



# PACKAGE AIR CONDITIONERS

FORM NO. STZ-934

Featuring Earth-Friendly R-410A Refrigerant

**R-410A**

**TZAC-\*\*JL 13-SEER SERIES**  
NOMINAL SIZES 2-5 TONS [7.0-17.6 kW]



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



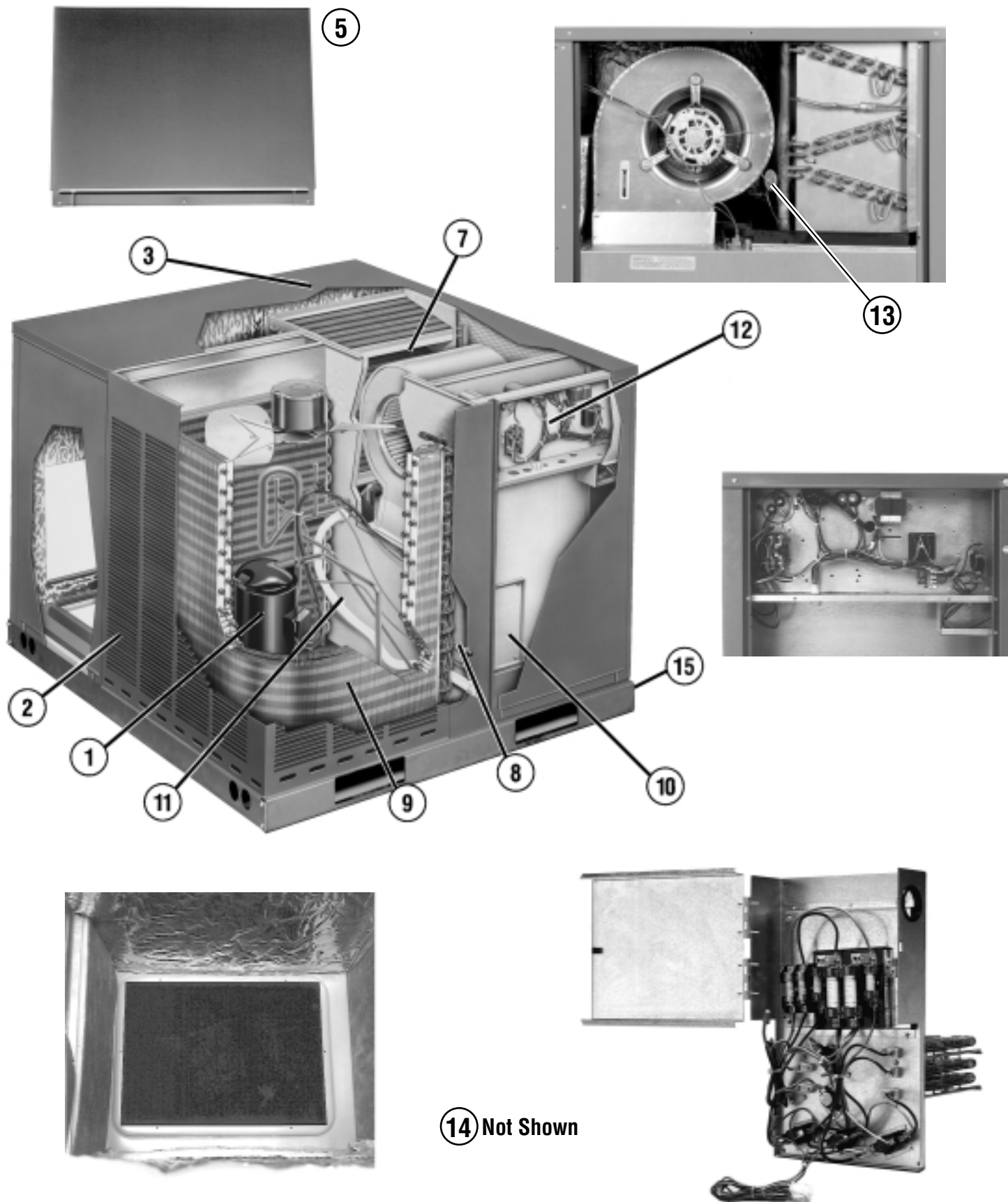
*"Proper sizing and installation of equipment is critical to achieve optimal performance. Ask your Contractor for details or visit [www.energystar.gov](http://www.energystar.gov)."*

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



## UNIT FEATURES & BENEFITS—TZAC-\*\*JL 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 options 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 or factory installed) for periods of extreme cold temperatures. Single point wiring simplifies installation.
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.
13. Thermal expansion valve standard on all models for superior superheat control, reliability, and energy efficiency at all operating conditions.
14. Filter drier standard on all models (not shown).
15. Rugged baserail included for improved installation and handling.

# MODEL IDENTIFICATION—TZAC-\*\*JL SERIES



<u>TZ</u>	<u>A</u>	<u>C</u>	<u>—</u>	<u>3</u>	<u>24</u>	<u>J</u>	<u>L</u>
THERMAL ZONE®	AIR CONDITIONING	CONVERTIBLE		3 = 13 SEER	COOLING CAPACITY	.ELECTRICAL DESIGNATION	CABINET REFRIGERANT
					24 = 24,000 [7.03 kW]	J = 208-230V	L = R-410A
					30 = 30,000 [8.79 kW]	—1PH—60Hz	
					36 = 36,000 [10.55 kW]	C = 208-230V	
					42 = 42,000 [12.31 kW]	—3PH—60Hz	
					48 = 48,000 [14.07 kW]		
					60 = 60,000 [17.58 kW]		

# OPTIONS—TZAC-\*\*JL SERIES

## Instructions for Factory Installed Option(s) Selection

**Note:** Two characters following the model number will be utilized to designate a factory-installed option or combination of options. If no factory option(s) is required, nothing follows the model number.

**Step 1.** After a basic rooftop model is selected, choose a *two-character* option code from the FACTORY INSTALLED OPTION SELECTION TABLE.

## FACTORY INSTALLED OPTION CODES

Option Code	Side Flow
AA	No Option
AK	x

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

Model TZAC-**JL Series	324JL	330JL	336CL	336JL
<b>Cooling Performance<sup>1</sup></b>				<b>CONTINUED</b> →
Gross Cooling Capacity Btu [kW]	24,400 [7.15]	29,800 [8.73]	37,000 [10.84]	37,000 [10.84]
EER/SEER <sup>2</sup>	11.1/13	11.1/13	11.3/13	11.3/13
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]	23,600 [6.91]	28,600 [8.38]	35,600 [10.43]	35,600 [10.43]
Net Sensible Capacity Btu [kW]	17,340 [5.08]	20,810 [6.1]	26,390 [7.73]	26,390 [7.73]
Net Latent Capacity Btu [kW]	6,260 [1.83]	7,790 [2.28]	9,210 [2.7]	9,210 [2.7]
Net System Power kW	2.12	2.58	3.15	3.15
<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 1/5 HP	1 at 1/5 HP	1 at 1/5 HP	1 at 1/5 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 [228.6x177.8]	1/10x9 [254x228.6]	1/10x9 [254x228.6]	1/10x9 [254x228.6]
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>	77.8 [2206]	76.8 [2177]	92.8 [2631]	92.8 [2631]
<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 10 for Notes.

