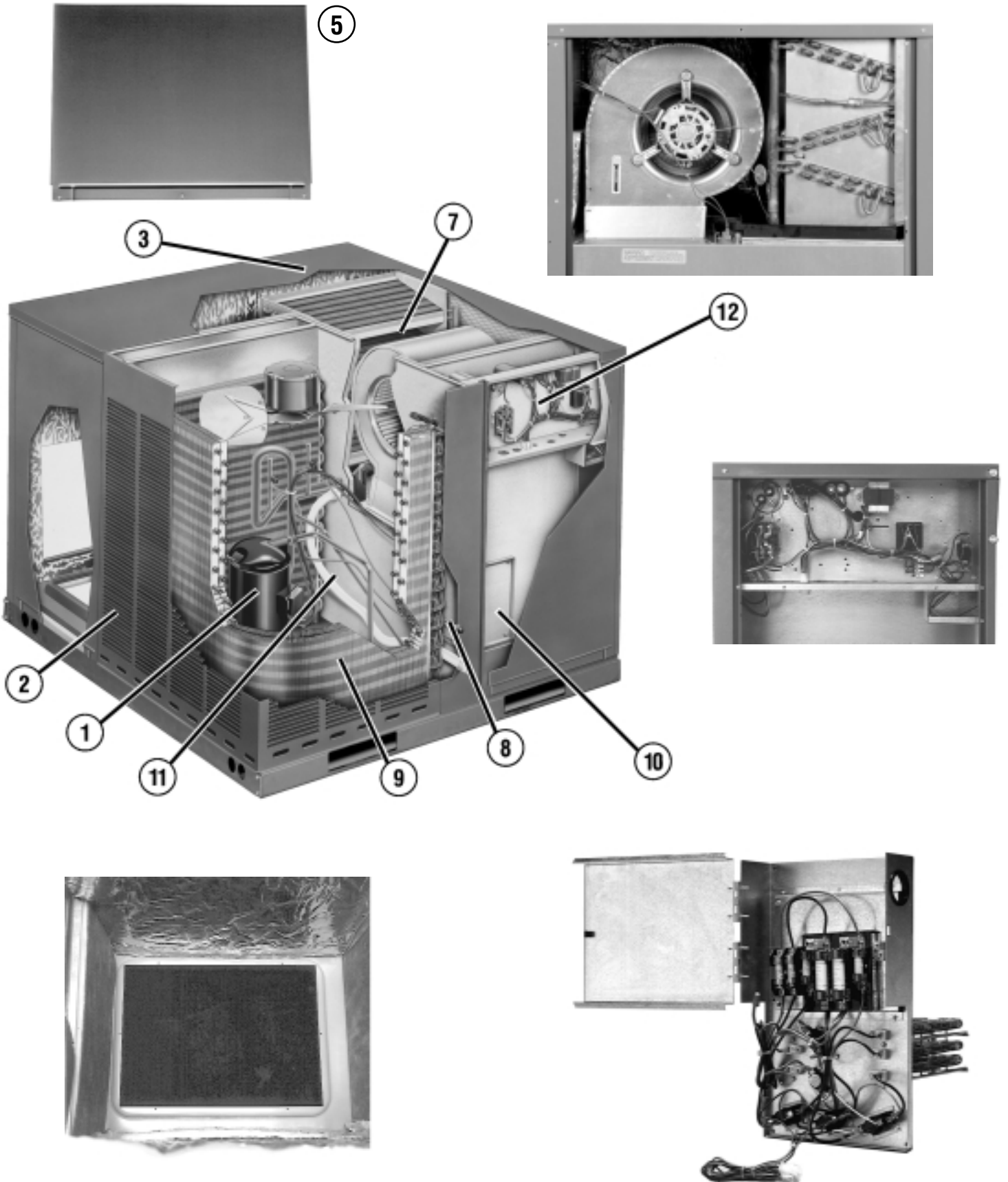


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*These quality features are included in the Thermal Zone® Package Air Conditioner*



## UNIT FEATURES & BENEFITS—TZAC- SERIES



### Features Below Correspond to Photos on Page 3

1. All models feature Scroll® compressors for maximum efficiency and quiet operation.
2. Louvered condenser compartment for protecting the coil against yard hazards and/or weather extremes.
3. One-piece top with a drip lip to help keep water off of the unit sides.
4. Supply and return air openings feature a one-inch tall flange to prevent water migration into the ductwork.
5. Access panels have “weep holes” and channels to further help manage water run-off.
6. Side and down discharge conversion available on all models.
7. Easily accessible blower section complete with slide-out blower.
8. Refrigerant connections are conveniently located for easy service diagnostics.
9. Condenser and evaporator coils feature enhanced fins for better heat transfer and rifled copper tubing for greater efficiency.
10. Supplemental electric heat strips up to 15 kW are available (field installed) for periods of extreme cold temperatures. Single point wiring makes installation even easier.
11. All units feature an internal trap on the condensate line eliminating the need for installing an on-site external trap.
12. Easily accessible control box.

# MODEL IDENTIFICATION—TZAC- SERIES



<u>TZ</u>	<u>A</u>	<u>C</u> — <u>3</u>	<u>24</u>	<u>J</u>	<u>A</u>
THERMAL ZONE®	AIR CONDITIONING	CONVERTIBLE 3 = 13 SEER	COOLING CAPACITY	ELECTRICAL DESIGNATION	CABINET REFRIGERANT
			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]	J = 208-230V —1PH—60Hz C = 208-230V —3PH—60Hz	A = R-22

# GENERAL DATA—TZAC- SERIES

## NOMINAL SIZES 2-5 TONS [7.0-17.6 kW]

Model TZAC- Series	324JA	330JA	336CA	336JA
<b>Cooling Performance<sup>1</sup></b>				<b>CONTINUED</b> →
Gross Cooling Capacity Btu [kW]	24,800 [7.27]	31,200 [9.14]	37,400 [10.96]	37,400 [10.96]
EER/SEER <sup>2</sup>	11.8/13	11.1/13	11.7/13	11.7/13
Nominal CFM/ARI Rated CFM [L/s]	800/800 [378/378]	1000/1000 [472/472]	1200/1200 [566/566]	1200/1200 [566/566]
ARI Net Cooling Capacity Btu [kW]	24,000 [7.03]	30,000 [8.79]	36,000 [10.55]	36,000 [10.55]
Net Sensible Capacity Btu [kW]	17,170 [5.03]	20,980 [6.15]	25,740 [7.54]	25,740 [7.54]
Net Latent Capacity Btu [kW]	6,830 [2]	9,020 [2.64]	10,260 [3.01]	10,260 [3.01]
Net System Power kW	2.04	2.7	3.07	3.07
<b>Compressor</b>				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
<b>Outdoor Sound Rating (dB)<sup>3</sup></b>	76	76	76	76
<b>Outdoor Coil—Fin Type</b>	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	10.56 [0.98]	10.56 [0.98]	14.8 [1.37]	14.8 [1.37]
Rows / FPI [FPcm]	1 / 18 [7]	1 / 18 [7]	1 / 22 [9]	1 / 22 [9]
<b>Indoor Coil—Fin Type</b>	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	5.54 [0.51]	5.54 [0.51]	5.54 [0.51]	5.54 [0.51]
Rows / FPI [FPcm]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
<b>Outdoor Fan—Type</b>	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	2500 [1180]	2500 [1180]	2700 [1274]	2700 [1274]
No. Motors/HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP
Motor RPM	1075	1075	1075	1075
<b>Indoor Fan—Type</b>	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/9x7 [229x178]	1/10x9 [254x229]	1/10x9 [254x229]	1/10x9 [254x229]
Drive Type/No. Speeds	Direct/2	Direct/3	Direct/3	Direct/3
No. Motors	1	1	1	1
Motor HP	1/4	1/2	1/2	1/2
Motor RPM	1075	1075	1075	1075
Motor Frame Size	48	48	48	48
<b>Filter—Type</b>	Field Supplied	Field Supplied	Field Supplied	Field Supplied
Furnished	No	No	No	No
(No.) Size Recommended in. [mm]	(1)1x20x20 [25x508x508]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]
<b>Refrigerant Charge Oz. [g]</b>	69.6 [1973]	72 [2041]	83.2 [2359]	83.2 [2359]
<b>Weights</b>				
Net Weight lbs. [kg]	381 [173]	399 [181]	412 [187]	412 [187]
Ship Weight lbs. [kg]	421 [191]	439 [199]	452 [205]	452 [205]

See Page 9 for Notes.

[ ] Designates Metric Conversions

## NOMINAL SIZES 2-5 TONS [7.0-17.6 kW]

Model TZAC- Series	342CA	342JA	348CA	C48JA
<b>Cooling Performance<sup>1</sup></b>				<b>CONTINUED</b> →
Gross Cooling Capacity Btu [kW]	42,500 [12.45]	42,500 [12.45]	50,000 [14.65]	50,000 [14.65]
EER/SEER <sup>2</sup>	11.5/13	11.5/13	11.4/13	11.4/13
Nominal CFM/ARI Rated CFM [L/s]	1400/1350 [661/637]	1400/1350 [661/637]	1600/1550 [755/731]	1600/1550 [755/731]
ARI Net Cooling Capacity Btu [kW]	41,000 [12.01]	41,000 [12.01]	48,000 [14.06]	48,000 [14.06]
Net Sensible Capacity Btu [kW]	28,510 [8.35]	28,510 [8.35]	34,020 [9.97]	34,020 [9.97]
Net Latent Capacity Btu [kW]	12,490 [3.66]	12,490 [3.66]	13,980 [4.1]	13,980 [4.1]
Net System Power kW	3.57	3.57	4.18	4.18
<b>Compressor</b>				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
<b>Outdoor Sound Rating (dB)<sup>3</sup></b>	76	76	78	78
<b>Outdoor Coil—Fin Type</b>	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	16.65 [1.55]	16.65 [1.55]	16.23 [1.51]	16.23 [1.51]
Rows / FPI [FPcm]	1 / 22 [9]	1 / 22 [9]	1 / 22 [9]	1 / 22 [9]
<b>Indoor Coil—Fin Type</b>	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	7.39 [0.69]	7.39 [0.69]	7.39 [0.69]	7.39 [0.69]
Rows / FPI [FPcm]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
<b>Outdoor Fan—Type</b>	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	3500 [1652]	3500 [1652]	3300 [1557]	3300 [1557]
No. Motors/HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP
Motor RPM	1075	1075	1075	1075
<b>Indoor Fan—Type</b>	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/10x9 [254x229]	1/10x9 [254x229]	1/10x9 [254x229]	1/10x9 [254x229]
Drive Type/No. Speeds	Direct/3	Direct/3	Direct/3	Direct/3
No. Motors	1	1	1	1
Motor HP	1/2	1/2	3/4	3/4
Motor RPM	1075	1075	1050	1050
Motor Frame Size	48	48	48	48
<b>Filter—Type</b>	Field Supplied	Field Supplied	Field Supplied	Field Supplied
Furnished	No	No	No	No
(No.) Size Recommended in. [mm]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]
<b>Refrigerant Charge Oz. [g]</b>	104 [2948]	104 [2948]	97.6 [2767]	97.6 [2767]
<b>Weights</b>				
Net Weight lbs. [kg]	422 [191]	422 [191]	481 [218]	490 [222]
Ship Weight lbs. [kg]	462 [210]	462 [210]	492 [223]	501 [227]

See Page 9 for Notes.

[ ] Designates Metric Conversions

# GENERAL DATA—TZAC- SERIES

## NOMINAL SIZES 2-5 TONS [7.0-17.6 kW]

Model TZAC- Series	360CA	C60JA
<b>Cooling Performance<sup>1</sup></b>		
Gross Cooling Capacity Btu [kW]	60,000 [17.58]	60,000 [17.58]
EER/SEER <sup>2</sup>	11.1/13	11.1/13
Nominal CFM/ARI Rated CFM [L/s]	2000/1850 [944/873]	2000/1850 [944/873]
ARI Net Cooling Capacity Btu [kW]	58,000 [16.99]	58,000 [16.99]
Net Sensible Capacity Btu [kW]	40,560 [11.88]	40,560 [11.88]
Net Latent Capacity Btu [kW]	17,440 [5.11]	17,440 [5.11]
Net System Power kW	5.2	5.2
<b>Compressor</b>		
No./Type	1/Scroll	1/Scroll
<b>Outdoor Sound Rating (dB)<sup>3</sup></b>		
	78	78
<b>Outdoor Coil—Fin Type</b>		
	Louvered	Louvered
Tube Type	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	16.23 [1.51]	16.23 [1.51]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]
<b>Indoor Coil—Fin Type</b>		
	Louvered	Louvered
Tube Type	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	7.39 [0.69]	7.39 [0.69]
Rows / FPI [FPcm]	2 / 15 [6]	2 / 15 [6]
Refrigerant Control	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]
<b>Outdoor Fan—Type</b>		
	Propeller	Propeller
No. Used/Diameter in. [mm]	1/22 [558.8]	1/22 [558.8]
Drive Type/No. Speeds	Direct/1	Direct/1
CFM [L/s]	3300 [1557]	3300 [1557]
No. Motors/HP	1 at 1/3 HP	1 at 1/3 HP
Motor RPM	1075	1075
<b>Indoor Fan—Type</b>		
	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/12x9 [305x229]	1/12x9 [305x229]
Drive Type/No. Speeds	Direct/3	Direct/3
No. Motors	1	1
Motor HP	1	1
Motor RPM	1075	1075
Motor Frame Size	48	48
<b>Filter—Type</b>		
	Field Supplied	Field Supplied
Furnished	No	No
(No.) Size Recommended in. [mm]	(1)1x24x30 [25x610x762]	(1)1x24x30 [25x610x762]
<b>Refrigerant Charge Oz. [g]</b>		
	145.6 [4128]	145.6 [4128]
<b>Weights</b>		
Net Weight lbs. [kg]	540 [245]	540 [245]
Ship Weight lbs. [kg]	585 [265]	585 [265]

See Page 9 for Notes.

[ ] Designates Metric Conversions



### NOTES:

1. Cooling Performance is rated at 95° F ambient, 80° F entering dry bulb, 67° F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to  $\pm 20\%$  of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on ARI Standard 210/240 or 360.
2. EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.
3. Outdoor Sound Rating shown is tested in accordance with ARI Standard 270.

# SYSTEMS PERFORMANCE—TZAC- SERIES

## GROSS SYSTEMS PERFORMANCE DATA—TZAC-324

		ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①									
wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]			
CFM [L/s]		880 [415]	800 [378]	680 [321]	880 [415]	800 [378]	680 [321]	880 [415]	800 [378]	680 [321]	
DR ①		.21	.20	.18	.21	.20	.18	.21	.20	.18	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW] Sens BTUH [kW] Power	28.9 [8.47] 16.2 [4.75] 1.4	28.4 [8.32] 15.4 [4.51] 1.3	27.6 [8.09] 14.4 [4.22] 1.3	27.3 [8.00] 19.5 [5.71] 1.3	26.8 [7.85] 18.6 [5.45] 1.3	26.1 [7.65] 17.3 [5.07] 1.3	25.0 [7.33] 22.0 [6.45] 1.3	24.6 [7.21] 21.1 [6.18] 1.3	23.9 [7.00] 19.6 [5.74] 1.3
	80 [26.7]	Total BTUH [kW] Sens BTUH [kW] Power	28.9 [8.47] 16.1 [4.72] 1.5	28.4 [8.32] 15.4 [4.51] 1.5	27.6 [8.09] 14.3 [4.19] 1.4	27.2 [7.97] 19.5 [5.71] 1.5	26.8 [7.85] 18.6 [5.45] 1.4	26.0 [7.62] 17.3 [5.07] 1.4	25.0 [7.33] 22.0 [6.45] 1.4	24.5 [7.18] 21.0 [6.15] 1.4	23.9 [7.00] 19.6 [5.74] 1.4
	85 [29.4]	Total BTUH [kW] Sens BTUH [kW] Power	28.5 [8.35] 16.0 [4.69] 1.6	28.0 [8.21] 15.3 [4.48] 1.6	27.2 [7.97] 14.2 [4.16] 1.5	26.9 [7.88] 19.3 [5.66] 1.6	26.4 [7.74] 18.5 [5.42] 1.6	25.7 [7.53] 17.2 [5.04] 1.5	24.6 [7.21] 21.9 [6.42] 1.5	24.1 [7.06] 20.9 [6.13] 1.5	23.5 [6.89] 19.5 [5.71] 1.5
	90 [32.2]	Total BTUH [kW] Sens BTUH [kW] Power	27.8 [8.15] 15.8 [4.63] 1.7	27.3 [8.00] 15.1 [4.43] 1.7	26.6 [7.80] 14.0 [4.10] 1.7	26.2 [7.68] 19.1 [5.60] 1.7	25.7 [7.53] 18.3 [5.36] 1.7	25.0 [7.33] 17.0 [4.98] 1.7	23.9 [7.00] 21.7 [6.36] 1.6	23.5 [6.89] 20.7 [6.07] 1.6	22.8 [6.68] 19.3 [5.66] 1.6
	95 [35]	Total BTUH [kW] Sens BTUH [kW] Power	27.0 [7.91] 15.5 [4.54] 1.8	26.5 [7.77] 14.8 [4.34] 1.8	25.8 [7.56] 13.8 [4.04] 1.8	25.3 [7.41] 18.9 [5.54] 1.8	24.8 [7.27] 18.0 [5.28] 1.8	24.2 [7.09] 16.8 [4.92] 1.8	23.0 [6.74] 21.4 [6.27] 1.8	22.6 [6.62] 20.5 [6.01] 1.7	22.0 [6.45] 19.0 [5.57] 1.7
	100 [37.8]	Total BTUH [kW] Sens BTUH [kW] Power	26.0 [7.62] 15.2 [4.45] 1.9	25.5 [7.47] 14.5 [4.25] 1.9	24.8 [7.27] 13.5 [3.96] 1.9	24.3 [7.12] 18.5 [5.42] 1.9	23.9 [7.00] 17.7 [5.19] 1.9	23.2 [6.80] 16.4 [4.81] 1.9	22.1 [6.48] 21.1 [6.18] 1.9	21.7 [6.36] 20.1 [5.89] 1.9	21.1 [6.18] 18.7 [5.48] 1.8
	105 [40.6]	Total BTUH [kW] Sens BTUH [kW] Power	25.0 [7.33] 14.7 [4.31] 2.0	24.5 [7.18] 14.1 [4.13] 2.0	23.9 [7.00] 13.1 [3.84] 2.0	23.3 [6.83] 18.1 [5.30] 2.0	22.9 [6.71] 17.3 [5.07] 2.0	22.3 [6.54] 16.1 [4.72] 2.0	21.1 [6.18] 20.6 [6.04] 2.0	20.7 [6.07] 19.7 [5.77] 2.0	20.1 [5.89] 18.3 [5.36] 1.9
	110 [43.3]	Total BTUH [kW] Sens BTUH [kW] Power	24.1 [7.06] 14.3 [4.19] 2.1	23.7 [6.95] 13.6 [3.99] 2.1	23.0 [6.74] 12.7 [3.72] 2.1	22.4 [6.56] 17.6 [5.16] 2.1	22.0 [6.45] 16.8 [4.92] 2.1	21.4 [6.27] 15.6 [4.57] 2.1	20.2 [5.92] 20.1 [5.89] 2.1	19.8 [5.80] 19.2 [5.63] 2.1	19.3 [5.66] 17.9 [5.25] 2.1
	115 [46.1]	Total BTUH [kW] Sens BTUH [kW] Power	23.3 [6.83] 13.7 [4.02] 2.3	22.9 [6.71] 13.1 [3.84] 2.2	22.3 [6.54] 12.2 [3.58] 2.2	21.7 [6.36] 17.0 [4.98] 2.3	21.3 [6.24] 16.3 [4.78] 2.2	20.7 [6.07] 15.1 [4.43] 2.2	19.4 [5.69] 19.4 [5.69] 2.2	19.1 [5.60] 18.7 [5.48] 2.2	18.5 [5.42] 17.4 [5.10] 2.2