[ ] Designates Metric Conversions

# GENERAL DATA—TZAC-\*\*JL SERIES

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

Model TZAC-**JL Series	342CL	342JL	348CL	348JL
<b>Cooling Performance<sup>1</sup></b>				<b>CONTINUED</b> →
Gross Cooling Capacity Btu [kW]	44,000 [12.89]	44,000 [12.89]	50,000 [14.65]	50,000 [14.65]
EER/SEER <sup>2</sup>	11.2/13	11.2/13	11.2/13	11.2/13
Nominal CFM/ARI Rated CFM [L/s]	1400/1400 [661/661]	1400/1400 [661/661]	1600/1600 [755/755]	1600/1600 [755/755]
ARI Net Cooling Capacity Btu [kW]	42,000 [12.31]	42,000 [12.31]	48,000 [14.06]	48,000 [14.06]
Net Sensible Capacity Btu [kW]	30,510 [8.94]	30,510 [8.94]	33,990 [9.96]	33,990 [9.96]
Net Latent Capacity Btu [kW]	11,490 [3.37]	11,490 [3.37]	14,010 [4.1]	14,010 [4.1]
Net System Power kW	3.73	3.73	4.28	4.28
<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]	2 / 22 [9]	2 / 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 [254x228.6]	1/10x9 [254x228.6]	1/10x9 [254x228.6]	1/10x9 [254x228.6]
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	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)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]
<b>Refrigerant Charge Oz. [g]</b>	112 [3175]	112 [3175]	161.2 [4570]	161.2 [4570]
<b>Weights</b>				
Net Weight lbs. [kg]	422 [191]	422 [191]	452 [205]	461 [209]
Ship Weight lbs. [kg]	462 [210]	462 [210]	492 [223]	501 [227]

See Page 10 for Notes.

[ ] Designates Metric Conversions



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

Model TZAC-**JL Series	360CL	360JL
<b>Cooling Performance<sup>1</sup></b>		
Gross Cooling Capacity Btu [kW]	59,500 [17.43]	59,500 [17.43]
EER/SEER <sup>2</sup>	10.5/13	10.5/13
Nominal CFM/ARI Rated CFM [L/s]	1900/1850 [897/873]	1900/1850 [897/873]
ARI Net Cooling Capacity Btu [kW]	57,500 [16.85]	57,500 [16.85]
Net Sensible Capacity Btu [kW]	40,460 [11.85]	40,460 [11.85]
Net Latent Capacity Btu [kW]	17,040 [4.99]	17,040 [4.99]
Net System Power kW	5.48	5.48
<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>		
Tube Type	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>		
Tube Type	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 [304.8x228.6]	1/12x9 [304.8x228.6]
Drive Type/No. Speeds	Direct/4	Direct/4
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>		
	172.8 [4899]	172.8 [4899]
<b>Weights</b>		
Net Weight lbs. [kg]	532 [241]	532 [241]
Ship Weight lbs. [kg]	577 [262]	577 [262]

See Page 10 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 in CFM range shown in airflow tables. 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-\*\*JL SERIES

## GROSS SYSTEMS PERFORMANCE DATA—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		.19	.17	.16	.19	.17	.16	.19	.17	.16	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW] Sens BTUH [kW] Power	29.6 [8.67] 17.6 [5.16] 1.5	29.0 [8.50] 16.8 [4.92] 1.5	28.5 [8.35] 16.0 [4.69] 1.5	27.8 [8.15] 20.7 [6.07] 1.5	27.3 [8.00] 19.8 [5.80] 1.5	26.8 [7.85] 18.8 [5.51] 1.5	26.6 [7.80] 22.1 [6.48] 1.5	26.1 [7.65] 21.2 [6.21] 1.5	25.7 [7.53] 20.2 [5.92] 1.5
	80 [26.7]	Total BTUH [kW] Sens BTUH [kW] Power	29.0 [8.50] 17.3 [5.07] 1.6	28.5 [8.35] 16.5 [4.84] 1.6	28.0 [8.21] 15.7 [4.60] 1.6	27.2 [7.97] 20.3 [5.95] 1.6	26.8 [7.85] 19.4 [5.69] 1.6	26.3 [7.71] 18.5 [5.42] 1.6	26.0 [7.62] 21.8 [6.39] 1.6	25.6 [7.50] 20.8 [6.10] 1.6	25.1 [7.36] 19.9 [5.83] 1.6
	85 [29.4]	Total BTUH [kW] Sens BTUH [kW] Power	28.3 [8.29] 16.9 [4.95] 1.7	27.8 [8.15] 16.1 [4.72] 1.7	27.3 [8.00] 15.4 [4.51] 1.7	26.5 [7.77] 19.9 [5.83] 1.7	26.1 [7.65] 19.0 [5.57] 1.7	25.6 [7.50] 18.1 [5.30] 1.7	25.3 [7.41] 21.4 [6.27] 1.7	24.9 [7.30] 20.4 [5.98] 1.7	24.4 [7.15] 19.5 [5.71] 1.7
	90 [32.2]	Total BTUH [kW] Sens BTUH [kW] Power	27.5 [8.06] 16.4 [4.81] 1.8	27.0 [7.91] 15.7 [4.60] 1.8	26.5 [7.77] 14.9 [4.37] 1.8	25.7 [7.53] 19.5 [5.71] 1.8	25.3 [7.41] 18.6 [5.45] 1.8	24.8 [7.27] 17.7 [5.19] 1.8	24.5 [7.18] 20.9 [6.13] 1.8	24.1 [7.06] 20.0 [5.86] 1.8	23.7 [6.95] 19.1 [5.60] 1.8
	95 [35]	Total BTUH [kW] Sens BTUH [kW] Power	26.6 [7.80] 15.9 [4.66] 1.9	26.1 [7.65] 15.2 [4.45] 1.9	25.7 [7.53] 14.5 [4.25] 1.9	24.9 [7.30] 19.0 [5.57] 1.9	24.4 [7.15] 18.2 [5.33] 1.9	24.0 [7.03] 17.3 [5.07] 1.9	23.7 [6.95] 20.5 [6.01] 1.9	23.2 [6.80] 19.6 [5.74] 1.9	22.8 [6.68] 18.6 [5.45] 1.9
	100 [37.8]	Total BTUH [kW] Sens BTUH [kW] Power	25.7 [7.53] 15.5 [4.54] 2.0	25.3 [7.41] 14.8 [4.34] 2.0	24.8 [7.27] 14.1 [4.13] 2.0	24.0 [7.03] 18.6 [5.45] 2.0	23.5 [6.89] 17.8 [5.22] 2.0	23.1 [6.77] 16.9 [4.95] 2.0	22.8 [6.68] 20.0 [5.86] 2.0	22.4 [6.56] 19.2 [5.63] 2.0	22.0 [6.45] 18.3 [5.36] 2.0
	105 [40.6]	Total BTUH [kW] Sens BTUH [kW] Power	24.9 [7.30] 15.1 [4.43] 2.1	24.4 [7.15] 14.5 [4.25] 2.1	24.0 [7.03] 13.8 [4.04] 2.1	23.1 [6.77] 18.2 [5.33] 2.1	22.7 [6.65] 17.4 [5.10] 2.1	22.3 [6.54] 16.6 [4.86] 2.1	21.9 [6.42] 19.7 [5.77] 2.1	21.5 [6.30] 18.8 [5.51] 2.1	21.1 [6.18] 17.9 [5.25] 2.1
	110 [43.3]	Total BTUH [kW] Sens BTUH [kW] Power	24.0 [7.03] 14.9 [4.37] 2.2	23.6 [6.92] 14.2 [4.16] 2.2	23.2 [6.80] 13.6 [3.99] 2.1	22.3 [6.54] 18.0 [5.28] 2.2	21.9 [6.42] 17.2 [5.04] 2.2	21.5 [6.30] 16.4 [4.81] 2.1	21.1 [6.18] 19.4 [5.69] 2.2	20.7 [6.07] 18.6 [5.45] 2.2	20.3 [5.95] 17.7 [5.19] 2.1
	115 [46.1]	Total BTUH [kW] Sens BTUH [kW] Power	23.3 [6.83] 14.8 [4.34] 2.3	22.9 [6.71] 14.1 [4.13] 2.3	22.4 [6.56] 13.4 [3.93] 2.2	21.5 [6.30] 17.8 [5.22] 2.3	21.1 [6.18] 17.0 [4.98] 2.3	20.8 [6.10] 16.2 [4.75] 2.2	20.3 [5.95] 19.3 [5.66] 2.3	20.0 [5.86] 18.4 [5.39] 2.3	19.6 [5.74] 17.6 [5.16] 2.2