## GROSS SYSTEMS PERFORMANCE DATA—TZAC-330

		ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①									
wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]			
CFM [L/s]		1100 [519]	1000 [472]	850 [401]	1100 [519]	1000 [472]	850 [401]	1100 [519]	1000 [472]	850 [401]	
DR ①		.24	.23	.21	.24	.23	.21	.24	.23	.21	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW] Sens BTUH [kW] Power	37.6 [11.02] 21.3 [6.24] 1.9	36.9 [10.81] 20.3 [5.95] 1.9	35.9 [10.52] 18.9 [5.54] 1.9	35.0 [10.26] 25.2 [7.39] 1.9	34.4 [10.08] 24.1 [7.06] 1.9	33.4 [9.79] 22.4 [6.56] 1.9	33.6 [9.85] 27.2 [7.97] 1.9	33.0 [9.67] 26.0 [7.62] 1.9	32.1 [9.41] 24.2 [7.09] 1.9
	80 [26.7]	Total BTUH [kW] Sens BTUH [kW] Power	37.1 [10.87] 20.8 [6.10] 2.1	36.4 [10.67] 19.9 [5.83] 2.0	35.4 [10.37] 18.5 [5.42] 2.0	34.5 [10.11] 24.7 [7.24] 2.0	33.9 [9.94] 23.6 [6.92] 2.0	32.9 [9.64] 22.0 [6.45] 2.0	33.1 [9.70] 26.7 [7.83] 2.0	32.5 [9.52] 25.5 [7.47] 2.0	31.6 [9.26] 23.8 [6.98] 2.0
	85 [29.4]	Total BTUH [kW] Sens BTUH [kW] Power	36.3 [10.64] 20.3 [5.95] 2.2	35.6 [10.43] 19.4 [5.69] 2.2	34.7 [10.17] 18.0 [5.28] 2.1	33.7 [9.88] 24.2 [7.09] 2.2	33.1 [9.70] 23.1 [6.77] 2.1	32.2 [9.44] 21.5 [6.30] 2.1	32.3 [9.47] 26.2 [7.68] 2.1	31.7 [9.29] 25.1 [7.36] 2.1	30.9 [9.06] 23.3 [6.83] 2.1
	90 [32.2]	Total BTUH [kW] Sens BTUH [kW] Power	35.3 [10.35] 19.8 [5.80] 2.3	34.7 [10.17] 18.9 [5.54] 2.3	33.8 [9.91] 17.6 [5.16] 2.2	32.8 [9.61] 23.7 [6.95] 2.3	32.2 [9.44] 22.6 [6.62] 2.2	31.3 [9.17] 21.1 [6.18] 2.2	31.4 [9.20] 25.7 [7.53] 2.3	30.8 [9.03] 24.6 [7.21] 2.2	30.0 [8.79] 22.9 [6.71] 2.2
	95 [35]	Total BTUH [kW] Sens BTUH [kW] Power	34.3 [10.05] 19.3 [5.66] 2.4	33.7 [9.88] 18.4 [5.39] 2.4	32.8 [9.61] 17.1 [5.01] 2.4	31.7 [9.29] 23.2 [6.80] 2.4	31.2 [9.14] 22.1 [6.48] 2.4	30.3 [8.88] 20.6 [6.04] 2.3	30.3 [8.88] 25.2 [7.39] 2.4	29.8 [8.73] 24.1 [7.06] 2.4	29.0 [8.50] 22.4 [6.56] 2.3
	100 [37.8]	Total BTUH [kW] Sens BTUH [kW] Power	33.2 [9.73] 18.7 [5.48] 2.5	32.6 [9.55] 17.9 [5.25] 2.5	31.7 [9.29] 16.6 [4.86] 2.5	30.6 [8.97] 22.7 [6.65] 2.5	30.1 [8.82] 21.6 [6.33] 2.5	29.3 [8.59] 20.1 [5.89] 2.4	29.2 [8.56] 24.7 [7.24] 2.5	28.7 [8.41] 23.6 [6.92] 2.5	27.9 [8.18] 21.9 [6.42] 2.4
	105 [40.6]	Total BTUH [kW] Sens BTUH [kW] Power	32.1 [9.41] 18.2 [5.33] 2.6	31.6 [9.26] 17.4 [5.10] 2.6	30.7 [9.00] 16.2 [4.75] 2.6	29.6 [8.67] 22.1 [6.48] 2.6	29.0 [8.50] 21.2 [6.21] 2.6	28.3 [8.29] 19.7 [5.77] 2.6	28.2 [8.26] 24.2 [7.09] 2.6	27.7 [8.12] 23.1 [6.77] 2.6	26.9 [7.88] 21.5 [6.30] 2.5
	110 [43.3]	Total BTUH [kW] Sens BTUH [kW] Power	31.2 [9.14] 17.7 [5.19] 2.7	30.6 [8.97] 16.9 [4.95] 2.7	29.8 [8.73] 15.7 [4.60] 2.7	28.6 [8.38] 21.6 [6.33] 2.7	28.1 [8.24] 20.7 [6.07] 2.7	27.3 [8.00] 19.2 [5.63] 2.7	27.2 [7.97] 23.7 [6.95] 2.7	26.7 [7.83] 22.6 [6.62] 2.7	26.0 [7.62] 21.0 [6.15] 2.7
	115 [46.1]	Total BTUH [kW] Sens BTUH [kW] Power	30.4 [8.91] 17.2 [5.04] 2.9	29.8 [8.73] 16.5 [4.84] 2.8	29.0 [8.50] 15.3 [4.48] 2.8	27.8 [8.15] 21.1 [6.18] 2.8	27.3 [8.00] 20.2 [5.92] 2.8	26.6 [7.80] 18.8 [5.51] 2.8	26.4 [7.74] 23.2 [6.80] 2.8	25.9 [7.59] 22.1 [6.48] 2.8	25.2 [7.39] 20.6 [6.04] 2.8

DR —Depression ratio  
dbE—Entering air dry bulb  
wbE—Entering air wet bulb

Total —Total capacity x 1000 BTUH  
Sens —Sensible capacity x 1000 BTUH  
Power—KW input

NOTES: ① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding [1.10 x CFM x (1 - DR) x (dbE - 80)].

[ ] Designates Metric Conversions

# SYSTEMS PERFORMANCE—TZAC- SERIES

## GROSS SYSTEMS PERFORMANCE DATA—TZAC-336

		ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①									
		wbE	71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]		
			CFM [L/s]	1320 [623]	1200 [566]	1020 [481]	1320 [623]	1200 [566]	1020 [481]	1320 [623]	1200 [566]
		DR ①	.21	.20	.17	.21	.20	.17	.21	.20	.17
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	44.4 [13.01]	43.6 [12.78]	42.4 [12.43]	41.3 [12.10]	40.6 [11.90]	39.5 [11.58]	39.6 [11.61]	38.9 [11.40]	37.8 [11.08]
		Sens BTUH [kW]	25.5 [7.47]	24.4 [7.15]	22.7 [6.65]	30.4 [8.91]	29.1 [8.53]	27.0 [7.91]	31.4 [9.20]	30.0 [8.79]	27.9 [8.18]
		Power	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
	80 [26.7]	Total BTUH [kW]	43.6 [12.78]	42.8 [12.54]	41.7 [12.22]	40.5 [11.87]	39.8 [11.66]	38.7 [11.34]	38.7 [11.34]	38.0 [11.14]	37.0 [10.84]
		Sens BTUH [kW]	25.0 [7.33]	23.9 [7.00]	22.2 [6.51]	29.9 [8.76]	28.6 [8.38]	26.6 [7.80]	30.8 [9.03]	29.5 [8.65]	27.4 [8.03]
		Power	2.3	2.3	2.2	2.3	2.3	2.2	2.3	2.3	2.2
	85 [29.4]	Total BTUH [kW]	42.8 [12.54]	42.1 [12.34]	40.9 [11.99]	39.7 [11.63]	39.0 [11.43]	38.0 [11.14]	38.0 [11.14]	37.3 [10.93]	36.3 [10.64]
		Sens BTUH [kW]	24.5 [7.18]	23.4 [6.86]	21.8 [6.39]	29.4 [8.62]	28.1 [8.24]	26.1 [7.65]	30.3 [8.88]	29.0 [8.50]	27.0 [7.91]
		Power	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	90 [32.2]	Total BTUH [kW]	42.0 [12.31]	41.3 [12.10]	40.2 [11.78]	38.9 [11.40]	38.3 [11.22]	37.2 [10.90]	37.2 [10.90]	36.5 [10.70]	35.5 [10.40]
Sens BTUH [kW]		24.0 [7.03]	22.9 [6.71]	21.3 [6.24]	28.9 [8.47]	27.6 [8.09]	25.7 [7.53]	29.9 [8.76]	28.5 [8.35]	26.5 [7.77]	
Power		2.6	2.5	2.5	2.6	2.5	2.5	2.5	2.5	2.5	
95 [35]	Total BTUH [kW]	41.1 [12.05]	40.4 [11.84]	39.3 [11.52]	38.0 [11.14]	37.4 [10.96]	36.3 [10.64]	36.3 [10.64]	35.6 [10.43]	34.7 [10.17]	
	Sens BTUH [kW]	23.5 [6.89]	22.4 [6.56]	20.9 [6.13]	28.4 [8.32]	27.1 [7.94]	25.2 [7.39]	29.3 [8.59]	28.0 [8.21]	26.0 [7.62]	
	Power	2.7	2.7	2.6	2.7	2.7	2.6	2.7	2.7	2.6	
100 [37.8]	Total BTUH [kW]	40.0 [11.72]	39.3 [11.52]	38.2 [11.20]	36.9 [10.81]	36.3 [10.64]	35.3 [10.35]	35.2 [10.32]	34.5 [10.11]	33.6 [9.85]	
	Sens BTUH [kW]	22.8 [6.68]	21.8 [6.39]	20.3 [5.95]	27.7 [8.12]	26.5 [7.77]	24.6 [7.21]	28.7 [8.41]	27.4 [8.03]	25.5 [7.47]	
	Power	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	
105 [40.6]	Total BTUH [kW]	38.6 [11.31]	37.9 [11.11]	36.9 [10.81]	35.5 [10.40]	34.9 [10.23]	33.9 [9.94]	33.8 [9.91]	33.2 [9.73]	32.3 [9.47]	
	Sens BTUH [kW]	22.1 [6.48]	21.1 [6.18]	19.6 [5.74]	26.9 [7.88]	25.7 [7.53]	23.9 [7.00]	27.9 [8.18]	26.6 [7.80]	24.8 [7.27]	
	Power	3.0	3.0	2.9	3.0	2.9	2.9	3.0	2.9	2.9	
110 [43.3]	Total BTUH [kW]	36.9 [10.81]	36.2 [10.61]	35.2 [10.32]	33.8 [9.91]	33.1 [9.70]	32.2 [9.44]	32.0 [9.38]	31.4 [9.20]	30.6 [8.97]	
	Sens BTUH [kW]	21.1 [6.18]	20.1 [5.89]	18.7 [5.48]	26.0 [7.62]	24.8 [7.27]	23.1 [6.77]	26.9 [7.88]	25.7 [7.53]	23.9 [7.00]	
	Power	3.1	3.1	3.1	3.1	3.1	3.0	3.1	3.1	3.0	
115 [46.1]	Total BTUH [kW]	34.6 [10.14]	34.0 [9.96]	33.1 [9.70]	31.5 [9.23]	30.9 [9.06]	30.1 [8.82]	29.7 [8.70]	29.2 [8.56]	28.4 [8.32]	
	Sens BTUH [kW]	19.9 [5.83]	19.0 [5.57]	17.7 [5.19]	24.8 [7.27]	23.7 [6.95]	22.0 [6.45]	25.7 [7.53]	24.6 [7.21]	22.9 [6.71]	
	Power	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	

## GROSS SYSTEMS PERFORMANCE DATA—TZAC-342

		ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①									
		wbE	71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]		
			CFM [L/s]	1490 [703]	1350 [637]	1150 [543]	1490 [703]	1350 [637]	1150 [543]	1490 [703]	1350 [637]
		DR ①	.24	.23	.21	.24	.23	.21	.24	.23	.21
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	51.1 [14.98]	50.2 [14.71]	48.8 [14.30]	47.7 [13.98]	46.9 [13.75]	45.6 [13.36]	45.2 [13.25]	44.3 [12.98]	43.1 [12.63]
		Sens BTUH [kW]	28.1 [8.24]	26.9 [7.88]	25.0 [7.33]	33.4 [9.79]	31.9 [9.35]	29.7 [8.70]	37.9 [11.11]	36.2 [10.61]	33.6 [9.85]
		Power	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	80 [26.7]	Total BTUH [kW]	50.1 [14.68]	49.2 [14.42]	47.8 [14.01]	46.7 [13.69]	45.9 [13.45]	44.6 [13.07]	44.1 [12.92]	43.3 [12.69]	42.2 [12.37]
		Sens BTUH [kW]	27.9 [8.18]	26.7 [7.83]	24.8 [7.27]	33.2 [9.73]	31.7 [9.29]	29.5 [8.65]	37.6 [11.02]	36.0 [10.55]	33.5 [9.82]
		Power	2.7	2.7	2.7	2.7	2.7	2.6	2.7	2.7	2.6
	85 [29.4]	Total BTUH [kW]	49.0 [14.36]	48.1 [14.10]	46.8 [13.72]	45.6 [13.36]	44.8 [13.13]	43.6 [12.78]	43.1 [12.63]	42.3 [12.40]	41.1 [12.05]
		Sens BTUH [kW]	27.5 [8.06]	26.3 [7.71]	24.5 [7.18]	32.8 [9.61]	31.3 [9.17]	29.1 [8.53]	37.2 [10.90]	35.6 [10.43]	33.1 [9.70]
		Power	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
	90 [32.2]	Total BTUH [kW]	47.9 [14.04]	47.0 [13.77]	45.8 [13.42]	44.5 [13.04]	43.7 [12.81]	42.5 [12.46]	42.0 [12.31]	41.2 [12.07]	40.1 [11.75]
Sens BTUH [kW]		27.0 [7.91]	25.8 [7.56]	24.0 [7.03]	32.2 [9.44]	30.8 [9.03]	28.6 [8.38]	36.7 [10.76]	35.0 [10.26]	32.6 [9.55]	
Power		3.0	3.0	2.9	3.0	3.0	2.9	3.0	2.9	2.9	
95 [35]	Total BTUH [kW]	46.8 [13.72]	45.9 [13.45]	44.7 [13.10]	43.4 [12.72]	42.6 [12.48]	41.4 [12.13]	40.8 [11.96]	40.1 [11.75]	39.0 [11.43]	
	Sens BTUH [kW]	26.3 [7.71]	25.1 [7.36]	23.4 [6.86]	31.5 [9.23]	30.1 [8.82]	28.0 [8.21]	36.0 [10.55]	34.4 [10.08]	32.0 [9.38]	
	Power	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.0	
100 [37.8]	Total BTUH [kW]	45.6 [13.36]	44.8 [13.13]	43.6 [12.78]	42.2 [12.37]	41.5 [12.16]	40.4 [11.84]	39.7 [11.63]	39.0 [11.43]	37.9 [11.11]	
	Sens BTUH [kW]	25.6 [7.50]	24.4 [7.15]	22.7 [6.65]	30.8 [9.03]	29.4 [8.62]	27.4 [8.03]	35.3 [10.35]	33.7 [9.88]	31.3 [9.17]	
	Power	3.3	3.3	3.2	3.3	3.2	3.2	3.3	3.2	3.2	
105 [40.6]	Total BTUH [kW]	44.5 [13.04]	43.7 [12.81]	42.5 [12.46]	41.1 [12.05]	40.4 [11.84]	39.3 [11.52]	38.6 [11.31]	37.9 [11.11]	36.8 [10.79]	
	Sens BTUH [kW]	24.8 [7.27]	23.7 [6.95]	22.1 [6.48]	30.1 [8.82]	28.7 [8.41]	26.7 [7.83]	34.5 [10.11]	33.0 [9.67]	30.7 [9.00]	
	Power	3.4	3.4	3.4	3.4	3.4	3.3	3.4	3.4	3.3	
110 [43.3]	Total BTUH [kW]	43.4 [12.72]	42.6 [12.48]	41.5 [12.16]	40.0 [11.72]	39.3 [11.52]	38.2 [11.20]	37.5 [10.99]	36.8 [10.79]	35.8 [10.49]	
	Sens BTUH [kW]	24.2 [7.09]	23.1 [6.77]	21.5 [6.30]	29.4 [8.62]	28.1 [8.24]	26.1 [7.65]	33.9 [9.94]	32.4 [9.50]	30.1 [8.82]	
	Power	3.6	3.6	3.5	3.6	3.5	3.5	3.5	3.5	3.5	
115 [46.1]	Total BTUH [kW]	42.3 [12.40]	41.6 [12.19]	40.4 [11.84]	39.0 [11.43]	38.3 [11.22]	37.2 [10.90]	36.4 [10.67]	35.7 [10.46]	34.8 [10.20]	
	Sens BTUH [kW]	23.6 [6.92]	22.5 [6.59]	21.0 [6.15]	28.8 [8.44]	27.5 [8.06]	25.6 [7.50]	33.3 [9.76]	31.8 [9.32]	29.6 [8.67]	
	Power	3.7	3.7	3.7	3.7	3.7	3.6	3.7	3.7	3.6	

DR —Depression ratio  
dbE—Entering air dry bulb  
wbE—Entering air wet bulb

Total —Total capacity x 1000 BTUH  
Sens —Sensible capacity x 1000 BTUH  
Power—KW input

NOTES: ① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding  $[1.10 \times \text{CFM} \times (1 - \text{DR}) \times (\text{dbE} - 80)]$ .