## GROSS SYSTEMS PERFORMANCE DATA—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]		1100 [519]	1000 [472]	850 [401]	1100 [519]	1000 [472]	850 [401]	1100 [519]	1000 [472]	850 [401]	
DR ①		.22	.20	.19	.22	.20	.19	.22	.20	.19	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW] Sens BTUH [kW] Power	36.7 [10.76] 21.3 [6.24] 1.8	36.0 [10.55] 20.4 [5.98] 1.8	35.4 [10.37] 19.4 [5.69] 1.8	34.5 [10.11] 25.4 [7.44] 1.8	33.9 [9.94] 24.3 [7.12] 1.8	33.3 [9.76] 23.2 [6.80] 1.8	33.1 [9.70] 27.1 [7.94] 1.8	32.6 [9.55] 25.9 [7.59] 1.8	32.0 [9.38] 24.7 [7.24] 1.8
	80 [26.7]	Total BTUH [kW] Sens BTUH [kW] Power	35.8 [10.49] 20.7 [6.07] 1.9	35.2 [10.32] 19.8 [5.80] 1.9	34.5 [10.11] 18.9 [5.54] 1.9	33.6 [9.85] 24.8 [7.27] 1.9	33.0 [9.67] 23.7 [6.95] 1.9	32.4 [9.50] 22.6 [6.62] 1.9	32.2 [9.44] 26.5 [7.77] 1.9	31.7 [9.29] 25.3 [7.41] 1.9	31.1 [9.11] 24.1 [7.06] 1.9
	85 [29.4]	Total BTUH [kW] Sens BTUH [kW] Power	34.8 [10.20] 20.1 [5.89] 2.0	34.2 [10.02] 19.2 [5.63] 2.0	33.5 [9.82] 18.3 [5.36] 2.0	32.6 [9.55] 24.2 [7.09] 2.0	32.0 [9.38] 23.1 [6.77] 2.0	31.4 [9.20] 22.0 [6.45] 2.0	31.2 [9.14] 25.9 [7.59] 2.0	30.7 [9.00] 24.7 [7.24] 2.0	30.1 [8.82] 23.6 [6.92] 2.0
	90 [32.2]	Total BTUH [kW] Sens BTUH [kW] Power	33.7 [9.88] 19.5 [5.71] 2.2	33.1 [9.70] 18.6 [5.45] 2.1	32.5 [9.52] 17.7 [5.19] 2.1	31.5 [9.23] 23.6 [6.92] 2.2	30.9 [9.06] 22.5 [6.59] 2.1	30.3 [8.88] 21.5 [6.30] 2.1	30.1 [8.82] 25.2 [7.39] 2.1	29.6 [8.67] 24.1 [7.06] 2.1	29.0 [8.50] 23.0 [6.74] 2.1
	95 [35]	Total BTUH [kW] Sens BTUH [kW] Power	32.5 [9.52] 18.8 [5.51] 2.3	31.9 [9.35] 18.0 [5.28] 2.2	31.3 [9.17] 17.2 [5.04] 2.2	30.3 [8.88] 23.0 [6.74] 2.3	29.7 [8.70] 21.9 [6.42] 2.2	29.2 [8.56] 20.9 [6.13] 2.2	28.9 [8.47] 24.6 [7.21] 2.3	28.4 [8.32] 23.5 [6.89] 2.2	27.9 [8.18] 22.4 [6.56] 2.2
	100 [37.8]	Total BTUH [kW] Sens BTUH [kW] Power	31.2 [9.14] 18.2 [5.33] 2.4	30.6 [8.97] 17.4 [5.10] 2.4	30.1 [8.82] 16.6 [4.86] 2.3	29.0 [8.50] 22.3 [6.54] 2.4	28.5 [8.35] 21.3 [6.24] 2.4	28.0 [8.21] 20.3 [5.95] 2.3	27.7 [8.12] 24.0 [7.03] 2.4	27.2 [7.97] 22.9 [6.71] 2.4	26.7 [7.83] 21.8 [6.39] 2.3
	105 [40.6]	Total BTUH [kW] Sens BTUH [kW] Power	29.9 [8.76] 17.5 [5.13] 2.5	29.4 [8.62] 16.7 [4.89] 2.5	28.8 [8.44] 16.0 [4.69] 2.5	27.7 [8.12] 21.6 [6.33] 2.5	27.2 [7.97] 20.7 [6.07] 2.5	26.7 [7.83] 19.7 [5.77] 2.5	26.3 [7.71] 23.3 [6.83] 2.5	25.9 [7.59] 22.3 [6.54] 2.5	25.4 [7.44] 21.2 [6.21] 2.4
	110 [43.3]	Total BTUH [kW] Sens BTUH [kW] Power	28.5 [8.35] 16.8 [4.92] 2.6	28.0 [8.21] 16.0 [4.69] 2.6	27.5 [8.06] 15.3 [4.48] 2.6	26.3 [7.71] 20.9 [6.13] 2.6	25.9 [7.59] 20.0 [5.86] 2.6	25.4 [7.44] 19.0 [5.57] 2.6	25.0 [7.33] 22.6 [6.62] 2.6	24.5 [7.18] 21.6 [6.33] 2.6	24.1 [7.06] 20.6 [6.04] 2.6
	115 [46.1]	Total BTUH [kW] Sens BTUH [kW] Power	27.2 [7.97] 16.0 [4.69] 2.7	26.7 [7.83] 15.3 [4.48] 2.7	26.2 [7.68] 14.6 [4.28] 2.7	25.0 [7.33] 20.1 [5.89] 2.7	24.5 [7.18] 19.2 [5.63] 2.7	24.1 [7.06] 18.3 [5.36] 2.7	23.6 [6.92] 21.8 [6.39] 2.7	23.2 [6.80] 20.8 [6.10] 2.7	22.8 [6.68] 19.8 [5.80] 2.7

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-\*\*JL SERIES

## GROSS SYSTEMS PERFORMANCE DATA—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]	1080 [510]	1320 [623]	1200 [566]	1080 [510]	1320 [623]	1200 [566]
		DR ①	.17	.15	.13	.17	.15	.13	.17	.15	.13
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	44.9 [13.16]	44.1 [12.92]	43.3 [12.69]	42.3 [12.40]	41.5 [12.16]	40.7 [11.93]	40.6 [11.90]	39.9 [11.69]	39.2 [11.49]
		Sens BTUH [kW]	26.5 [7.77]	25.3 [7.41]	24.1 [7.06]	31.6 [9.26]	30.2 [8.85]	28.8 [8.44]	33.5 [9.82]	32.0 [9.38]	30.5 [8.94]
		Power	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	80 [26.7]	Total BTUH [kW]	44.2 [12.95]	43.4 [12.72]	42.6 [12.48]	41.6 [12.19]	40.8 [11.96]	40.1 [11.75]	39.9 [11.69]	39.2 [11.49]	38.5 [11.28]
		Sens BTUH [kW]	26.2 [7.68]	25.0 [7.33]	23.8 [6.98]	31.3 [9.17]	29.9 [8.76]	28.5 [8.35]	33.2 [9.73]	31.7 [9.29]	30.2 [8.85]
		Power	2.4	2.4	2.4	2.4	2.4	2.3	2.4	2.4	2.3
	85 [29.4]	Total BTUH [kW]	43.1 [12.63]	42.4 [12.43]	41.6 [12.19]	40.5 [11.87]	39.8 [11.66]	39.1 [11.46]	38.9 [11.40]	38.2 [11.20]	37.5 [10.99]
		Sens BTUH [kW]	25.6 [7.50]	24.4 [7.15]	23.3 [6.83]	30.7 [9.00]	29.3 [8.59]	27.9 [8.18]	32.6 [9.55]	31.1 [9.11]	29.7 [8.70]
		Power	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	90 [32.2]	Total BTUH [kW]	41.8 [12.25]	41.1 [12.05]	40.3 [11.81]	39.2 [11.49]	38.5 [11.28]	37.8 [11.08]	37.6 [11.02]	36.9 [10.81]	36.2 [10.61]
Sens BTUH [kW]		24.8 [7.27]	23.7 [6.95]	22.6 [6.62]	29.9 [8.76]	28.6 [8.38]	27.3 [8.00]	31.8 [9.32]	30.4 [8.91]	29.0 [8.50]	
Power		2.7	2.7	2.6	2.7	2.6	2.6	2.7	2.6	2.6	
95 [35]	Total BTUH [kW]	40.3 [11.81]	39.6 [11.61]	38.9 [11.40]	37.7 [11.05]	37.0 [10.84]	36.4 [10.67]	36.1 [10.58]	35.4 [10.37]	34.8 [10.20]	
	Sens BTUH [kW]	24.0 [7.03]	22.9 [6.71]	21.9 [6.42]	29.1 [8.53]	27.8 [8.15]	26.5 [7.77]	31.0 [9.09]	29.6 [8.67]	28.3 [8.29]	
	Power	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	
100 [37.8]	Total BTUH [kW]	38.8 [11.37]	38.1 [11.17]	37.4 [10.96]	36.1 [10.58]	35.5 [10.40]	34.8 [10.20]	34.5 [10.11]	33.9 [9.94]	33.3 [9.76]	
	Sens BTUH [kW]	23.2 [6.80]	22.1 [6.48]	21.1 [6.18]	28.3 [8.29]	27.0 [7.91]	25.8 [7.56]	30.2 [8.85]	28.8 [8.44]	27.5 [8.06]	
	Power	3.0	2.9	2.9	3.0	2.9	2.9	2.9	2.9	2.9	
105 [40.6]	Total BTUH [kW]	37.2 [10.90]	36.5 [10.70]	35.9 [10.52]	34.6 [10.14]	34.0 [9.96]	33.3 [9.76]	32.9 [9.64]	32.3 [9.47]	31.8 [9.32]	
	Sens BTUH [kW]	22.4 [6.56]	21.4 [6.27]	20.4 [5.98]	27.5 [8.06]	26.3 [7.71]	25.0 [7.33]	29.4 [8.62]	28.1 [8.24]	26.8 [7.85]	
	Power	3.1	3.1	3.1	3.1	3.1	3.0	3.1	3.1	3.0	
110 [43.3]	Total BTUH [kW]	35.7 [10.46]	35.1 [10.29]	34.5 [10.11]	33.1 [9.70]	32.5 [9.52]	31.9 [9.35]	31.5 [9.23]	30.9 [9.06]	30.4 [8.91]	
	Sens BTUH [kW]	21.8 [6.39]	20.8 [6.10]	19.8 [5.80]	26.9 [7.88]	25.7 [7.53]	24.5 [7.18]	28.8 [8.44]	27.5 [8.06]	26.2 [7.68]	
	Power	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	
115 [46.1]	Total BTUH [kW]	34.5 [10.11]	33.9 [9.94]	33.3 [9.76]	31.9 [9.35]	31.3 [9.17]	30.7 [9.00]	30.2 [8.85]	29.7 [8.70]	29.2 [8.56]	
	Sens BTUH [kW]	21.3 [6.24]	20.4 [5.98]	19.4 [5.69]	26.4 [7.74]	25.2 [7.39]	24.1 [7.06]	28.3 [8.29]	27.1 [7.94]	25.8 [7.56]	
	Power	3.4	3.4	3.3	3.4	3.4	3.3	3.4	3.3	3.3	

## GROSS SYSTEMS PERFORMANCE DATA—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]	1540 [727]	1400 [661]	1260 [595]	1540 [727]	1400 [661]	1260 [595]	1540 [727]	1400 [661]
		DR ①	.18	.17	.15	.18	.17	.15	.18	.17	.15
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	53.6 [15.71]	52.6 [15.42]	51.7 [15.15]	50.3 [14.74]	49.4 [14.48]	48.5 [14.21]	48.6 [14.24]	47.7 [13.98]	46.8 [13.72]
		Sens BTUH [kW]	31.1 [9.11]	29.7 [8.70]	28.3 [8.29]	36.6 [10.73]	34.9 [10.23]	33.3 [9.76]	39.7 [11.63]	37.9 [11.11]	36.2 [10.61]
		Power	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	80 [26.7]	Total BTUH [kW]	52.1 [15.27]	51.1 [14.98]	50.2 [14.71]	48.7 [14.27]	47.9 [14.04]	47.0 [13.77]	47.0 [13.77]	46.2 [13.54]	45.4 [13.31]
		Sens BTUH [kW]	30.4 [8.91]	29.0 [8.50]	27.7 [8.12]	35.9 [10.52]	34.3 [10.05]	32.7 [9.58]	39.0 [11.43]	37.3 [10.93]	35.5 [10.40]
		Power	2.8	2.7	2.7	2.8	2.7	2.7	2.8	2.7	2.7
	85 [29.4]	Total BTUH [kW]	50.6 [14.83]	49.7 [14.57]	48.8 [14.30]	47.3 [13.86]	46.4 [13.60]	45.6 [13.36]	45.6 [13.36]	44.8 [13.13]	44.0 [12.90]
		Sens BTUH [kW]	29.7 [8.70]	28.4 [8.32]	27.1 [7.94]	35.2 [10.32]	33.6 [9.85]	32.0 [9.38]	38.3 [11.22]	36.6 [10.73]	34.9 [10.23]
		Power	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
	90 [32.2]	Total BTUH [kW]	49.3 [14.45]	48.4 [14.18]	47.5 [13.92]	45.9 [13.45]	45.1 [13.22]	44.3 [12.98]	44.2 [12.95]	43.4 [12.72]	42.6 [12.48]
Sens BTUH [kW]		29.0 [8.50]	27.7 [8.12]	26.4 [7.74]	34.5 [10.11]	32.9 [9.64]	31.4 [9.20]	37.6 [11.02]	35.9 [10.52]	34.3 [10.05]	
Power		3.1	3.1	3.0	3.1	3.1	3.0	3.1	3.1	3.0	
95 [35]	Total BTUH [kW]	47.9 [14.04]	47.1 [13.80]	46.2 [13.54]	44.6 [13.07]	43.8 [12.84]	43.0 [12.60]	42.9 [12.57]	42.1 [12.34]	41.4 [12.13]	
	Sens BTUH [kW]	28.3 [8.29]	27.1 [7.94]	25.8 [7.56]	33.8 [9.91]	32.3 [9.47]	30.8 [9.03]	36.9 [10.81]	35.3 [10.35]	33.6 [9.85]	
	Power	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	
100 [37.8]	Total BTUH [kW]	46.6 [13.66]	45.8 [13.42]	44.9 [13.16]	43.2 [12.66]	42.5 [12.46]	41.7 [12.22]	41.6 [12.19]	40.8 [11.96]	40.1 [11.75]	
	Sens BTUH [kW]	27.6 [8.09]	26.4 [7.74]	25.1 [7.36]	33.1 [9.70]	31.6 [9.26]	30.1 [8.82]	36.2 [10.61]	34.6 [10.14]	33.0 [9.67]	
	Power	3.4	3.4	3.4	3.4	3.4	3.3	3.4	3.4	3.3	
105 [40.6]	Total BTUH [kW]	45.3 [13.28]	44.4 [13.01]	43.6 [12.78]	41.9 [12.28]	41.2 [12.07]	40.4 [11.84]	40.2 [11.78]	39.5 [11.58]	38.8 [11.37]	
	Sens BTUH [kW]	26.9 [7.88]	25.7 [7.53]	24.5 [7.18]	32.3 [9.47]	30.9 [9.06]	29.4 [8.62]	35.5 [10.40]	33.9 [9.94]	32.3 [9.47]	
	Power	3.6	3.5	3.5	3.6	3.5	3.5	3.6	3.5	3.5	
110 [43.3]	Total BTUH [kW]	43.9 [12.87]	43.1 [12.63]	42.3 [12.40]	40.5 [11.87]	39.8 [11.66]	39.1 [11.46]	38.8 [11.37]	38.2 [11.20]	37.5 [10.99]	
	Sens BTUH [kW]	26.1 [7.65]	24.9 [7.30]	23.7 [6.95]	31.5 [9.23]	30.1 [8.82]	28.7 [8.41]	34.7 [10.17]	33.1 [9.70]	31.6 [9.26]	
	Power	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	
115 [46.1]	Total BTUH [kW]	42.4 [12.43]	41.7 [12.22]	40.9 [11.99]	39.1 [11.46]	38.4 [11.25]	37.7 [11.05]	37.4 [10.96]	36.7 [10.76]	36.1 [10.58]	
	Sens BTUH [kW]	25.2 [7.39]	24.1 [7.06]	23.0 [6.74]	30.7 [9.00]	29.3 [8.59]	28.0 [8.21]	33.8 [9.91]	32.3 [9.47]	30.8 [9.03]	
	Power	3.9	3.9	3.8	3.9	3.8	3.8	3.9	3.8	3.8	

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  $[1.10 \times \text{CFM} \times (1 - \text{DR}) \times (\text{dbE} - 80)]$ .