[ ] Designates Metric Conversions

# SYSTEMS PERFORMANCE—TZAC- SERIES

## GROSS SYSTEMS PERFORMANCE DATA—TZAC-348

		ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①									
wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]			
CFM [L/s]		1760 [831]	1600 [755]	1360 [642]	1760 [831]	1600 [755]	1360 [642]	1760 [831]	1600 [755]	1360 [642]	
DR ①		.20	.19	.17	.20	.19	.17	.20	.19	.17	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW] Sens BTUH [kW] Power	60.8 [17.82] 36.3 [10.64] 2.9	59.7 [17.50] 34.7 [10.17] 2.9	58.1 [17.03] 32.3 [9.47] 2.9	56.4 [16.53] 41.5 [12.16] 2.9	55.4 [16.24] 39.7 [11.63] 2.9	53.9 [15.80] 36.9 [10.81] 2.9	53.1 [15.56] 48.2 [14.13] 2.9	52.2 [15.30] 46.0 [13.48] 2.8	50.8 [14.89] 42.8 [12.54] 2.8
	80 [26.7]	Total BTUH [kW] Sens BTUH [kW] Power	59.9 [17.55] 35.2 [10.32] 3.1	58.8 [17.23] 33.7 [9.88] 3.1	57.2 [16.76] 31.3 [9.17] 3.0	55.5 [16.27] 40.4 [11.84] 3.1	54.5 [15.97] 38.6 [11.31] 3.1	53.0 [15.53] 35.9 [10.52] 3.0	52.3 [15.33] 47.1 [13.80] 3.0	51.3 [15.03] 45.0 [13.19] 3.0	49.9 [14.62] 41.8 [12.25] 3.0
	85 [29.4]	Total BTUH [kW] Sens BTUH [kW] Power	58.8 [17.23] 34.3 [10.05] 3.3	57.7 [16.91] 32.8 [9.61] 3.2	56.1 [16.44] 30.5 [8.94] 3.2	54.4 [15.94] 39.5 [11.58] 3.3	53.4 [15.65] 37.7 [11.05] 3.2	51.9 [15.21] 35.1 [10.29] 3.2	51.1 [14.98] 46.1 [13.51] 3.2	50.2 [14.71] 44.1 [12.92] 3.2	48.8 [14.30] 41.0 [12.02] 3.1
	90 [32.2]	Total BTUH [kW] Sens BTUH [kW] Power	57.4 [16.82] 33.5 [9.82] 3.4	56.4 [16.53] 32.0 [9.38] 3.4	54.8 [16.06] 29.8 [8.73] 3.4	53.0 [15.53] 38.7 [11.34] 3.4	52.0 [15.24] 37.0 [10.84] 3.4	50.6 [14.83] 34.4 [10.08] 3.4	49.7 [14.57] 45.3 [13.28] 3.4	48.8 [14.30] 43.4 [12.72] 3.3	47.5 [13.92] 40.3 [11.81] 3.3
	95 [35]	Total BTUH [kW] Sens BTUH [kW] Power	55.9 [16.38] 33.1 [9.70] 3.6	54.9 [16.09] 31.6 [9.26] 3.6	53.4 [15.65] 29.4 [8.62] 3.5	51.5 [15.09] 38.3 [11.22] 3.6	50.6 [14.83] 36.6 [10.73] 3.6	49.2 [14.42] 34.0 [9.96] 3.5	48.2 [14.13] 45.0 [13.19] 3.5	47.4 [13.89] 42.9 [12.57] 3.5	46.1 [13.51] 39.9 [11.69] 3.5
	100 [37.8]	Total BTUH [kW] Sens BTUH [kW] Power	54.3 [15.91] 33.0 [9.67] 3.8	53.3 [15.62] 31.5 [9.23] 3.7	51.9 [15.21] 29.3 [8.59] 3.7	49.9 [14.62] 38.2 [11.20] 3.8	49.0 [14.36] 36.5 [10.70] 3.7	47.7 [13.98] 34.0 [9.96] 3.7	46.7 [13.69] 45.0 [13.19] 3.7	45.8 [13.42] 42.9 [12.57] 3.7	44.6 [13.07] 39.9 [11.69] 3.6
	105 [40.6]	Total BTUH [kW] Sens BTUH [kW] Power	52.8 [15.47] 33.4 [9.79] 3.9	51.8 [15.18] 31.9 [9.35] 3.9	50.4 [14.77] 29.7 [8.70] 3.9	48.4 [14.18] 38.6 [11.31] 3.9	47.5 [13.92] 36.9 [10.81] 3.9	46.2 [13.54] 34.3 [10.05] 3.9	45.1 [13.22] 45.1 [13.22] 3.9	44.3 [12.98] 43.2 [12.66] 3.9	43.1 [12.63] 40.2 [11.78] 3.8
	110 [43.3]	Total BTUH [kW] Sens BTUH [kW] Power	51.3 [15.03] 34.4 [10.08] 4.1	50.4 [14.77] 32.9 [9.64] 4.1	49.0 [14.36] 30.6 [8.97] 4.0	46.9 [13.75] 39.6 [11.61] 4.1	46.1 [13.51] 37.8 [11.08] 4.1	44.8 [13.13] 35.2 [10.32] 4.0	43.6 [12.78] 43.6 [12.78] 4.1	42.9 [12.57] 42.9 [12.57] 4.0	41.7 [12.22] 41.1 [12.05] 4.0
	115 [46.1]	Total BTUH [kW] Sens BTUH [kW] Power	50.0 [14.65] 36.0 [10.55] 4.3	49.1 [14.39] 34.4 [10.08] 4.2	47.8 [14.01] 32.0 [9.38] 4.2	45.6 [13.36] 41.2 [12.07] 4.3	44.8 [13.13] 39.4 [11.55] 4.3	43.6 [12.78] 36.6 [10.73] 4.2	42.3 [12.40] 42.3 [12.40] 4.2	41.6 [12.19] 41.6 [12.19] 4.2	40.4 [11.84] 40.4 [11.84] 4.1

## GROSS SYSTEMS PERFORMANCE DATA—TZAC-360

		ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①									
wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]			
CFM [L/s]		2040 [963]	1850 [873]	1570 [741]	2040 [963]	1850 [873]	1570 [741]	2040 [963]	1850 [873]	1570 [741]	
DR ①		.21	.20	.18	.21	.20	.18	.21	.20	.18	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW] Sens BTUH [kW] Power	69.9 [20.49] 41.5 [12.16] 3.9	68.7 [20.13] 39.7 [11.63] 3.8	66.8 [19.58] 36.9 [10.81] 3.8	66.3 [19.43] 48.8 [14.30] 3.8	65.1 [19.08] 46.7 [13.69] 3.7	63.3 [18.55] 43.4 [12.72] 3.7	63.8 [18.70] 53.0 [15.53] 3.7	62.6 [18.35] 50.6 [14.83] 3.7	60.9 [17.85] 47.1 [13.80] 3.7
	80 [26.7]	Total BTUH [kW] Sens BTUH [kW] Power	69.6 [20.40] 40.4 [11.84] 4.1	68.4 [20.05] 38.6 [11.31] 4.0	66.5 [19.49] 35.9 [10.52] 4.0	65.9 [19.31] 47.8 [14.01] 4.0	64.8 [18.99] 45.6 [13.36] 4.0	63.0 [18.46] 42.4 [12.43] 3.9	63.4 [18.58] 51.9 [15.21] 3.9	62.3 [18.26] 49.6 [14.54] 3.9	60.6 [17.76] 46.1 [13.51] 3.9
	85 [29.4]	Total BTUH [kW] Sens BTUH [kW] Power	68.5 [20.08] 39.4 [11.55] 4.3	67.3 [19.72] 37.6 [11.02] 4.3	65.4 [19.17] 35.0 [10.26] 4.2	64.8 [18.99] 46.7 [13.69] 4.2	63.7 [18.67] 44.6 [13.07] 4.2	61.9 [18.14] 41.5 [12.16] 4.1	62.3 [18.26] 50.9 [14.92] 4.2	61.2 [17.94] 48.6 [14.24] 4.1	59.5 [17.44] 45.2 [13.25] 4.1
	90 [32.2]	Total BTUH [kW] Sens BTUH [kW] Power	66.8 [19.58] 38.3 [11.22] 4.5	65.6 [19.23] 36.6 [10.73] 4.5	63.9 [18.73] 34.0 [9.96] 4.4	63.2 [18.52] 45.7 [13.39] 4.4	62.0 [18.17] 43.6 [12.78] 4.4	60.4 [17.70] 40.6 [11.90] 4.3	60.7 [17.79] 49.8 [14.59] 4.4	59.6 [17.47] 47.6 [13.95] 4.3	58.0 [17.00] 44.3 [12.98] 4.3
	95 [35]	Total BTUH [kW] Sens BTUH [kW] Power	64.8 [18.99] 37.3 [10.93] 4.7	63.7 [18.67] 35.6 [10.43] 4.7	61.9 [18.14] 33.1 [9.70] 4.6	61.2 [17.94] 44.6 [13.07] 4.6	60.1 [17.61] 42.6 [12.48] 4.6	58.4 [17.12] 39.7 [11.63] 4.5	58.7 [17.20] 48.8 [14.30] 4.6	57.6 [16.88] 46.6 [13.66] 4.5	56.0 [16.41] 43.4 [12.72] 4.5
	100 [37.8]	Total BTUH [kW] Sens BTUH [kW] Power	62.7 [18.38] 36.3 [10.64] 4.9	61.6 [18.05] 34.7 [10.17] 4.9	59.9 [17.55] 32.3 [9.47] 4.8	59.0 [17.29] 43.6 [12.78] 4.8	58.0 [17.00] 41.7 [12.22] 4.8	56.4 [16.53] 38.8 [11.37] 4.7	56.5 [16.56] 47.8 [14.01] 4.8	55.5 [16.27] 45.7 [13.39] 4.8	54.0 [15.83] 42.5 [12.46] 4.7
	105 [40.6]	Total BTUH [kW] Sens BTUH [kW] Power	60.6 [17.76] 35.3 [10.35] 5.1	59.6 [17.47] 33.8 [9.91] 5.1	57.9 [16.97] 31.4 [9.20] 5.0	57.0 [16.71] 42.7 [12.51] 5.1	55.9 [16.38] 40.8 [11.96] 5.0	54.4 [15.94] 37.9 [11.11] 4.9	54.5 [15.97] 46.9 [13.75] 5.0	53.5 [15.68] 44.8 [13.13] 5.0	52.0 [15.24] 41.6 [12.19] 4.9
	110 [43.3]	Total BTUH [kW] Sens BTUH [kW] Power	58.8 [17.23] 34.4 [10.08] 5.3	57.8 [16.94] 32.9 [9.64] 5.3	56.2 [16.47] 30.6 [8.97] 5.2	55.2 [16.18] 41.8 [12.25] 5.3	54.2 [15.88] 39.9 [11.69] 5.2	52.7 [15.44] 37.1 [10.87] 5.2	52.7 [15.44] 45.9 [13.45] 5.2	51.7 [15.15] 43.9 [12.87] 5.2	50.3 [14.74] 40.8 [11.96] 5.1
	115 [46.1]	Total BTUH [kW] Sens BTUH [kW] Power	57.5 [16.85] 33.5 [9.82] 5.6	56.5 [16.56] 32.0 [9.38] 5.5	55.0 [16.12] 29.8 [8.73] 5.4	53.9 [15.80] 40.9 [11.99] 5.5	52.9 [15.50] 39.1 [11.46] 5.4	51.4 [15.06] 36.3 [10.64] 5.4	51.3 [15.03] 45.0 [13.19] 5.4	50.4 [14.77] 43.0 [12.60] 5.4	49.0 [14.36] 40.0 [11.72] 5.3

DR —Depression ratio  
dbE—Entering air dry bulb  
wbE—Entering air wet bulb

Total —Total capacity x 1000 BTUH  
Sens —Sensible capacity x 1000 BTUH  
Power—KW input

NOTES: ① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding  $[1.10 \times \text{CFM} \times (1 - \text{DR}) \times (\text{dbE} - 80)]$ .

[ ] Designates Metric Conversions

## INDOOR AIRFLOW PERFORMANCE—208 VOLTS

Nominal Cooling Capacity Tons [kW]	Motor Speed from Factory	Blower Size/ Motor HP [W] & # of Speeds	Motor Speed	CFM [L/s] Air Delivery/RPM/Watts—208 Volts Side Discharge—Wet Coil							
				External Static Pressure—Inches W.C. [kPa]							
				0.1 [0.02]	0.2 [0.05]	0.3 [0.07]	0.4 [0.10]	0.5 [0.12]	0.6 [0.15]	0.7 [0.17]	
2.0 [7.03]	High	9x7 1/4 HP [186] 2 Speed PSC Motor	Low	CFM [L/s]	675 [319]	657 [310]	634 [299]	602 [284]	580 [264]	505 [238]	435 [205]
				RPM	695	785	870	905	940	980	1020
				Watts	221	214	203	191	171	193	149
2.5 [8.79]	Low	10x9 1/2 HP [373] 3 Speed PSC Motor	High	CFM [L/s]	898 [424]	861 [406]	822 [388]	777 [367]	721 [340]	651 [307]	562 [265]
				RPM	940	965	995	1020	1045	1070	1090
				Watts	292	278	266	253	239	221	199
3.0 [10.55]	Med.	10x9 1/2 HP [373] 3 Speed PSC Motor	Low	CFM [L/s]	1076 [508]	1059 [500]	1032 [487]	996 [470]	950 [448]	896 [423]	832 [393]
				RPM	730	775	820	865	905	940	975
				Watts	356	349	341	331	320	305	287
3.5 [12.31]	High	10x9 1/2 HP [373] 3 Speed PSC Motor	Med.	CFM [L/s]	1222 [577]	1197 [565]	1179 [556]	1162 [548]	1137 [537]	1097 [518]	1033 [488]
				RPM	765	810	855	890	920	960	995
				Watts	423	415	407	397	386	370	351
4.0 [14.07]	High (See Note Below)	10x9 3/4 HP [559] 3 Speed X13 Motor	High	CFM [L/s]	1514 [715]	1461 [670]	1415 [668]	1370 [647]	1322 [624]	1266 [597]	1197 [565]
				RPM	895	930	965	985	1005	1025	1045
				Watts	538	514	493	473	454	434	412
5.0 [17.59]	High (See Note Below)	12x9 1 HP [746] 3 Speed X13 Motor	Low (Tap 1)	CFM [L/s]	1454 [686]	1433 [676]	1392 [657]	1354 [639]	1322 [624]	1283 [606]	1238 [584]
				RPM	923	946	976	1015	1044	1085	1126
				Watts	301	309	316	327	337	348	356
	Med. (Tap 2)	CFM [L/s]	1642 [775]	1621 [765]	1584 [748]	1542 [728]	1496 [706]	1451 [685]	1396 [659]		
		RPM	1006	1022	1064	1090	1114	1151	1160		
		Watts	405	412	422	435	442	449	440		
	High (Tap 3)	CFM [L/s]	1896 [895]	1863 [879]	1776 [838]	1694 [799]	1603 [757]	1528 [721]	1424 [672]		
		RPM	1146	1147	1159	1171	1173	1180	1188		
		Watts	624	614	583	554	522	497	467		
5.0 [17.59]	Low (Tap 1)	12x9 1 HP [746] 3 Speed X13 Motor	Low (Tap 1)	CFM [L/s]	1418 [669]	1386 [654]	1352 [638]	1307 [617]	1270 [599]	1221 [576]	1180 [557]
				RPM	774	794	829	860	892	922	955
				Watts	267	273	287	295	308	316	328
5.0 [17.59]	High (Tap 3)	12x9 1 HP [746] 3 Speed X13 Motor	Med. (Tap 2)	CFM [L/s]	1858 [877]	1821 [859]	1782 [841]	1752 [827]	1714 [809]	1678 [792]	1640 [774]
				RPM	944	968	994	1019	1041	1072	1089
				Watts	541	555	564	578	586	598	611
	High (Tap 3)	CFM [L/s]	2017 [952]	1985 [937]	1949 [920]	1909 [901]	1879 [887]	1843 [870]	1792 [846]		
		RPM	1018	1033	1070	1076	1112	1124	1147		
		Watts	690	701	711	723	735	741	742		

NOTE: On 4 and 5 ton models, cooling speed must be changed to medium to achieve ARI performance.