[ ] Designates Metric Conversions

# SYSTEMS PERFORMANCE—TZAC-\*\* JL SERIES

## GROSS SYSTEMS PERFORMANCE DATA—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]	1440 [680]	1760 [831]	1600 [755]	1440 [680]	1760 [831]	1600 [755]	1440 [680]	
DR ①		.22	.20	.19	.22	.20	.19	.22	.20	.19	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW] Sens BTUH [kW] Power	61.6 [18.05] 34.8 [10.20] 3.0	60.5 [17.73] 33.2 [9.73] 2.9	59.4 [17.41] 31.7 [9.29] 2.9	58.0 [17.00] 41.6 [12.19] 2.9	57.0 [16.71] 39.7 [11.63] 2.9	55.9 [16.38] 37.9 [11.11] 2.9	55.3 [16.21] 44.4 [13.01] 2.9	54.3 [15.91] 42.4 [12.43] 2.9	53.3 [15.62] 40.4 [11.84] 2.9
	80 [26.7]	Total BTUH [kW] Sens BTUH [kW] Power	59.9 [17.55] 33.7 [9.88] 3.1	58.8 [17.23] 32.2 [9.44] 3.1	57.7 [16.91] 30.7 [9.00] 3.1	56.2 [16.47] 40.5 [11.87] 3.1	55.2 [16.18] 38.7 [11.34] 3.1	54.2 [15.88] 36.9 [10.81] 3.1	53.5 [15.68] 43.3 [12.69] 3.1	52.6 [15.42] 41.4 [12.13] 3.1	51.6 [15.12] 39.4 [11.55] 3.1
	85 [29.4]	Total BTUH [kW] Sens BTUH [kW] Power	58.2 [17.06] 32.8 [9.61] 3.3	57.1 [16.73] 31.3 [9.17] 3.3	56.1 [16.44] 29.8 [8.73] 3.3	54.5 [15.97] 39.6 [11.61] 3.3	53.5 [15.68] 37.8 [11.08] 3.3	52.6 [15.42] 36.0 [10.55] 3.2	51.8 [15.18] 42.3 [12.40] 3.3	50.9 [14.92] 40.4 [11.84] 3.3	49.9 [14.62] 38.6 [11.31] 3.2
	90 [32.2]	Total BTUH [kW] Sens BTUH [kW] Power	56.4 [16.53] 31.9 [9.35] 3.5	55.4 [16.24] 30.4 [8.91] 3.5	54.4 [15.94] 29.0 [8.50] 3.4	52.8 [15.47] 38.7 [11.34] 3.5	51.8 [15.18] 36.9 [10.81] 3.4	50.9 [14.92] 35.2 [10.32] 3.4	50.1 [14.68] 41.4 [12.13] 3.5	49.2 [14.42] 39.6 [11.61] 3.4	48.3 [14.16] 37.7 [11.05] 3.4
	95 [35]	Total BTUH [kW] Sens BTUH [kW] Power	54.7 [16.03] 31.0 [9.09] 3.7	53.7 [15.74] 29.6 [8.67] 3.6	52.7 [15.44] 28.2 [8.26] 3.6	51.0 [14.95] 37.8 [11.08] 3.7	50.1 [14.68] 36.1 [10.58] 3.6	49.2 [14.42] 34.4 [10.08] 3.6	48.3 [14.16] 40.6 [11.90] 3.6	47.4 [13.89] 38.7 [11.34] 3.6	46.6 [13.66] 36.9 [10.81] 3.6
	100 [37.8]	Total BTUH [kW] Sens BTUH [kW] Power	52.9 [15.50] 30.1 [8.82] 3.9	51.9 [15.21] 28.8 [8.44] 3.8	51.0 [14.95] 27.4 [8.03] 3.8	49.2 [14.42] 36.9 [10.81] 3.8	48.3 [14.16] 35.3 [10.35] 3.8	47.5 [13.92] 33.6 [9.85] 3.8	46.5 [13.63] 39.7 [11.63] 3.8	45.7 [13.39] 37.9 [11.11] 3.8	44.8 [13.13] 36.1 [10.58] 3.8
	105 [40.6]	Total BTUH [kW] Sens BTUH [kW] Power	51.0 [14.95] 29.2 [8.56] 4.0	50.1 [14.68] 27.9 [8.18] 4.0	49.2 [14.42] 26.6 [7.80] 4.0	47.3 [13.86] 36.0 [10.55] 4.0	46.5 [13.63] 34.4 [10.08] 4.0	45.6 [13.36] 32.8 [9.61] 3.9	44.6 [13.07] 38.8 [11.37] 4.0	43.8 [12.84] 37.0 [10.84] 4.0	43.0 [12.60] 35.3 [10.35] 3.9
	110 [43.3]	Total BTUH [kW] Sens BTUH [kW] Power	49.0 [14.36] 28.2 [8.26] 4.2	48.1 [14.10] 27.0 [7.91] 4.2	47.2 [13.83] 25.7 [7.53] 4.1	45.3 [13.28] 35.0 [10.26] 4.2	44.5 [13.04] 33.5 [9.82] 4.2	43.7 [12.81] 31.9 [9.35] 4.1	42.6 [12.48] 37.8 [11.08] 4.2	41.9 [12.28] 36.1 [10.58] 4.1	41.1 [12.05] 34.4 [10.08] 4.1
	115 [46.1]	Total BTUH [kW] Sens BTUH [kW] Power	46.9 [13.75] 27.1 [7.94] 4.4	46.1 [13.51] 25.9 [7.59] 4.4	45.2 [13.25] 24.7 [7.24] 4.3	43.2 [12.66] 33.9 [9.94] 4.4	42.5 [12.46] 32.4 [9.50] 4.3	41.7 [12.22] 30.9 [9.06] 4.3	40.5 [11.87] 36.7 [10.76] 4.4	39.8 [11.66] 35.1 [10.29] 4.3	39.1 [11.46] 33.4 [9.79] 4.3