### DOWN DISCHARGE PRESSURE DROP (ADD TO EXTERNAL STATIC PRESSURE)

CFM [L/s]	600 [283]	800 [378]	1000 [472]	1200 [556]	1440 [661]	1600 [755]	1800 [850]	2000 [944]
Pressure Drop—Includes W.C. [kPa]	.00	.02 [0.005]	.05 [0.012]	.07 [0.017]	.1 [0.025]	.12 [0.030]	.15 [0.037]	.17 [0.042]
<b>MINIMUM RECOMMENDED FILTER SIZES</b>								
Nominal Cooling Capacity Tons [kW]	20 x 20 x 1 [508 x 508 x 25]		2.0 [7.03]		2.5 [8.79] – 4.0 [14.07]		5.0 [17.59]	
Minimum Filter Size—Inches [mm]	20 x 20 x 1 [508 x 508 x 25]		24 x 24 x 1 [610 x 610 x 25]		24 x 30 x 1 [610 x 762 x 1]			

[ ] Designates Metric Conversions

# AIRFLOW PERFORMANCE—TZAC- SERIES

## INDOOR AIRFLOW PERFORMANCE—230 VOLTS

Nominal Cooling Capacity Tons [kW]	Motor Speed from Factory	Blower Size/ Motor HP [W] & # of Speeds	Motor Speed	CFM [L/s] Air Delivery/RPM/Watts—230 Volts Side Discharge—Wet Coil									
				External Static Pressure—Inches W.C. [kPa]									
				0.1 [0.02]	0.2 [0.05]	0.3 [0.07]	0.4 [1.10]	0.5 [1.12]	0.6 [1.15]	0.7 [1.17]			
2.0 [7.03]	High	9x7 1/4 HP [186] 2 Speed PSC Motor	Low	CFM [L/s]	771 [364]	751 [354]	725 [342]	691 [326]	645 [304]	584 [276]	546 [258]		
				RPM	825	870	910	950	985	1010	1030		
				Watts	253	242	230	217	204	189	181		
2.5 [8.79]	Low		High	CFM [L/s]	946 [446]	922 [435]	882 [415]	830 [392]	769 [363]	701 [331]	630 [298]		
				RPM	990	1015	1035	1055	1070	1085	1100		
				Watts	315	303	288	273	257	241	226		
3.0 [10.55]	Med.	10x9 1/2 HP [373] 3 Speed PSC Motor	Low	CFM [L/s]	1206 [569]	1182 [558]	1157 [546]	1128 [532]	1091 [515]	1044 [493]	983 [464]		
				RPM	760	815	870	910	950	975	1000		
				Watts	419	406	394	381	368	353	334		
3.5 [12.31]	High		Med.	CFM [L/s]	1411 [666]	1368 [646]	1327 [626]	1285 [606]	1238 [584]	1183 [558]	1116 [527]		
				RPM	865	900	935	970	1000	1020	1035		
				Watts	498	481	464	447	430	411	391		
4.0 [14.07]	High  (See Note Below)		High	CFM [L/s]	1641 [774]	1577 [744]	1515 [715]	1455 [687]	1398 [657]	1329 [627]	1262 [596]		
				RPM	980	1000	1020	1035	1050	1065	1080		
				Watts	589	565	543	523	503	481	456		
5.0 [17.59]	High  (See Note Below)		Low (Tap 1)	CFM [L/s]	1459 [689]	1438 [679]	1409 [665]	1371 [647]	1337 [631]	1296 [612]	1258 [594]		
				RPM	931	958	993	1031	1058	1097	1133		
				Watts	308	319	331	339	349	362	373		
	Med. (Tap 2)		CFM [L/s]	1662 [784]	1648 [778]	1607 [758]	1579 [745]	1538 [726]	1477 [697]	1392 [657]			
			RPM	1016	1037	1072	1098	1129	1156	1169			
			Watts	421	429	443	453	465	465	446			
	High (Tap 3)		CFM [L/s]	1910 [901]	1873 [884]	1798 [849]	1715 [809]	1621 [765]	1536 [725]	1422 [671]			
			RPM	1149	1160	1163	1169	1175	1187	1184			
			Watts	638	625	601	571	536	506	469			
5.0 [17.59]	High  (See Note Below)		Low (Tap 1)	CFM [L/s]	1423 [672]	1390 [656]	1357 [640]	1311 [619]	1277 [603]	1233 [582]	1192 [563]		
				RPM	776	796	830	861	895	927	958		
				Watts	272	278	292	300	315	326	337		
	Med. (Tap 2)		CFM [L/s]	1872 [883]	1847 [872]	1808 [853]	1772 [836]	1743 [823]	1703 [804]	1670 [788]			
			RPM	956	973	1010	1023	1057	1085	1110			
			Watts	562	572	584	598	613	622	636			
	High (Tap 3)		CFM [L/s]	2046 [966]	2010 [949]	1980 [934]	1942 [917]	1904 [899]	1867 [881]	1822 [860]			
			RPM	1035	1046	1079	1086	1114	1141	1171			
			Watts	721	731	743	754	770	777	770			

NOTE: On 4 and 5 ton models, cooling speed must be changed to medium to achieve ARI performance.

[ ] Designates Metric Conversions

ELECTRICAL DATA – TZAC- SERIES											
		324JA	330JA	336CA	336JA	342CA	342JA	348CA	348JA	360CA	360JA
<b>Unit Information</b>	Unit Operating Voltage Range	187-253	187-253	187-253	187-253	187-253	187-253	187-253	187-253	187-253	187-253
	Minimum Circuit Ampacity	17/17	22/22	16/16	22/22	18/18	26/26	20/20	30/30	27/27	37/37
	Minimum Overcurrent Protection Device Size	20/20	25/25	20/20	30/30	20/20	30/30	25/25	35/35	35/35	45/45
	Maximum Overcurrent Protection Device Size	25/25	35/35	25/25	35/35	25/25	40/40	30/30	50/50	40/40	60/60
<b>Compressor Motor</b>	No.	1	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
	Phase	1	1	3	1	3	1	3	1	3	1
	HP	2 1/6	2 2/3	3 1/3	3 1/3	3 1/2	3 1/2	4	4	5	5
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450	3450
	Amps (RLA)	10.8/10.8	14.1/14.1	9.6/9.6	14.4/14.4	10.3/10.3	16.5/16.5	12.2/12.2	20.2/20.2	17.3/17.3	25/25
	Amps (LRA)	45.2/45.2	64.6/64.6	73/73	77/77	77/77	95/95	80.8/80.8	137/137	123/123	148/148
<b>Condenser Motor</b>	No.	1	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
	Phase	1	1	1	1	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA)	1.3	1.3	1.3	1.3	2	2	2	2	2	2
	Amps (LRA)	2.3	2.3	2.3	2.3	3.9	3.9	3.9	3.9	3.9	3.9
<b>Evaporator Fan</b>	No.	1	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
	Phase	1	1	1	1	1	1	1	1	1	1
	HP	1/4	1/2	1/2	1/2	1/2	1/2	3/4	3/4	1	1
	Amps (FLA)	1.3	2.4	2.4	2.4	2.4	2.4	2.7	2.7	2.8	2.8
	Amps (LRA)	2.3	4.8	4.8	4.8	4.8	4.8	0	0	0	0

1. Horsepower Per Compressor.
2. Amp Draw Per Motor. Multiply Value By Number of Motors to Determine Total Amps.

### Copper Wire Size—AWG (1% Voltage Drop)

<b>SUPPLY WIRE LENGTH- FEET</b>	<b>CIRCUIT AMPACITY</b>																						
	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125
300	4	3	2	2	1	1/0	1/0	2/0	2/0	3/0	3/0	3/0	4/0	4/0	4/0	4/0	250	250	250	250	300	300	300
250	4	4	3	3	2	1	1	1/0	1/0	2/0	2/0	2/0	3/0	3/0	3/0	4/0	4/0	4/0	4/0	4/0	250	250	250
200	6	4	4	4	3	2	2	1	1	1/0	1/0	1/0	2/0	2/0	2/0	3/0	3/0	3/0	3/0	3/0	4/0	4/0	4/0
150	8	6	6	4	4	4	3	3	2	2	1	1	1/0	1/0	1/0	1/0	2/0	2/0	2/0	2/0	2/0	3/0	3/0
100	10	8	8	6	6	6	4	4	4	3	3	2	2	2	1	1	1	1	1	1/0	1/0	1/0	1/0
50	14	12	10	10	8	8	6	6	6	4	4	4	3	3	3	2	2	2	2	2	1	1	1

- Notes: 1. Wire size based on 60°C. type copper conductors below 100 ampacity.
2. Wire size based on 75°C. type copper conductors for 100 ampacity and above.

# ELECTRIC HEATER KITS—TZAC- SERIES

## 208-240 VOLT, SINGLE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION

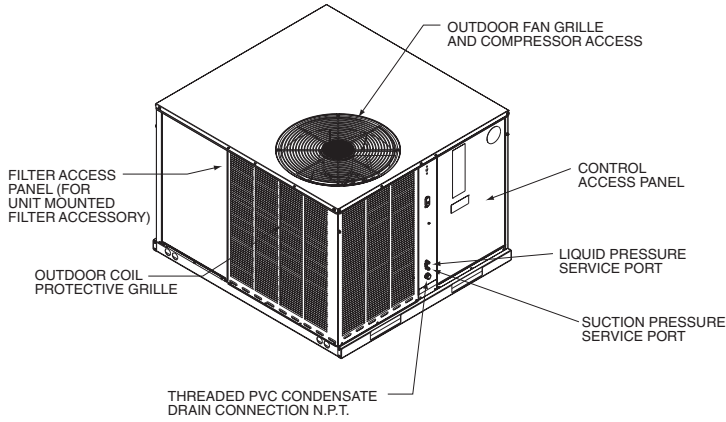
Single Power Supply For Both Unit and Heater Kit										Separate Power Supply For Both Unit and Heater Kit				
Unit Model No. TZAC	Heater Kit					Unit					Heater Kit		Air Conditioner	
	RXQJ-Heater Kit Nominal kW	No. of Elements	No. of Sequence Steps	Rated Heater kW @ 208/240 V	Heater KBTU/Hr @ 208/240 V	Heater Amp. @ 208/240 V	Unit Min. Ckt. Ampacity @ 208/240 V	Over Current Protective Device Size		Min. Circuit Ampacity 208/240 V	Max. Fuse Size 208/240V	Min. Ckt. Ampacity 208/240V	Over Current Protective Device Size	
								Min./Max. @ 208 V	Min./Max. @ 240 V				Min./Max. @ 208 V	Min./Max. @ 240 V
324JA	No Heat	—	—	—	—	—	16/16	20/25	20/25	16/16	—	—	20/25	20/25
	A05J A10J	1 2	1 1	3.6/4.8 7.2/9.6	12.28/16.38 24.57/32.76	17.3/20.0 34.6/40.0	24/27 45/52	25/25 45/45	30/30 60/60	—	22/25 44/50	—	—	—
330JA	No Heat	—	—	—	—	—	22/22	25/35	25/35	22/22	—	—	25/35	25/35
	A05J A10J	1 2	1 1	3.6/4.8 7.2/9.6	12.28/16.38 24.57/32.76	17.3/20.0 34.6/40.0	25/28 47/53	25/35 50/50	25/35 60/60	—	22/25 44/50	—	—	—
336JA	No Heat	—	—	—	—	—	22/22	30/35	30/35	22/22	—	—	30/35	30/35
	A10J A15J	2 3	1 1	7.2/9.6 10.8/14.4	24.57/32.76 36.85/49.13	34.6/40.0 51.9/60.0	47/53 68/78	50/50 70/70	60/60 80/80	—	44/50 65/75	—	—	—
342JA	No Heat	—	—	—	—	—	26/26	30/40	30/40	—	—	26/26	30/40	30/40
	A10J A15J	2 3	1 1	7.2/9.6 10.8/14.4	24.57/32.76 36.85/49.13	34.6/40.0 51.9/60.0	46/53 68/78	50/50 70/70	60/60 80/80	—	44/50 65/75	—	—	—
348JA	No Heat	—	—	—	—	—	30/30	35/50	35/50	—	—	30/30	35/50	35/50
	B10J B15J	2 3	1 1	7.2/9.6 10.8/14.4	24.57/32.76 36.85/49.13	34.6/40.0 51.9/60.0	47/54 69/79	50/50 70/70	60/60 80/80	—	44/50 65/75	—	—	—
360JA	No Heat	—	—	—	—	—	37/37	50/60	50/60	—	—	37/37	50/60	50/60
	B10J B15J	2 3	1 1	7.2/9.6 10.8/14.4	24.57/32.76 36.85/49.13	34.6/40.0 51.9/60.0	47/54 69/79	60/60 70/70	60/60 80/80	—	44/50 65/75	—	—	—

## 208-240 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION

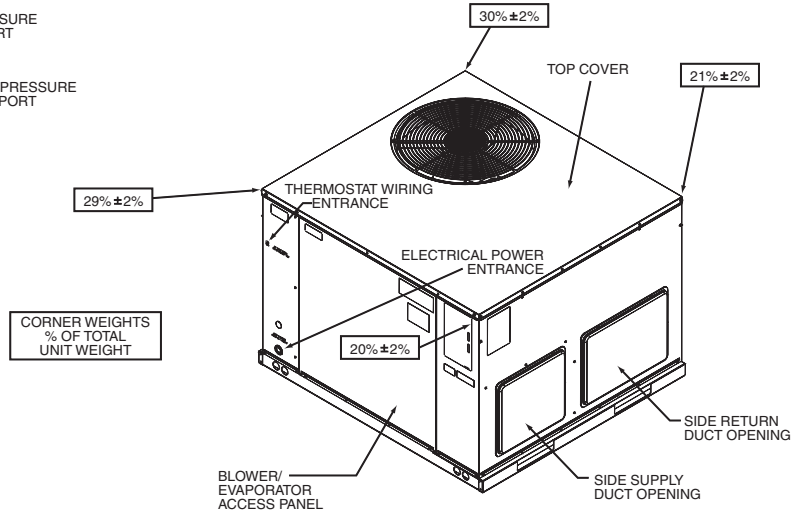
Single Power Supply For Both Unit and Heater Kit										Separate Power Supply For Both Unit and Heater Kit				
Unit Model No. TZAC-	Heater Kit					Unit					Heater Kit		Air Conditioner	
	RXQJ-Heater Kit Nominal kW	No. of Elements	No. of Sequence Steps	Rated Heater kW @ 208/240 V	Heater KBTU/Hr @ 208/240 V	Heater Amp. @ 208/240 V	Unit Min. Ckt. Ampacity @ 208/240 V	Over Current Protective Device Size		Min. Circuit Ampacity 208/240 V	Max. Fuse Size 208/240V	Min. Ckt. Ampacity 208/240V	Over Current Protective Device Size	
								Min./Max. @ 208 V	Min./Max. @ 240 V				Min./Max. @ 208 V	Min./Max. @ 240 V
336CA	No Heat	—	—	—	—	—	16/16	20/25	20/25	16/16	—	—	20/25	20/25
	A10C A15C	2 3	1 1	7.2/9.6 10.8/14.4	24.57/32.76 36.85/49.13	20.0/23.1 30.1/34.7	28/32 41/47	30/30 45/45	35/35 50/50	—	25/29 38/44	—	—	—
342CA	No Heat	—	—	—	—	—	18/18	20/25	20/25	18/18	—	—	20/25	20/25
	A10C A15C	2 3	1 1	7.2/9.6 10.8/14.4	24.57/32.76 36.85/49.13	20.0/23.1 30.1/34.7	28/32 41/46	30/30 45/45	35/35 50/50	—	25/29 38/44	—	—	—
348CA	No Heat	—	—	—	—	—	20/20	25/30	25/30	20/20	—	—	25/30	25/30
	A10C A15C	2 3	1 1	7.2/9.6 10.8/14.4	24.57/32.76 36.85/49.13	20.0/23.1 30.1/34.7	29/33 41/47	35/35 45/45	35/35 50/50	—	25/29 38/44	—	—	—
360CA	No Heat	—	—	—	—	—	27/27	35/40	35/40	27/27	—	—	35/40	35/40
	A10C A15C	2 3	1 1	7.2/9.6 10.8/14.4	24.57/32.76 36.85/49.13	20.0/23.1 30.1/34.7	29/33 42/47	40/40 45/45	40/40 50/50	—	25/29 38/44	—	—	—