## GROSS SYSTEMS PERFORMANCE DATA—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]		2040 [963]	1850 [873]	1660 [783]	2040 [963]	1850 [873]	1660 [783]	2040 [963]	1850 [873]	1660 [783]	
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	73.6 [21.57] 42.2 [12.37] 4.0	72.3 [21.19] 40.3 [11.81] 3.9	71.0 [20.81] 38.4 [11.25] 3.9	68.5 [20.08] 49.1 [14.39] 3.9	67.3 [19.72] 46.9 [13.75] 3.8	66.1 [19.37] 44.7 [13.10] 3.8	65.9 [19.31] 53.3 [15.62] 3.8	64.7 [18.96] 50.9 [14.92] 3.8	63.5 [18.61] 48.5 [14.21] 3.7
	80 [26.7]	Total BTUH [kW] Sens BTUH [kW] Power	71.3 [20.90] 40.7 [11.93] 4.2	70.0 [20.51] 38.9 [11.40] 4.1	68.7 [20.13] 37.1 [10.87] 4.1	66.2 [19.40] 47.7 [13.98] 4.1	65.0 [19.05] 45.5 [13.33] 4.0	63.9 [18.73] 43.4 [12.72] 4.0	63.6 [18.64] 51.8 [15.18] 4.0	62.4 [18.29] 49.5 [14.51] 4.0	61.3 [17.97] 47.2 [13.83] 3.9
	85 [29.4]	Total BTUH [kW] Sens BTUH [kW] Power	69.3 [20.31] 39.5 [11.58] 4.4	68.1 [19.96] 37.8 [11.08] 4.4	66.8 [19.58] 36.0 [10.55] 4.3	64.2 [18.82] 46.5 [13.63] 4.3	63.1 [18.49] 44.4 [13.01] 4.3	61.9 [18.14] 42.3 [12.40] 4.2	61.6 [18.05] 50.6 [14.83] 4.2	60.5 [17.73] 48.3 [14.16] 4.2	59.4 [17.41] 46.1 [13.51] 4.1
	90 [32.2]	Total BTUH [kW] Sens BTUH [kW] Power	67.5 [19.78] 38.5 [11.28] 4.6	66.3 [19.43] 36.8 [10.79] 4.6	65.1 [19.08] 35.1 [10.29] 4.5	62.5 [18.32] 45.5 [13.33] 4.5	61.3 [17.97] 43.5 [12.75] 4.5	60.2 [17.64] 41.4 [12.13] 4.4	59.8 [17.53] 49.6 [14.54] 4.4	58.7 [17.20] 47.4 [13.89] 4.4	57.6 [16.88] 45.2 [13.25] 4.4
	95 [35]	Total BTUH [kW] Sens BTUH [kW] Power	65.8 [19.28] 37.7 [11.05] 4.8	64.7 [18.96] 36.0 [10.55] 4.8	63.5 [18.61] 34.3 [10.05] 4.7	60.8 [17.82] 44.6 [13.07] 4.7	59.7 [17.50] 42.6 [12.48] 4.7	58.6 [17.17] 40.7 [11.93] 4.6	58.1 [17.03] 48.8 [14.30] 4.6	57.1 [16.73] 46.6 [13.66] 4.6	56.0 [16.41] 44.4 [13.01] 4.6
	100 [37.8]	Total BTUH [kW] Sens BTUH [kW] Power	64.2 [18.82] 36.9 [10.81] 5.0	63.0 [18.46] 35.3 [10.35] 5.0	61.9 [18.14] 33.6 [9.85] 4.9	59.1 [17.32] 43.9 [12.87] 4.9	58.0 [17.00] 41.9 [12.28] 4.9	57.0 [16.71] 39.9 [11.69] 4.8	56.4 [16.53] 48.0 [14.07] 4.9	55.4 [16.24] 45.8 [13.42] 4.8	54.4 [15.94] 43.7 [12.81] 4.8
	105 [40.6]	Total BTUH [kW] Sens BTUH [kW] Power	62.4 [18.29] 36.1 [10.58] 5.2	61.3 [17.97] 34.5 [10.11] 5.2	60.1 [17.61] 32.9 [9.64] 5.2	57.3 [16.79] 43.1 [12.63] 5.1	56.3 [16.50] 41.2 [12.07] 5.1	55.3 [16.21] 39.2 [11.49] 5.1	54.6 [16.00] 47.2 [13.83] 5.1	53.7 [15.74] 45.1 [13.22] 5.0	52.7 [15.44] 43.0 [12.60] 5.0
	110 [43.3]	Total BTUH [kW] Sens BTUH [kW] Power	60.4 [17.70] 35.3 [10.35] 5.5	59.3 [17.38] 33.7 [9.88] 5.4	58.2 [17.06] 32.2 [9.44] 5.4	55.3 [16.21] 42.3 [12.40] 5.4	54.3 [15.91] 40.4 [11.84] 5.3	53.4 [15.65] 38.5 [11.28] 5.3	52.7 [15.44] 46.4 [13.60] 5.3	51.7 [15.15] 44.3 [12.98] 5.2	50.8 [14.89] 42.2 [12.37] 5.2
	115 [46.1]	Total BTUH [kW] Sens BTUH [kW] Power	58.1 [17.03] 34.4 [10.08] 5.7	57.1 [16.73] 32.8 [9.61] 5.6	56.0 [16.41] 31.3 [9.17] 5.6	53.0 [15.53] 41.3 [12.10] 5.6	52.1 [15.27] 39.5 [11.58] 5.5	51.1 [14.98] 37.6 [11.02] 5.5	50.4 [14.77] 45.4 [13.31] 5.5	49.5 [14.51] 43.4 [12.72] 5.4	48.6 [14.24] 41.4 [12.13] 5.4

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

# AIRFLOW PERFORMANCE—TZAC-\*\*JL SERIES

## INDOOR AIRFLOW PERFORMANCE—208 VOLTS

Nominal Cooling Capacity Tons [kW]	Motor Speed from Factory		Blower Size/ Motor HP [W] & # of Speeds	Motor Speed	External Static Pressure—Inches W.C. [kPa] Side Discharge—Wet Coil							
	Cool	Heat			0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	
2.0 [7.03]	High	High	9 x 7 Blower 1/4 HP [186 W] 2 Speed (PSC Motor)	Low	CFM [l/s]	675 [319]	657 [310]	634 [299]	602 [284]	560 [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	Low	10 x 9 Blower 1/2 HP [372 W] 3 Speed (PSC Motor)	Low	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.	Med.	10 x 9 Blower 1/2 HP [372 W] 3 Speed (PSC Motor)	Med.	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	High	10 x 9 Blower 1/2 HP [372 W] 3 Speed (PSC Motor)	High	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]	Med.	Med.	10 x 9 Blower 3/4 HP [559 W] 3 Speed (PSC 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 (Tap 4)	High (Tap 2)	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High (Tap 2)	CFM [l/s]	1204 [568]	1202 [567]	1191 [562]	1171 [553]	1143 [539]	1107 [522]	1065 [503]
					RPM	734	810	886	923	959	988	1016
					Watts	476	468	450	427	403	380	363
5.0 [17.59]	High (Tap 4)	High (Tap 2)	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High (Tap 2)	CFM [l/s]	1674 [790]	1620 [765]	1566 [739]	1511 [713]	1451 [685]	1384 [653]	1305 [616]
					RPM	997	1019	1040	1058	1076	1088	1100
					Watts	625	596	567	539	512	484	455
5.0 [17.59]	High (Tap 4)	High (Tap 2)	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High (Tap 2)	CFM [l/s]	1843 [870]	1763 [832]	1693 [799]	1627 [768]	1560 [736]	1485 [701]	1398 [660]
					RPM	1085	1094	1102	1110	1118	1126	1134
					Watts	699	663	632	604	576	548	517
5.0 [17.59]	High (Tap 4)	High (Tap 2)	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High (Tap 2)	CFM [l/s]	1310 [618]	1288 [608]	1238 [584]	1204 [568]	1149 [542]	1104 [521]	1035 [488]
					RPM	731	757	789	826	857	894	937
					Watts	218	229	237	250	258	270	280
5.0 [17.59]	High (Tap 4)	High (Tap 2)	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High (Tap 2)	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 4)	High (Tap 2)	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High (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
5.0 [17.59]	High (Tap 4)	High (Tap 2)	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High (Tap 2)	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: 5 ton 1st & 2nd stage cooling speeds must be changed to low to achieve ARI performance.

[ J ] Designates Metric Conversions

**INDOOR AIRFLOW PERFORMANCE—208 VOLTS (cont.)**

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 [.005]	.05 [.012]	.07 [.017]	.1 [.025]	.12 [.030]	.15 [.037]	.17 [.042]		
MINIMUM RECOMMENDED FILTER SIZES										
Nominal Cooling Capacity Tons [kW]	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]		24 x 30 x 1 [610 x 762 x 1]			