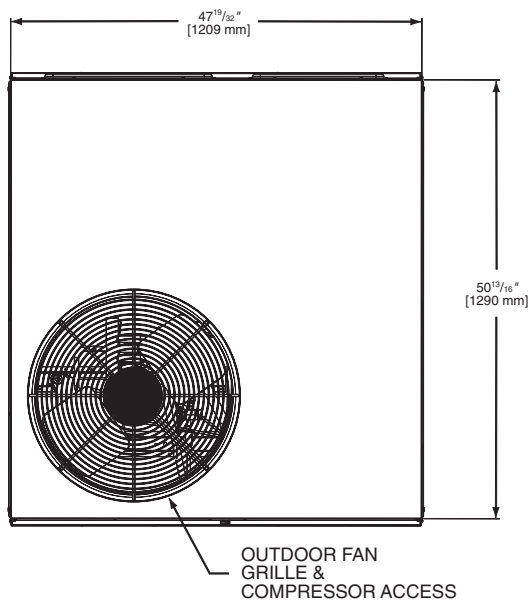
## UNIT DIMENSIONS PACKAGE AIR CONDITIONERS



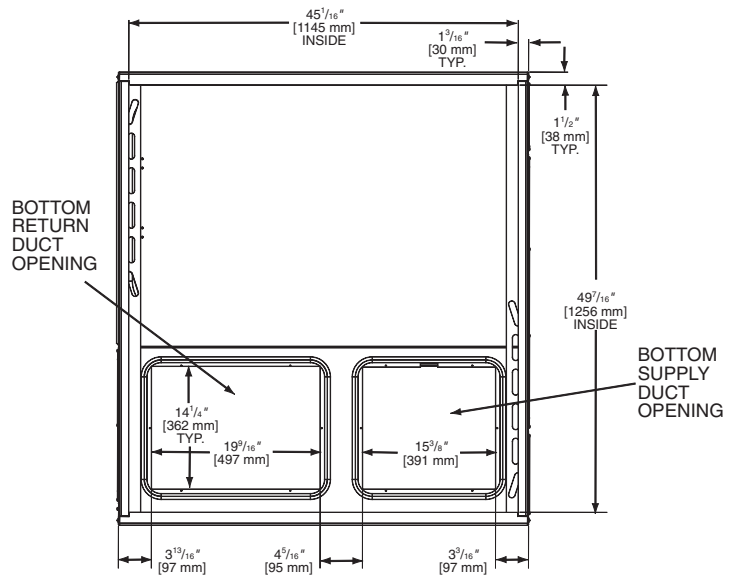
IMPORTANT: UNIT MUST BE LEVEL TO PREVENT WATER MIGRATION



### TOP VIEW



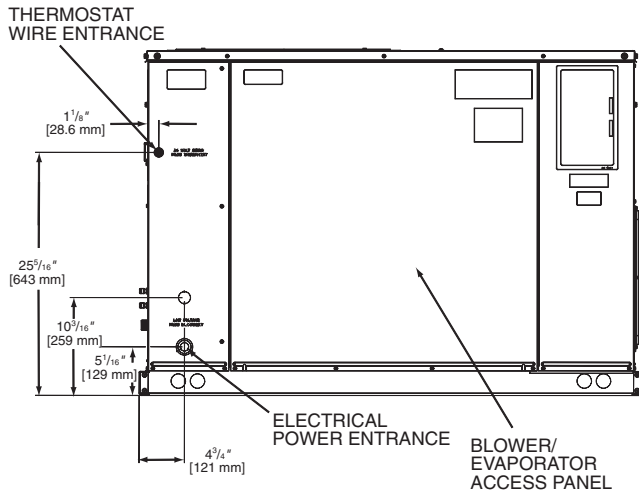
### BOTTOM VIEW



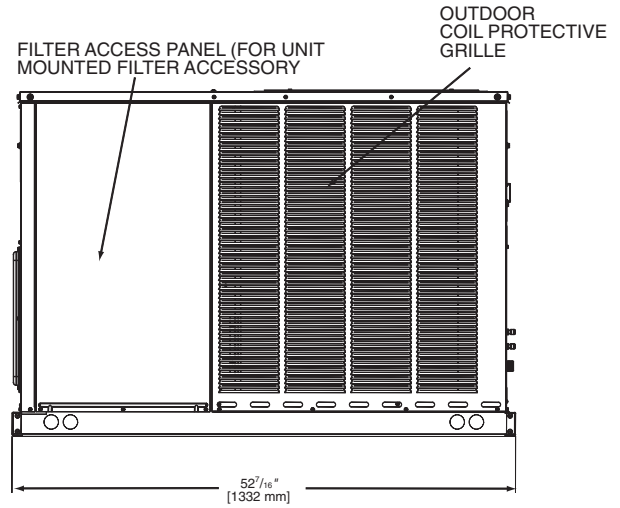
[ ] Designates Metric Conversions

# UNIT DIMENSIONS—TZAC- SERIES

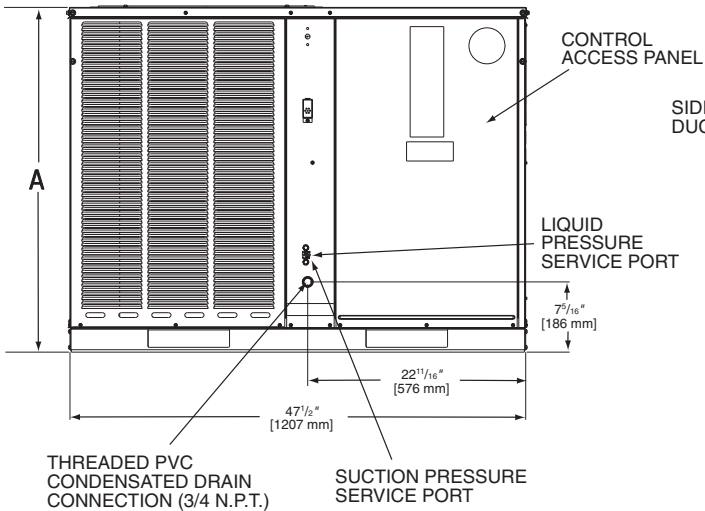
## SIDE VIEW



## SIDE VIEW

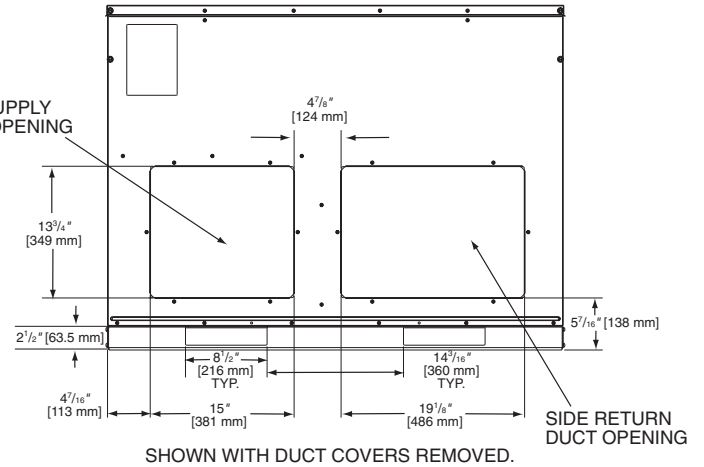


## FRONT VIEW



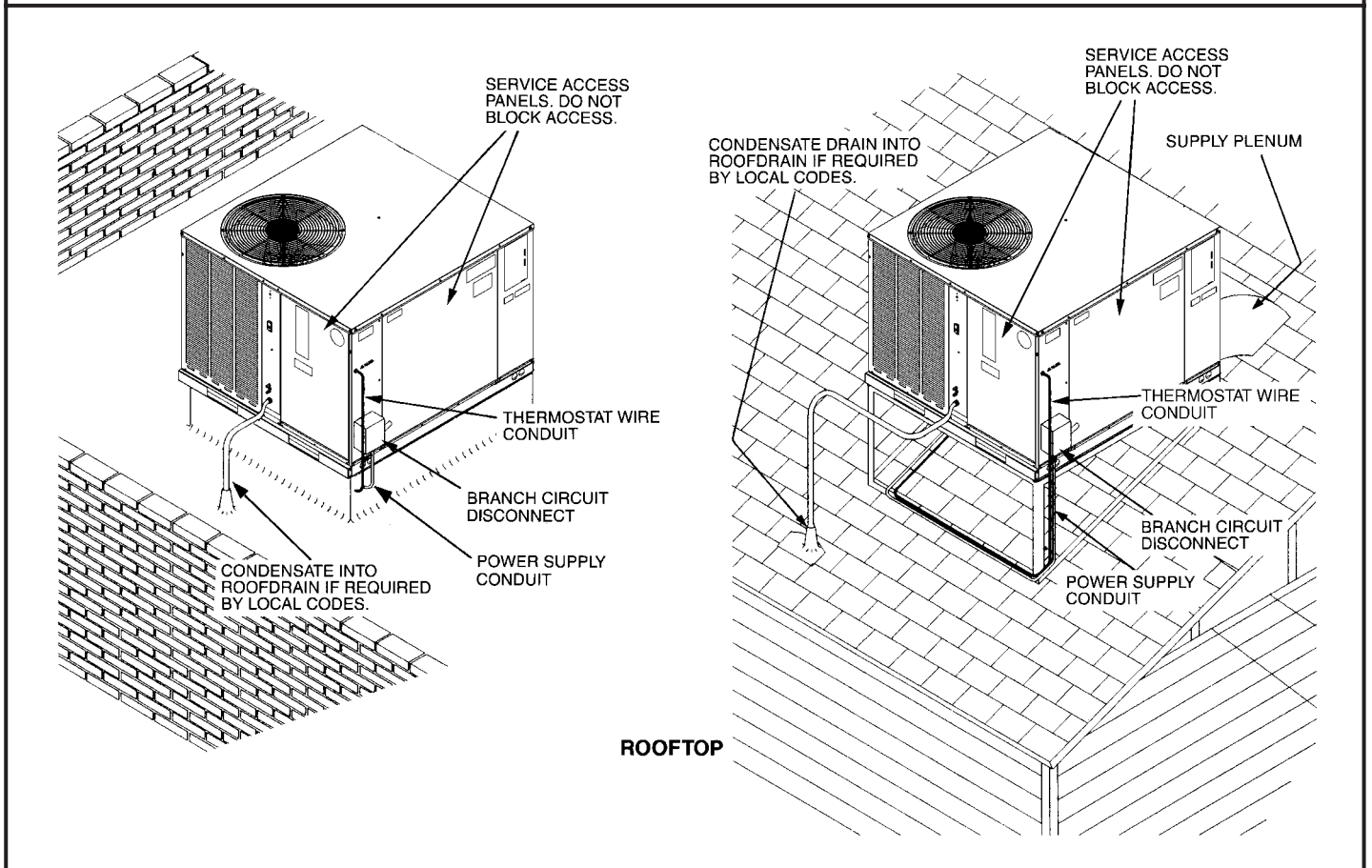
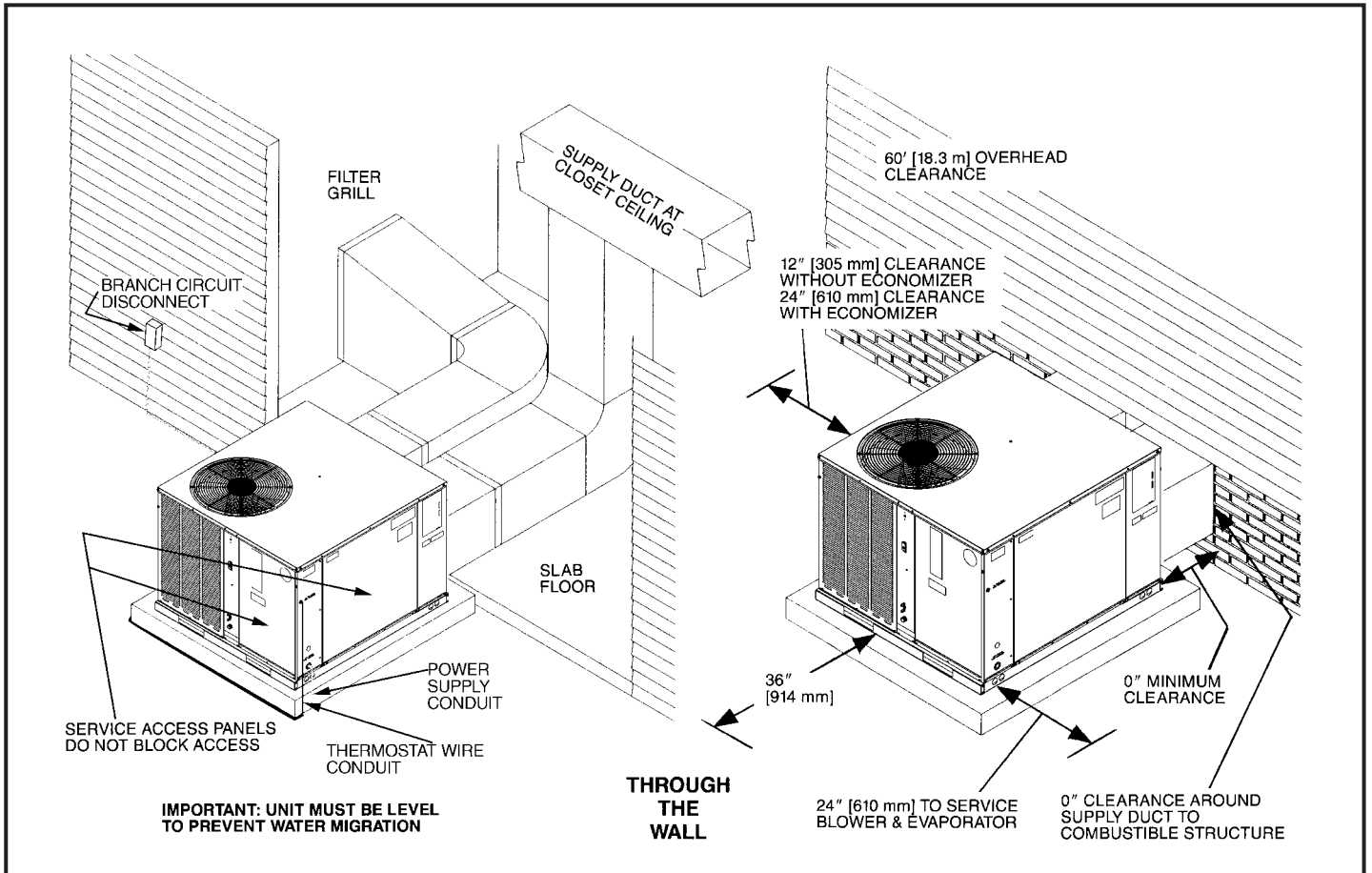
**IMPORTANT:**  
INSTALLATION MUST NOT INTERFERE WITH DRAINAGE OPENINGS IN BOTTOM OF UNIT UNDER OUTDOOR COIL.

## REAR VIEW



**IMPORTANT:**  
Unit must be level to prevent water migration.

Model #	Height "A"
024, 030, 036	35 <sup>15</sup> / <sub>16</sub>
042, 048, 060	41



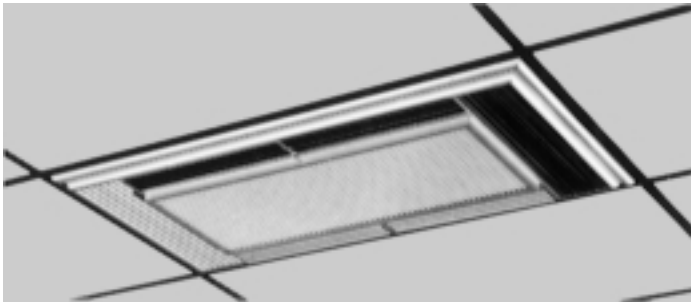
# ACCESSORIES

## ACCESSORY EQUIPMENT

Accessory Description	Model Application	Accessory Model No.
Roofcurbs	TZAC-	RXSG-AAA08 (8" [203 mm] Height) RXSG-AAA14 (14" [356 mm] Height) RXSG-AAA24 (24" [610 mm] Height)
Supply & Return Diffusers	TZAC-	RXRN-BD15
Economizers (Downflow ONLY)	TZAC-	RXRE-CAA30 (3 Position) RXRD-CAM10 (Fully Modulating)
Economizers (Sideflow ONLY)	TZAC-	RXRE-CCA30 (3 Position) RXRD-CCM10 (Fully Modulating)
Fresh Air Damper	TZAC-	RXRF-FAB1 (Motorized-35%) RXRF-FAA1 (Fixed-35%)
Rectangular to Round Transition (Downflow)	TZAC-	RXMC-CA02 (16" [406 mm] Ducts) RXMC-CA03 (18" [457 mm] Ducts)
Filter Kit	TZAC-	RXRY-B01
Low Ambient Control	TZAC-	RXRZ-A18
High Pressure Control	TZAC-	RXAB-A02
Low Pressure Control	TZAC-	RXAC-A02
Sideflow Rectangular to Round Transition	TZAC-	RXMC-BA01
LP Conversion Kits	TZAC-	RXGJ-EP84W (White-Rodgers Gas Valve) RXGJ-EP85H (Honeywell Gas Valve)
Canadian High Altitude Kit (for Natural Gas only*)	TZAC-	RXRX-AH01

\*If a particular unit is to be converted to operate on LP (propane) for elevations above 2000 ft. [609.6 m] in Canada, the existing Natural Gas to LP Conversion Kits for the subject models already contain the necessary orifices and instructions to de-rate the input for 2000-4500 ft. [609.6-1371.6 m] Canadian applications.

## COMMON SUPPLY/RETURN CONCENTRIC AIR DIFFUSER



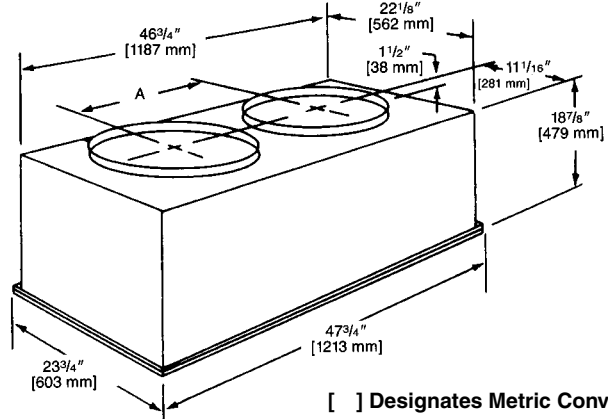
## SUPPLY/RETURN DIFFUSER



Designed to convert a side by side or an over and under arrangement into a concentric distribution of air. The diffuser is flush mounted, completely insulated, assembled, and internally baffled to provide four way supply air distribution with a center return. To make the assembly complete and ready to fit into a 2' [0.61 m] x 4' [1.22 m] suspended ceiling grid, the diffuser includes adjustable supply louvers, hanging rings, anti-sweat gasket, and round flanges for use with flexible ducts.

Model No. RXRN-	Diameter Inches [mm]	Shipping Wt. Lbs. [kg]	Dimension A Inches [mm]
BD15	16 [406]	90 [40.82]	20 1/2 [521]

DIFFUSER INSTALLS FLUSH WITH CEILING



**NOTE:** The location of the combination supply and return diffuser should not exceed 10 feet [3.05 m] above the floor level for units @ 1000 CFM [472 L/s] or less and 12 [3.66 m] to 14 feet [4.27 m] above the floor level for units with CFM greater than 1000 [472 L/s]. If the diffuser is installed with a greater distance than recommended above, the supply air may become stratified above the required comfort area causing uncomfortable conditions.

**AIRFLOW/PRESSURE DROP  
INFORMATION (INCHES W.C. [kPa])**

Accessory	Approximate CFM [L/s]-Supply Air			
	1300 [614]	1575 [743]	1800 [850]	2200 [1038]
Plenum & Supply/Return Duct	.07 [.017]	.10 [.024]	.12 [.030]	.17 [.042]
Diffuser	.09 [.022]	.13 [.032]	.16 [.040]	.24 [.060]
Economizer	.06 [.015]	.09 [.022]	.11 [.027]	.17 [.042]

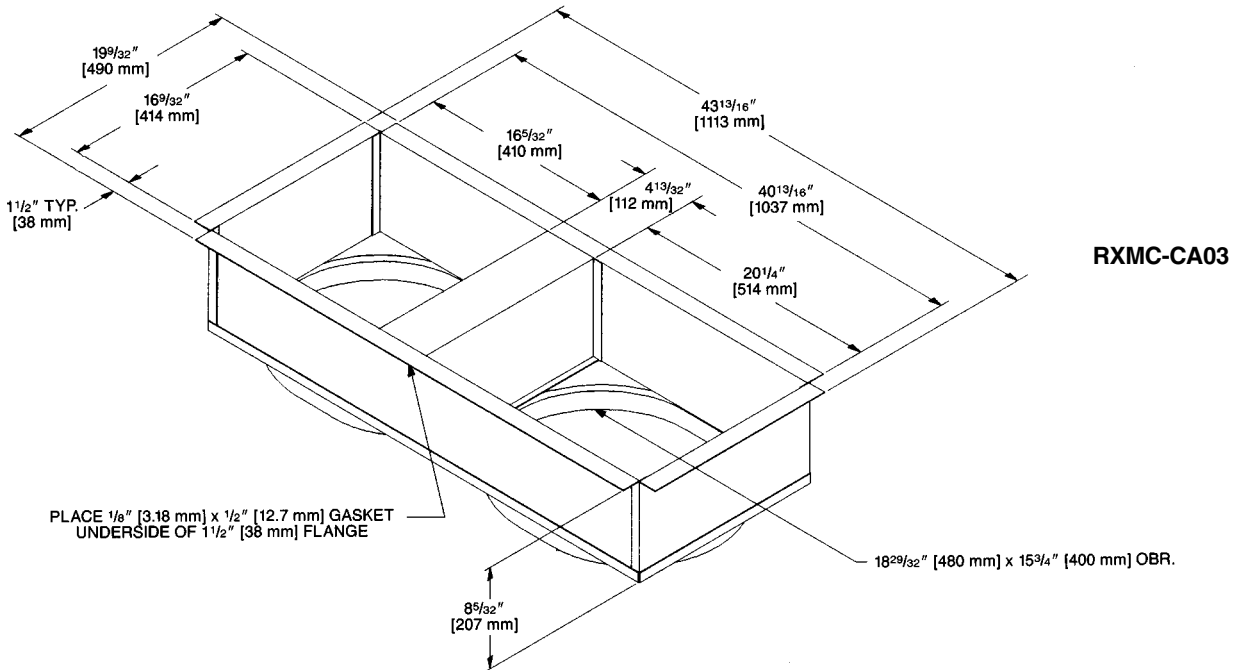
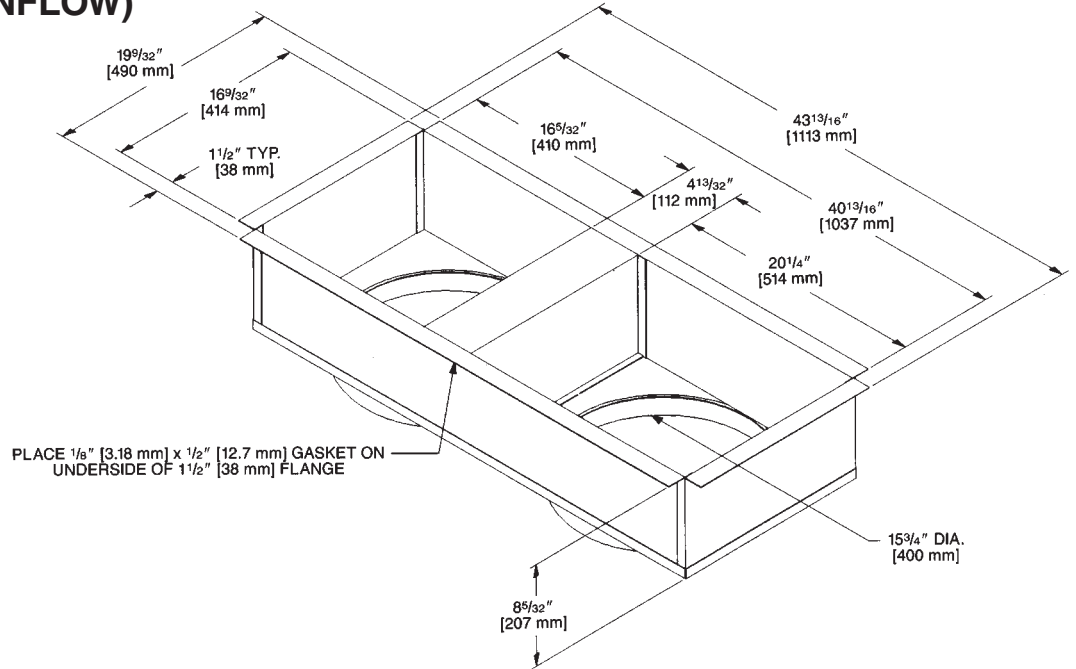
**SUPPLY AIR/PERFORMANCE**

Diffuser Airflow CFM [L/s]	Range of Throw Ft. [m]
800 [378]-1200 [566]	14 [4.27]-16 [4.88]
1600 [755]-2000 [944]	18 [5.49]-28 [8.53]

# ACCESSORIES

## DUCT ADAPTERS RECTANGULAR TO ROUND TRANSITIONS (DOWNFLOW)

**RXMC-CA02**



[ ] Designates Metric Conversions

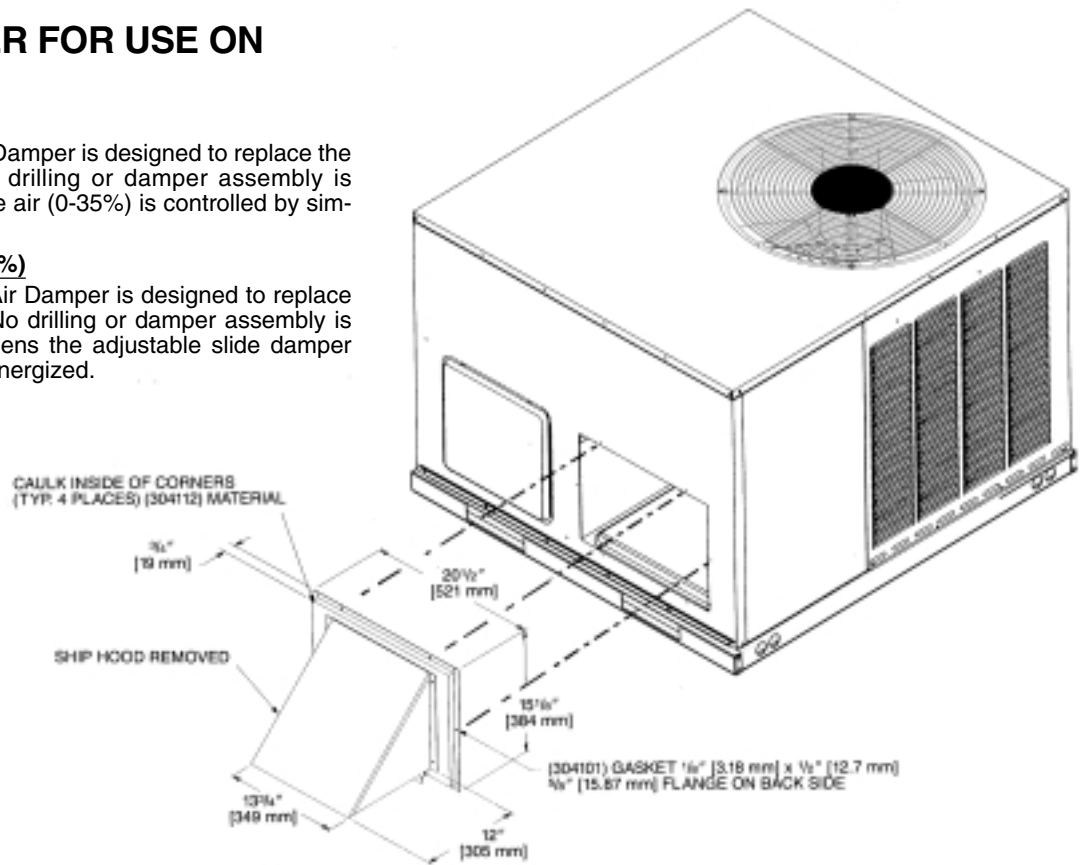
## FRESH AIR DAMPER FOR USE ON TZAC- SERIES

### **RXRF-FAA1 (Fixed - 0-35%)**

The 0-35% manual outside Air Damper is designed to replace the unit return air duct cover. No drilling or damper assembly is required. The amount of outside air (0-35%) is controlled by simply adjusting the side damper.

### **RXRF-FAB1 (Motorized - 0-35%)**

The 0-35% motorized outside Air Damper is designed to replace the unit return air duct cover. No drilling or damper assembly is required. The control motor opens the adjustable slide damper when the unit blower motor is energized.



# ACCESSORIES

## ECONOMIZERS

### RXRE-CAA30 (3 Position) and RXRD-CAM10 (Fully Modulating) for TZAC- Series

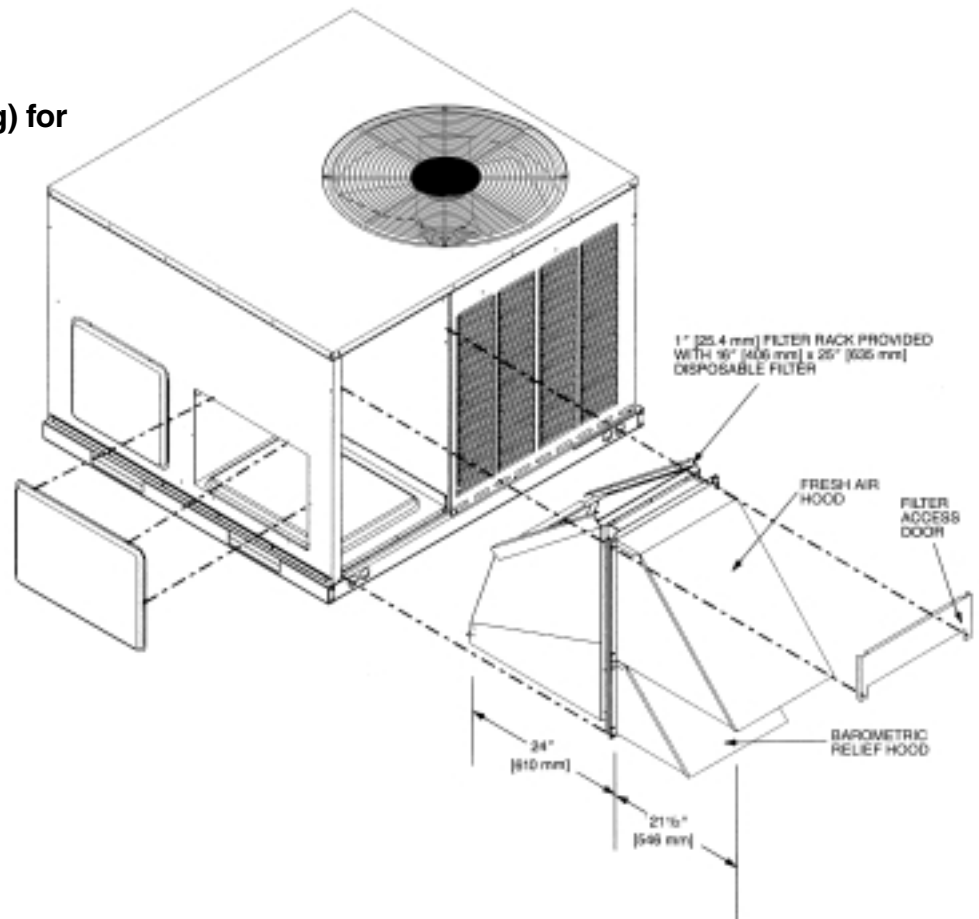
#### RXRE-CAA30 (3 Position)

Provided with enthalpy control, and mixed air sensor. Settings include fully open, fully closed and adjustable mid point.

#### RXRD-CAM10 (Fully Modulating)

Provided with enthalpy control, mixed air sensor and minimum position potentiometer for proportioning (modulating) the amount of fresh air.

**Note:** See economizer installation instructions for correct filter access door.



## ECONOMIZERS

### RXRD-CCM10 (Fully Modulating) and RXRE-CCA30 (3 Position) for TZAC- Series Horizontal Application

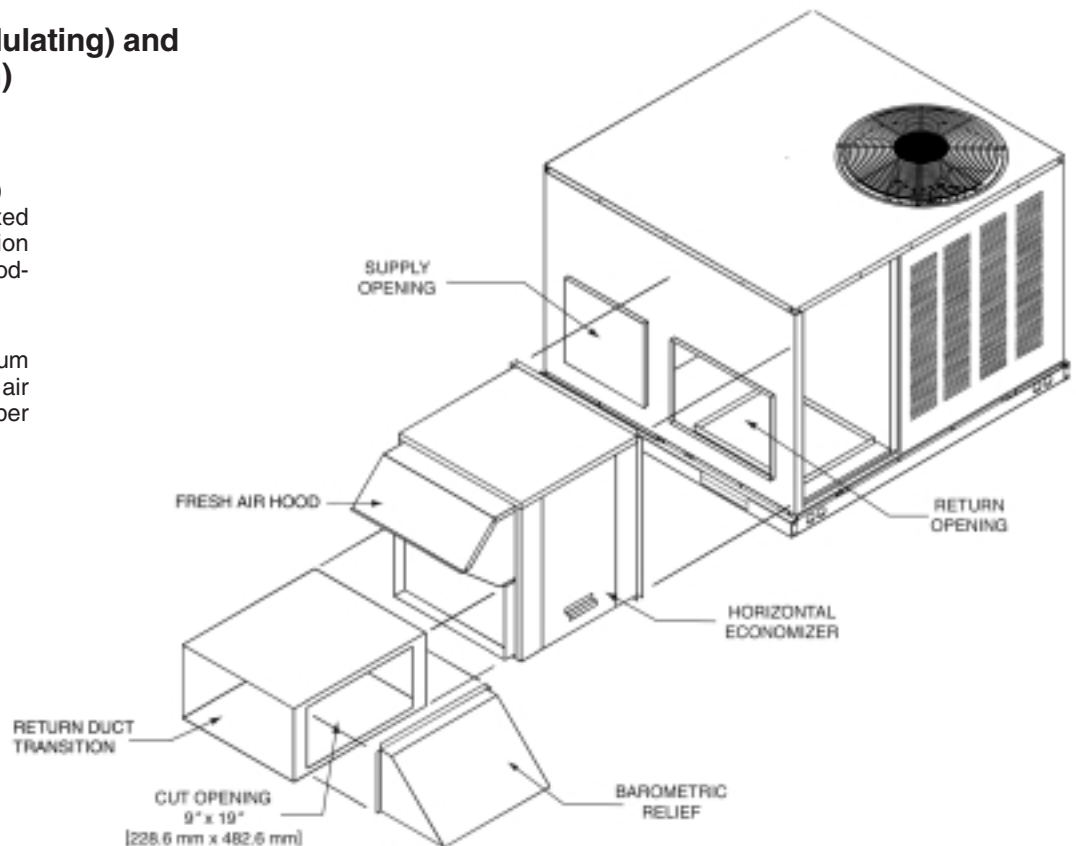
#### RXRD-CCM10 (Fully Modulating)

Provided with enthalpy control, mixed air sensor and minimum position potentiometer for proportioning (modulating) the amount of fresh air.

#### RXRE-CCA30 (3 Position)

Has outdoor air sensor, minimum position potentiometer and mixed air sensor to provide three damper positions.

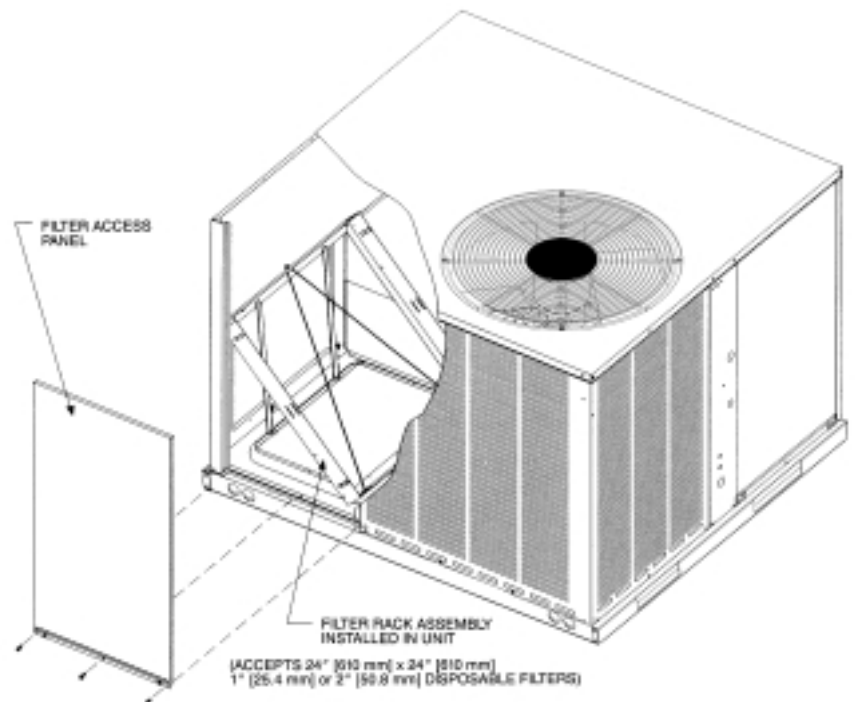
[ ] Designates Metric Conversions





## FILTER KIT INSTALLATION RXRY-01

For use in either  
vertical or horizontal  
discharge.