[ ] Designates Metric Conversions



# AIRFLOW PERFORMANCE—TZAC-\*\*JL SERIES

## INDOOR AIRFLOW PERFORMANCE—230 VOLTS

Nominal Cooling Capacity Tons [kW]	Motor Speed from Factory		Blower Size/ Motor HP [W] & # of Speeds	Motor Speed	External Static Pressure—Inches W.C. [kPa] Side Discharge—Wet Coil							
	Cool	Heat			0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	
2.0 [7.03]	High	High	9 x 7 Blower 1/4 HP [186 W] 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	Low	10 x 9 Blower 1/2 HP [372 W] 3 Speed (PSC Motor)	Low	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.	Med.	10 x 9 Blower 1/2 HP [372 W] 3 Speed (PSC Motor)	Med.	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	High	10 x 9 Blower 1/2 HP [372 W] 3 Speed (PSC Motor)	High	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]	Med.	Med.	10 x 9 Blower 3/4 HP [559 W] 3 Speed (PSC Motor)	Med.	CFM [l/s]	1641 [774]	1577 [744]	1515 [715]	1455 [687]	1393 [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	High	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High	CFM [l/s]	1412 [666]	1395 [658]	1371 [647]	1339 [632]	1296 [612]	1242 [586]	1176 [555]
					RPM	859	905	951	981	1011	1034	1057
					Watts	557	530	506	483	461	437	409
5.0 [17.59]	High	High	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High	CFM [l/s]	1793 [846]	1731 [817]	1665 [786]	1594 [752]	1519 [717]	1440 [660]	1356 [640]
					RPM	1053	1067	1080	1091	1101	1110	1119
					Watts	667	637	606	574	543	512	483
5.0 [17.59]	High	High	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High	CFM [l/s]	1889 [892]	1826 [852]	1753 [827]	1672 [789]	1586 [749]	1499 [707]	1413 [667]
					RPM	1110	1117	1124	1129	1133	1139	1144
					Watts	736	715	683	646	608	574	551
5.0 [17.59]	High	High	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High	CFM [l/s]	1319 [622]	1289 [608]	1242 [586]	1201 [567]	1148 [542]	1111 [524]	1047 [494]
					RPM	728	760	790	832	859	894	939
					Watts	222	234	241	256	263	276	287
5.0 [17.59]	High	High	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High	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
5.0 [17.59]	High	High	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High	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
5.0 [17.59]	High	High	12 x 9 Blower 1 HP [746 W] 4 Speed (X13 Motor)	High	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: 5 ton 1st & 2nd stage cooling speeds must be changed to low to achieve ARI performance.

[ J ] Designates Metric Conversions



# ELECTRICAL DATA—TZAC-\*\*JL SERIES

ELECTRICAL DATA – TZAC-**JL SERIES											
		324JL	330JL	336CL	336JL	342CL	342JL	348CL	348JL	360CL	360JL
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	187-253	187-253	187-253	187-253	187-253	197-253	197-253
	Minimum Circuit Ampacity	19/19	22/22	17/17	25/25	22/22	27/27	24/24	34/34	32/32	42/42
	Minimum Overcurrent Protection Device Size	20/20	25/25	20/20	25/25	25/25	30/30	25/25	35/35	35/35	45/45
	Maximum Overcurrent Protection Device Size	30/30	35/35	25/25	40/40	30/30	40/40	35/35	50/50	45/45	60/60
Compressor Motor	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)	12.8/12.8	14.1/14.1	10.4/10.4	16.7/16.7	13.5/13.5	17.9/17.9	13.7/13.7	21.8/21.8	17.6/17.6	25.6/25.6
	Amps (LRA)	58.3/58.3	73/73	88/88	79/79	88/88	112/112	83.1/83.1	117/117	135/135	118/118
Condenser Motor	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	1/5	1/5	1/5	1/5	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
Evaporator Fan	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	4.4	4.4	7.6	7.6
	Amps (LRA)	2.3	5.1	5.1	5.1	5.1	5.1	9.5	9.5	0	0

1. Horsepower Per Compressor.

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

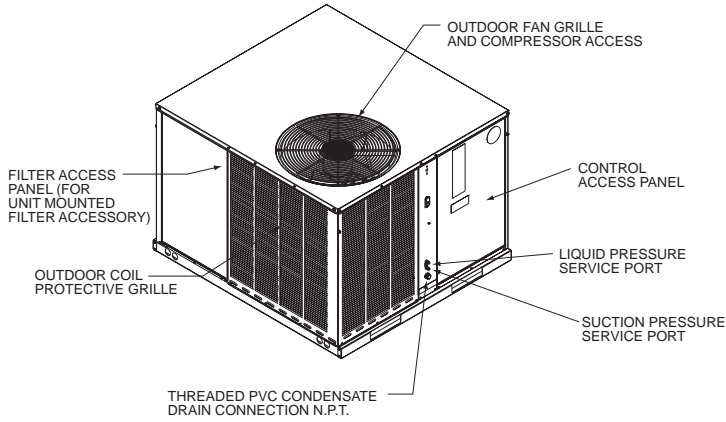
## 208-240 VOLT, SINGLE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION

Separate Power Supply For Both Unit and Heater Kit															
Unit Model No. TZAC-**JL	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. Ckt. Ampacity 208/240V	Max. Fuse Size 208/240V	Min. Circuit Ampacity 208/240 V	Over Current Protective Device Size		
								Min./Max. @ 208 V	Min./Max. @ 240 V				Min./Max. @ 208 V	Min./Max. @ 240 V	
324JL	No Heat	—	—	—	—	—	19/19	20/30	20/30	—	—	19/19	20/30	20/30	—
	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 46/52	25/30 50/50	30/30 60/60	22/25 44/50	25/25 45/50	—	—	—	—
330JL	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	30/35 60/60	22/25 44/50	25/25 45/50	—	—	—	—
336JL	No Heat	—	—	—	—	—	25/25	25/40	25/40	—	—	25/25	25/40	25/40	—
	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	47/53 68/78	50/50 70/70	60/60 80/80	44/50 65/75	45/50 70/80	—	—	—	—
342JL	No Heat	—	—	—	—	—	27/27	30/40	30/40	—	—	27/27	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	47/53 68/79	50/50 70/70	60/60 80/80	44/50 65/75	45/50 70/80	—	—	—	—
348JL	No Heat	—	—	—	—	—	34/34	35/50	35/50	—	—	34/34	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	49/56 71/81	50/50 80/80	60/60 90/90	44/50 65/75	45/50 70/80	—	—	—	—
360JL	No Heat	—	—	—	—	—	42/42	45/60	45/60	—	—	42/42	45/60	45/60	—
	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	53/60 75/85	60/60 80/80	60/60 90/90	44/50 65/75	45/50 70/80	—	—	—	—

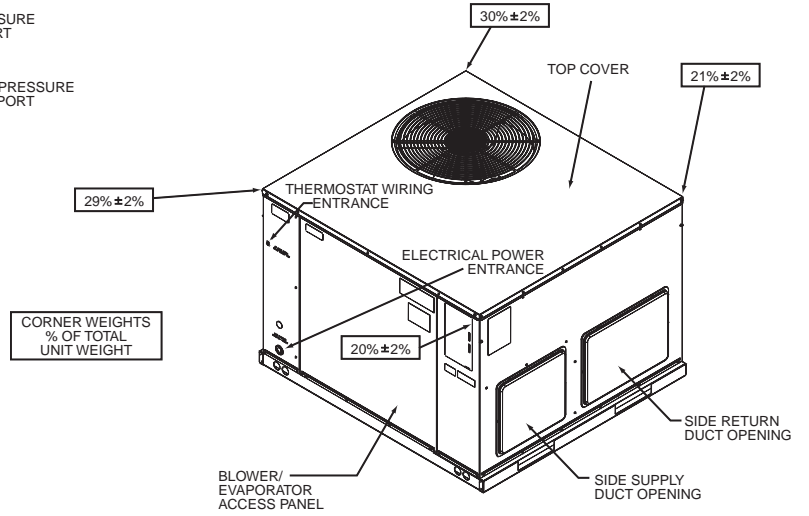
## 208-240 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION

Separate Power Supply For Both Unit and Heater Kit															
Unit Model No. TZAC-**JL	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. Ckt. Ampacity 208/240V	Max. Fuse Size 208/240V	Min. Circuit Ampacity 208/240 V	Over Current Protective Device Size		
								Min./Max. @ 208 V	Min./Max. @ 240 V				Min./Max. @ 208 V	Min./Max. @ 240 V	
336CL	No Heat	—	—	—	—	—	17/17	20/25	20/25	—	—	19/19	20/25	20/25	—
	A10C A15C	—	—	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	25/30 40/45	—	—	—	—
342CL	No Heat	—	—	—	—	—	22/22	25/30	25/30	—	—	24/24	25/30	25/35	—
	A10C A15C	—	—	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	25/30 40/45	—	—	—	—
348CL	No Heat	—	—	—	—	—	24/24	25/35	25/35	—	—	26/26	30/35	30/35	—
	A10C A15C	—	—	7.2/9.6 10.8/14.4	24.57/32.76 36.85/49.13	20.0/23.1 30.1/34.7	31/35 44/49	35/35 45/45	35/35 50/50	25/29 38/44	25/30 40/45	—	—	—	—
360CL	No Heat	—	—	—	—	—	32/32	35/45	35/45	—	—	32/32	35/45	35/45	—
	A10C A15C	—	—	7.2/9.6 10.8/14.4	24.57/32.76 36.85/49.13	20.0/23.1 30.1/34.7	35/39 48/53	35/45 50/50	40/45 60/60	25/29 38/44	25/30 40/45	—	—	—	—