Model No.	CFM [L/s]		
	Minimum Airflow	Nominal Airflow	Maximum Airflow
TZAC-	510 [241]	600 [283]	660 [311]
TZAC-	680 [321]	800 [378]	880 [415]
TZAC-	850 [401]	1000 [472]	1100 [519]
TZAC-	1020 [481]	1200 [566]	1320 [623]
TZAC-	1190 [562]	1400 [661]	1540 [727]
TZAC-	1275 [602]	1500 [708]	1650 [779]

[ ] Designates Metric Conversions

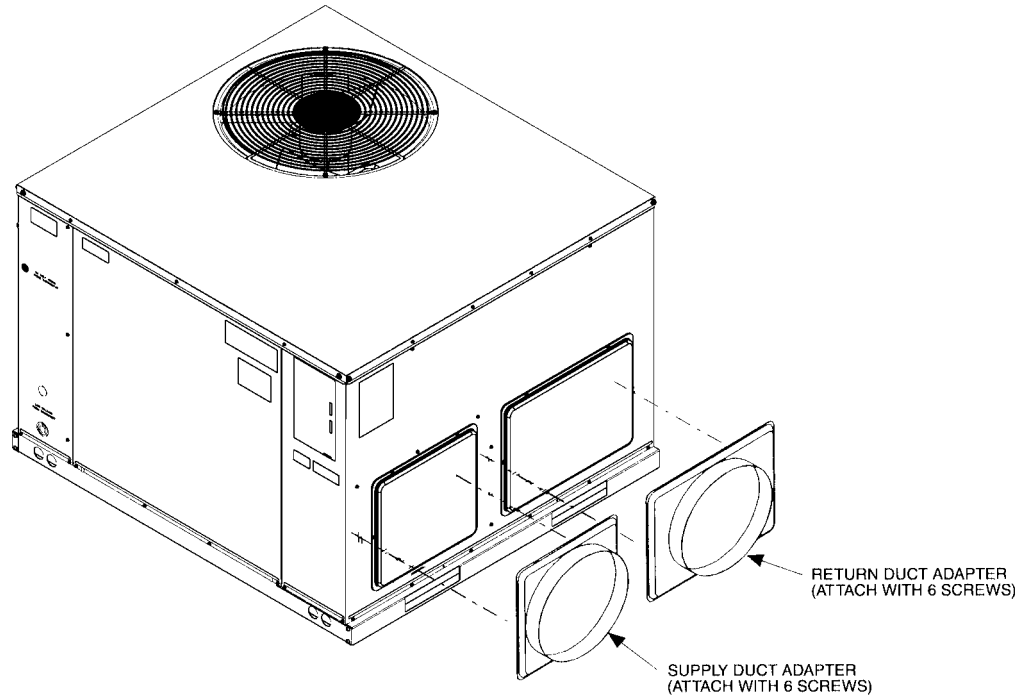
CFM [L/s]	Airflow Pressure Drop, Inches W.C. [kPa]	
	1" Filter	2" Filter
500 [236]	.02 [.0050]	.03 [.0075]
600 [283]	.02 [.0050]	.03 [.0075]
700 [330]	.03 [.0075]	.04 [.0010]
800 [378]	.04 [.0010]	.05 [.0124]
900 [425]	.05 [.0124]	.06 [.0149]
1000 [472]	.07 [.0174]	.08 [.0199]
1100 [519]	.08 [.0199]	.09 [.0224]
1200 [566]	.10 [.0249]	.12 [.0299]
1300 [614]	.13 [.0324]	.15 [.0373]
1400 [661]	.16 [.0398]	.19 [.0473]
1500 [708]	.19 [.0473]	.21 [.0523]
1600 [755]	.20 [.0498]	.23 [.0572]
1700 [802]	.21 [.0523]	.24 [.0598]
1800 [850]	.22 [.0548]	.25 [.0623]
1900 [897]	.24 [.0598]	.27 [.0672]
2000 [944]	.26 [.0647]	.29 [.0722]

# ACCESSORIES

## DUCT ADAPTER SIDEFLOW SQUARE TO ROUND TRANSITION RXMC-A01

Adapts the side rectangular supply and return openings to 14" [356 mm] diameter round openings. Adapters provided with same finish as unit and also provided with thermal insulation.

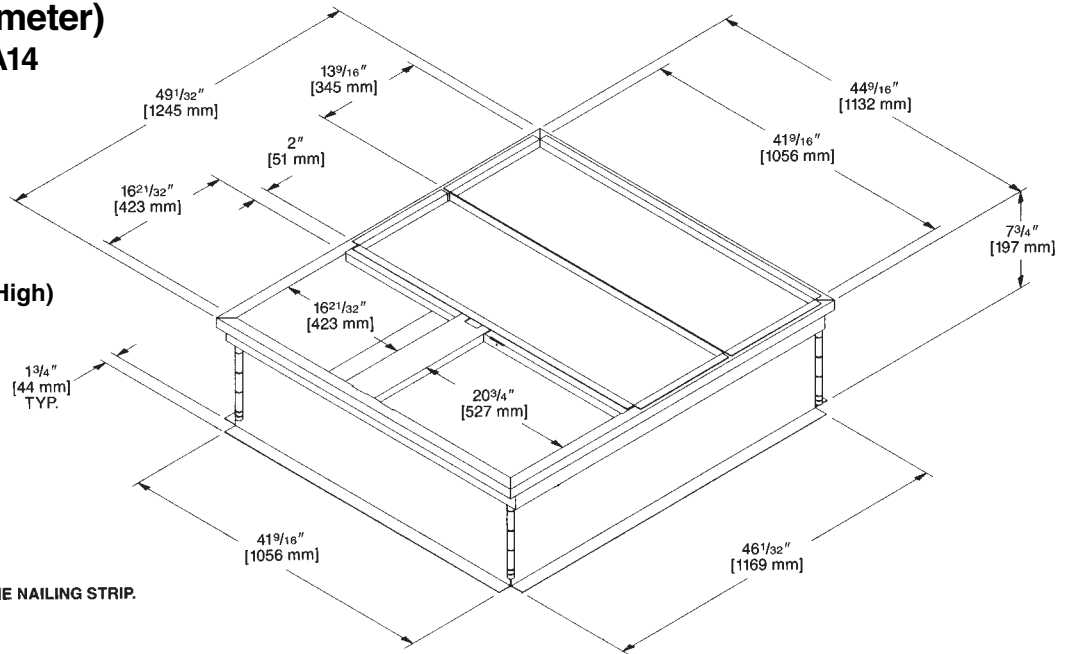
[ ] Designates Metric Conversions



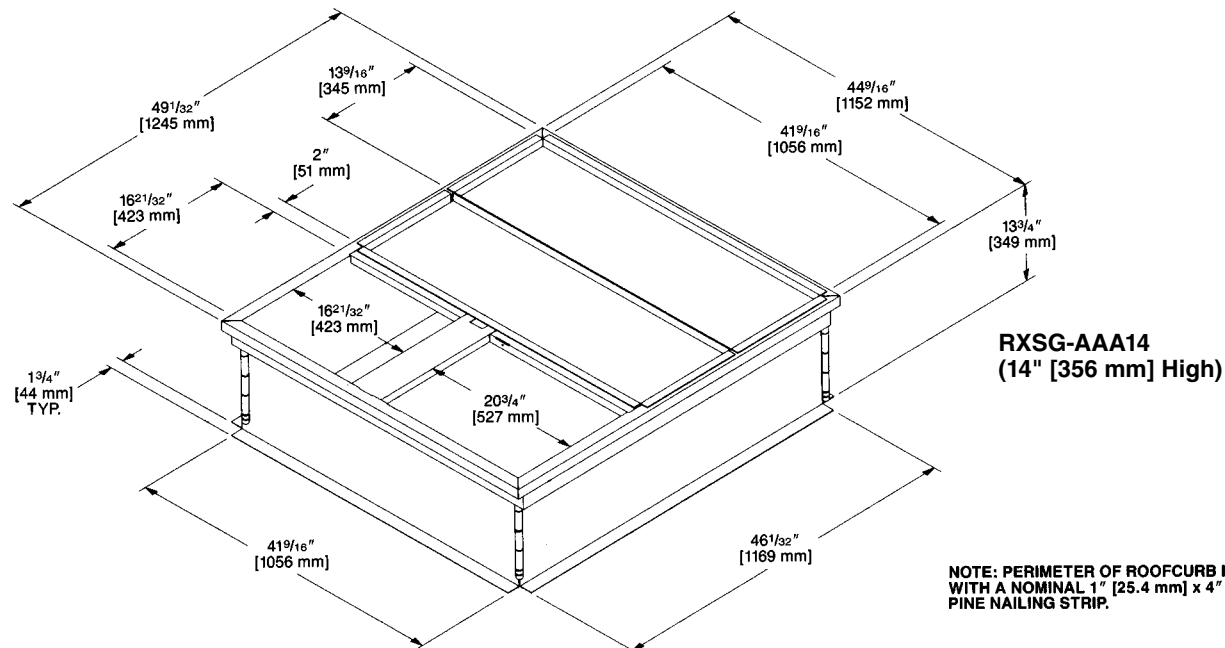
## ROOFCURB (Full Perimeter) RXSG-AAA08, RXSG-AAA14 and RXSG-AAA24m for TZAC- Series

Hinged corners make for  
fast, easy set-up.

### RXSG-AAA08 (8" [203 mm] High)



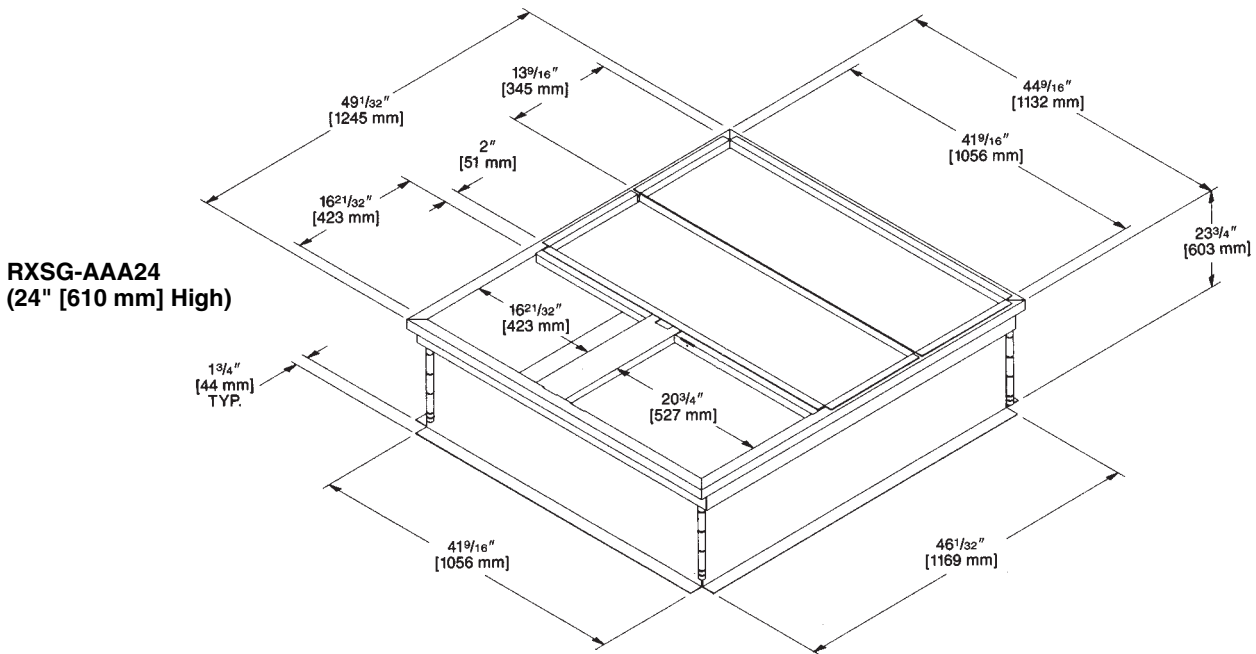
NOTE: PERIMETER OF ROOFCURB IS SUPPLIED  
WITH A NOMINAL 1" [25.4 mm] x 4" [102 mm] PINE NAILING STRIP.



NOTE: PERIMETER OF ROOFCURB IS SUPPLIED  
WITH A NOMINAL 1" [25.4 mm] x 4" [102 mm]  
PINE NAILING STRIP.

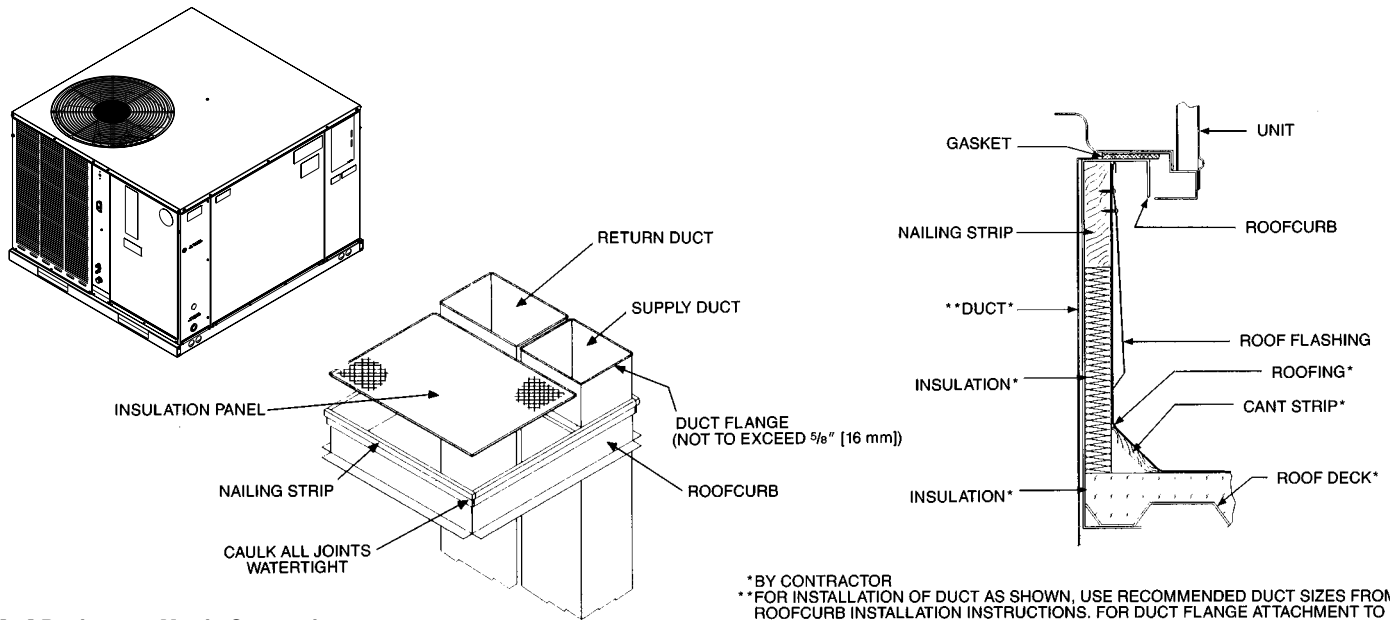
[ ] Designates Metric Conversions

## ROOFCURB (Full Perimeter) (Cont.)



[ ] Designates Metric Conversions

## PACKAGE AIR CONDITIONERS & GAS/ELECTRIC PACKAGE UNITS ROOFCURB INSTALLATION (Full Perimeter)

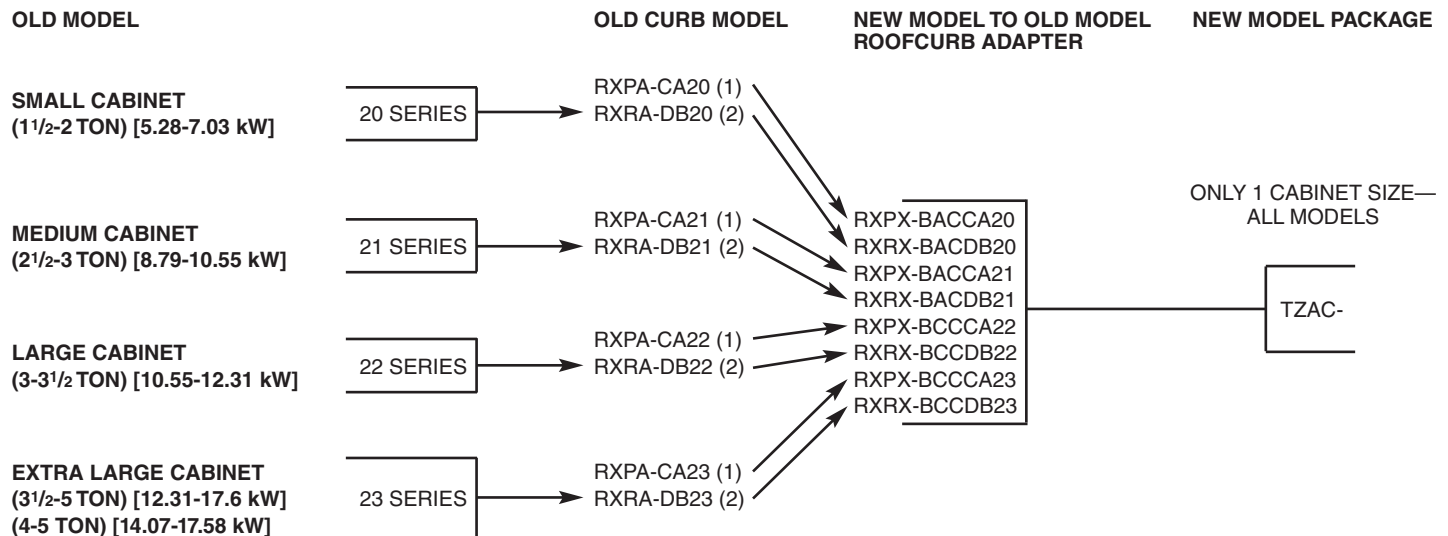


[ ] Designates Metric Conversions

\*BY CONTRACTOR  
\*\*FOR INSTALLATION OF DUCT AS SHOWN. USE RECOMMENDED DUCT SIZES FROM ROOFCURB INSTALLATION INSTRUCTIONS. FOR DUCT FLANGE ATTACHMENT TO UNIT, SEE UNIT INSTALLATION INSTRUCTIONS FOR RECOMMENDED DUCT SIZES.

## ROOFCURB ADAPTERS

Fabricated from galvanized steel to adapt the New cabinet to the old style curb. All are furnished with a New gasket.



(1) SLOPE TYPE  
(2) FULL PERIMETER TYPE

# ACCESSORIES

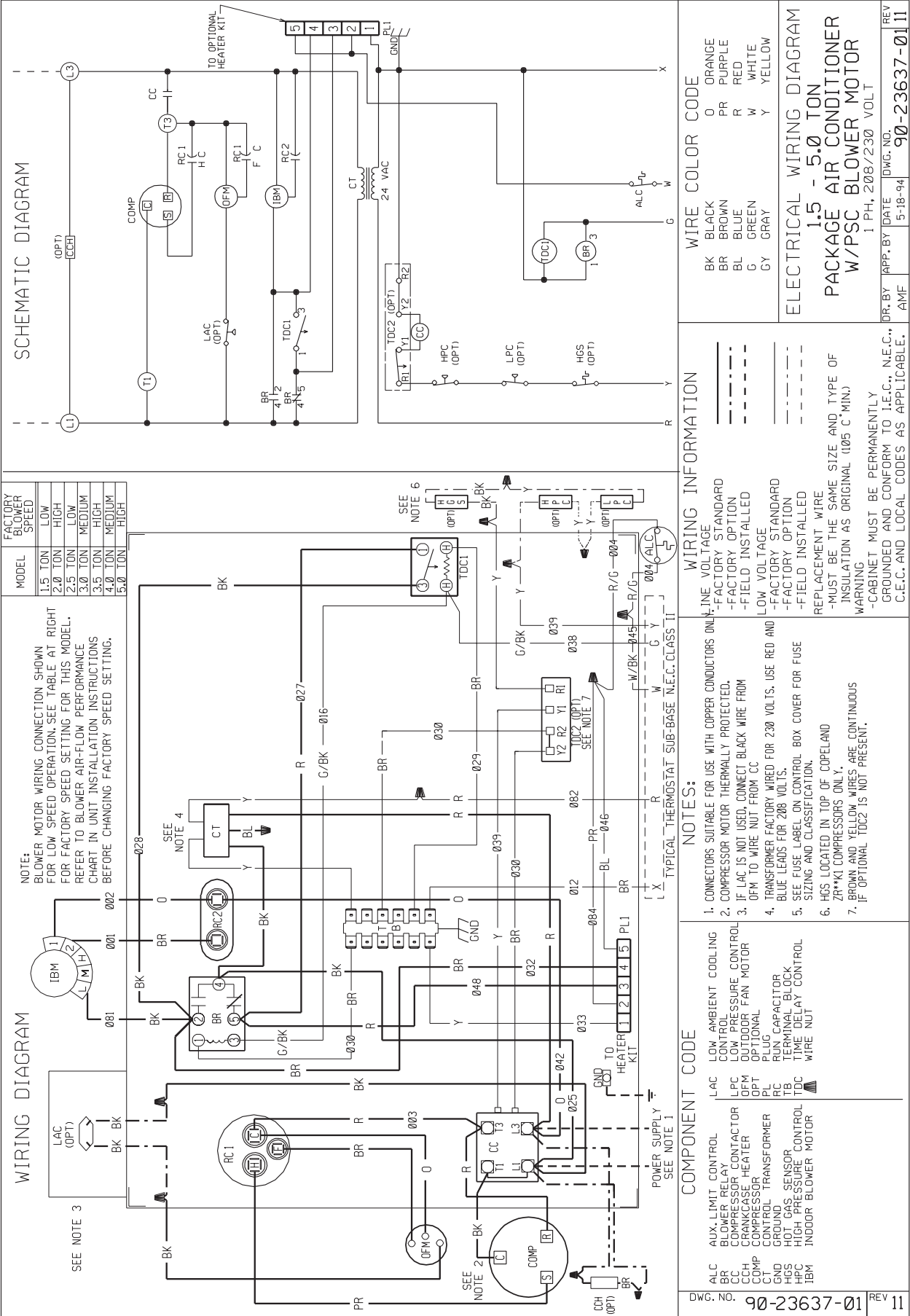
## ELECTRIC HEATER KITS—TZAC-

Unit Model Application	Electric Heater Kit Models
TZAC-324JA	RXQJ-A05J (208-240 volt, 1-ph, 5kW)
	RXQJ-A10J (208-240 volt, 1-ph, 10kW)
TZAC-330JA	RXQJ-A05J (208-240 volt, 1-ph, 5kW)
	RXQJ-A10J (208-240 volt, 1-ph, 10kW)
TZAC-336JA	RXQJ-A10J (208-240 volt, 1-ph, 10kW)
	RXQJ-A15J (208-240 volt, 1-ph, 15kW)
TZAC-342JA	RXQJ-A10J (208-240 volt, 1-ph, 10kW)
	RXQJ-A15J (208-240 volt, 1-ph, 15kW)
TZAC-348JA/360JA	RXQJ-B10J (208-240 volt, 1-ph, 10kW)
	RXQJ-B15J (208-240 volt, 1-ph, 15kW)
TZAC-336CA	RXQJ-A10C (208-240 volt, 3-ph, 10kW)
	RXQJ-A15C (208-240 volt, 3-ph, 15kW)
TZAC-342CA	RXQJ-A10C (208-240 volt, 3-ph, 10kW)
	RXQJ-A15C (208-240 volt, 3-ph, 15kW)
TZAC-348CA/360CA	RXQJ-A10C (208-240 volt, 3-ph, 10kW)
	RXQJ-A15C (208-240 volt, 3-ph, 15kW)

[ ] Designates Metric Conversions

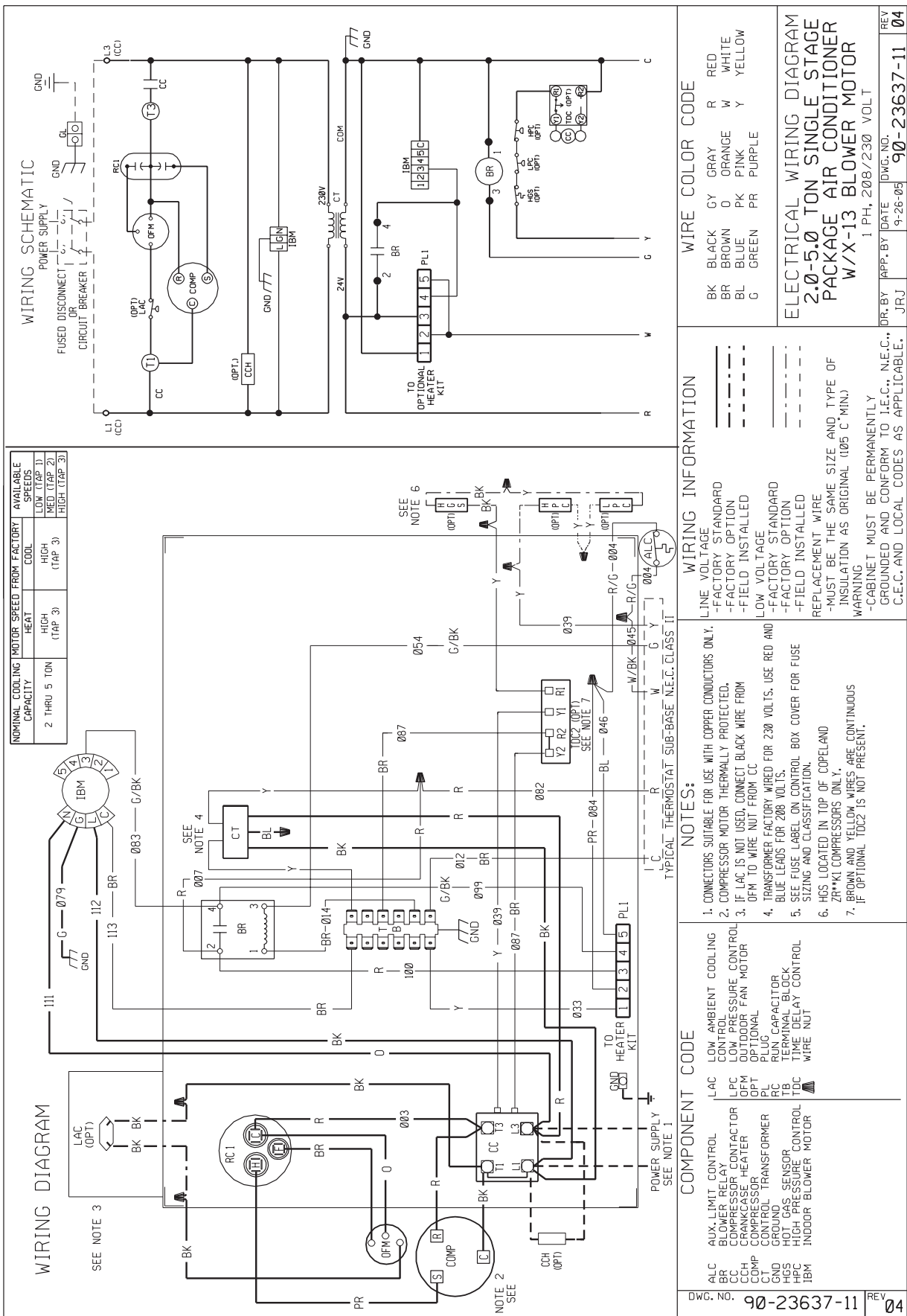
### WARNING

ONLY ELECTRIC HEATER KITS SUPPLIED BY THIS MANUFACTURER AS DESCRIBED IN THIS PUBLICATION HAVE BEEN DESIGNED, TESTED, AND EVALUATED BY A NATIONALLY RECOGNIZED SAFETY TESTING AGENCY FOR USE WITH THIS UNIT. USE OF ANY OTHER MANUFACTURED ELECTRIC HEATERS INSTALLED WITHIN THIS UNIT MAY CAUSE HAZARDOUS CONDITIONS RESULTING IN PROPERTY DAMAGE, FIRE, BODILY INJURY OR DEATH.









NOMINAL COOLING CAPACITY	MOTOR SPEED FROM FACTORY		AVAILABLE SPEEDS	
	HEAT	COOL	LOW (TAP 1)	HIGH (TAP 2)
2 THRU 5 TON	HIGH (TAP 3)	HIGH (TAP 3)	MED (TAP 2)	HIGH (TAP 3)
			LOW (TAP 1)	

**WIRING DIAGRAM**

**WIRING SCHEMATIC**

WIRE COLOR CODE	
BK	BLACK
BR	BROWN
BL	BLUE
G	GREEN
GY	GRAY
O	ORANGE
PK	PINK
PR	PURPLE
R	RED
W	WHITE
Y	YELLOW

**WIRING INFORMATION**

LINE VOLTAGE  
 -FACTORY STANDARD  
 -FACTORY OPTION  
 -FIELD INSTALLED

LOW VOLTAGE  
 -FACTORY STANDARD  
 -FACTORY OPTION  
 -FIELD INSTALLED

REPLACEMENT WIRE  
 -MUST BE THE SAME SIZE AND TYPE OF INSULATION AS ORIGINAL (105 C MIN.)

**WARNING**  
 -CABINET MUST BE PERMANENTLY GROUNDED AND CONFORM TO I.E.C., N.E.C., C.E.C. AND LOCAL CODES AS APPLICABLE.

**NOTES:**

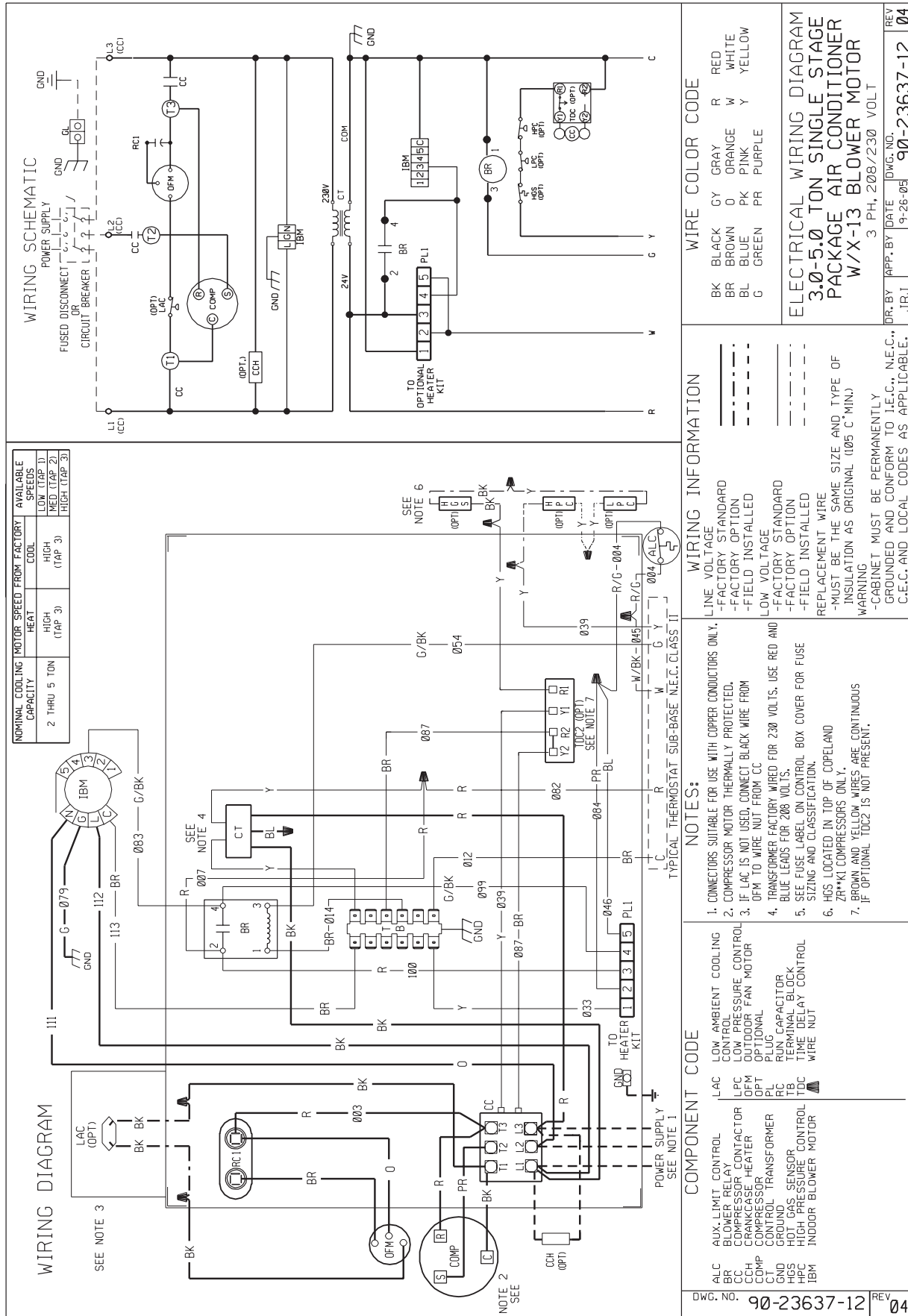
- CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
- COMPRESSOR MOTOR THERMALLY PROTECTED.
- IF LAC IS NOT USED, CONNECT BLACK WIRE FROM OFM TO WIRE NUT FROM CC
- TRANSFORMER FACTORY WIRED FOR 230 VOLTS. USE RED AND BLUE LEADS FOR 208 VOLTS.
- SEE FUSE LABEL ON CONTROL BOX COVER FOR FUSE SIZING AND CLASSIFICATION.
- HGS LOCATED IN TOP OF COPELAND ZRY-KI COMPRESSORS ONLY.
- BROWN AND YELLOW WIRES ARE CONTINUOUS IF OPTIONAL TOCC2 IS NOT PRESENT.

COMPONENT CODE	
ALC	AUX. LIMIT CONTROL
BR	BLOWER RELAY
CC	COMPRESSOR CONTACTOR
CCH	CRANKCASE HEATER
COMP	COMPRESSOR
CT	CONTROL TRANSFORMER
GND	GROUND
HGS	HIGH GAS SENSOR
IBM	INDOOR BLOWER MOTOR
LAC	LOW AMBIENT COOLING CONTROL
LPC	LOW PRESSURE CONTROL
OFM	OUTDOOR FAN MOTOR
OPT	OPTIONAL
PL	PLUG
RC	RUN CAPACITOR
TC	TEMPERATURE CONTROL
TDC	TERMINAL BLOCK
WIRE NUT	WIRE NUT

**ELECTRICAL WIRING DIAGRAM**  
**2.0-5.0 TON SINGLE STAGE PACKAGE AIR CONDITIONER W/X-13 BLOWER MOTOR**

DR. BY	JRJ
APP. DATE	9-26-05
DWG. NO.	90-23637-11
REV	04

# WIRING SCHEMATICS—TZAC- SERIES





**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 Your Local Installer or Contact the Manufacturer for a Copy.**

Condenser Coil and Evaporator Coil leaks caused by factory defects .....	Five (5) Years
Compressor .....	Five (5) Years
Any Other Part	
1-Phase Models .....	Five (5) Years
3-Phase Models .....	One (1) Year

**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."*