## UNIT DIMENSIONS PACKAGE AIR CONDITIONERS

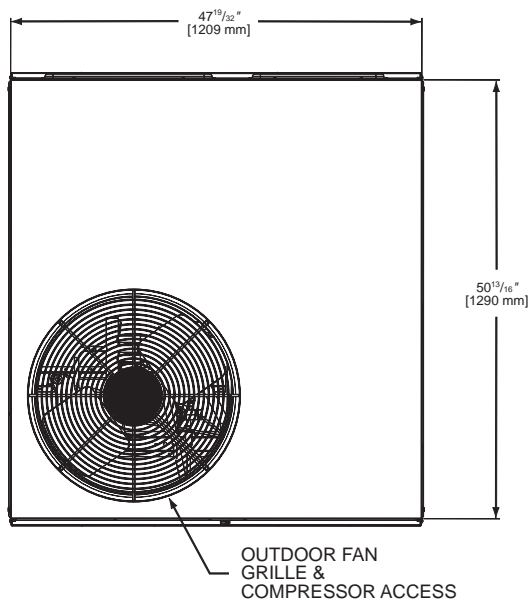


IMPORTANT: UNIT MUST BE LEVEL TO PREVENT WATER MIGRATION

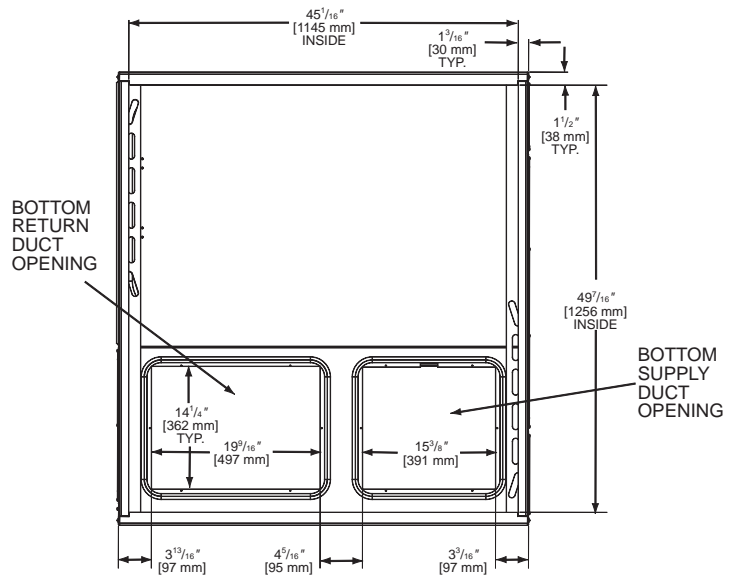


CORNER WEIGHTS  
% OF TOTAL  
UNIT WEIGHT

### TOP VIEW



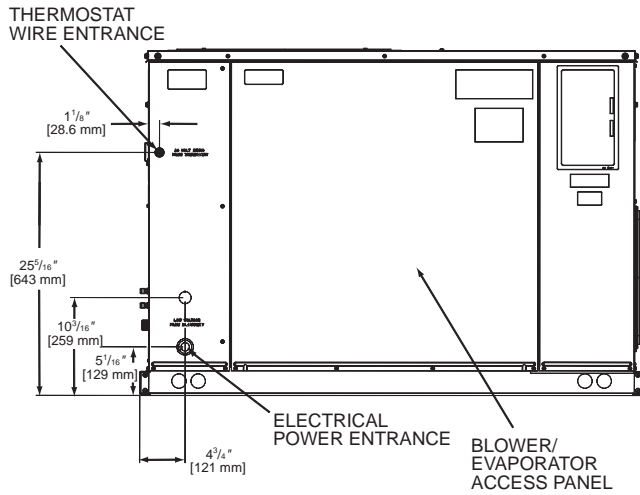
### BOTTOM VIEW



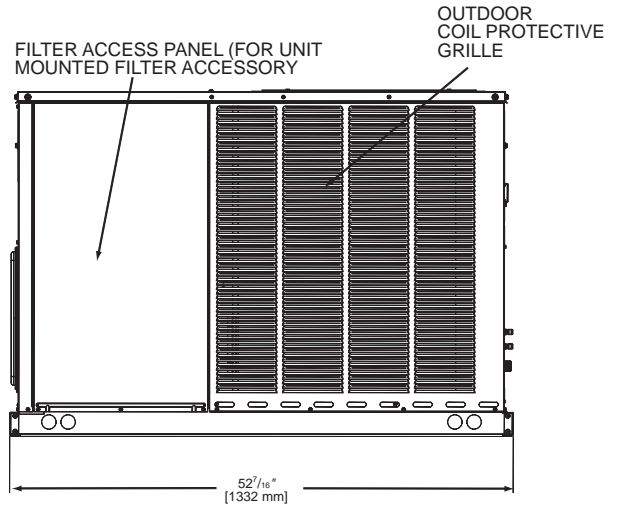
[ ] Designates Metric Conversions

# UNIT DIMENSIONS—TZAC-\*\*JL SERIES

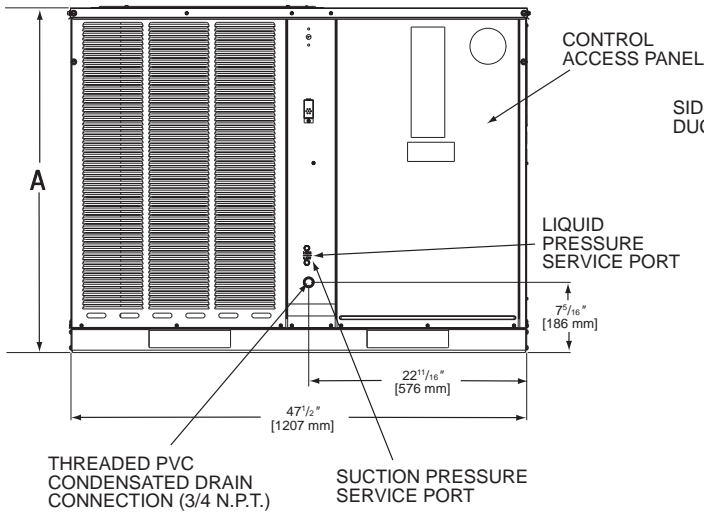
## SIDE VIEW



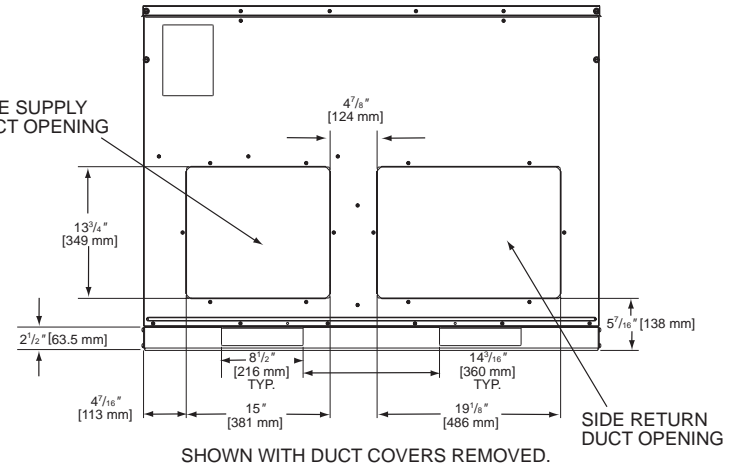
## SIDE VIEW



## FRONT VIEW



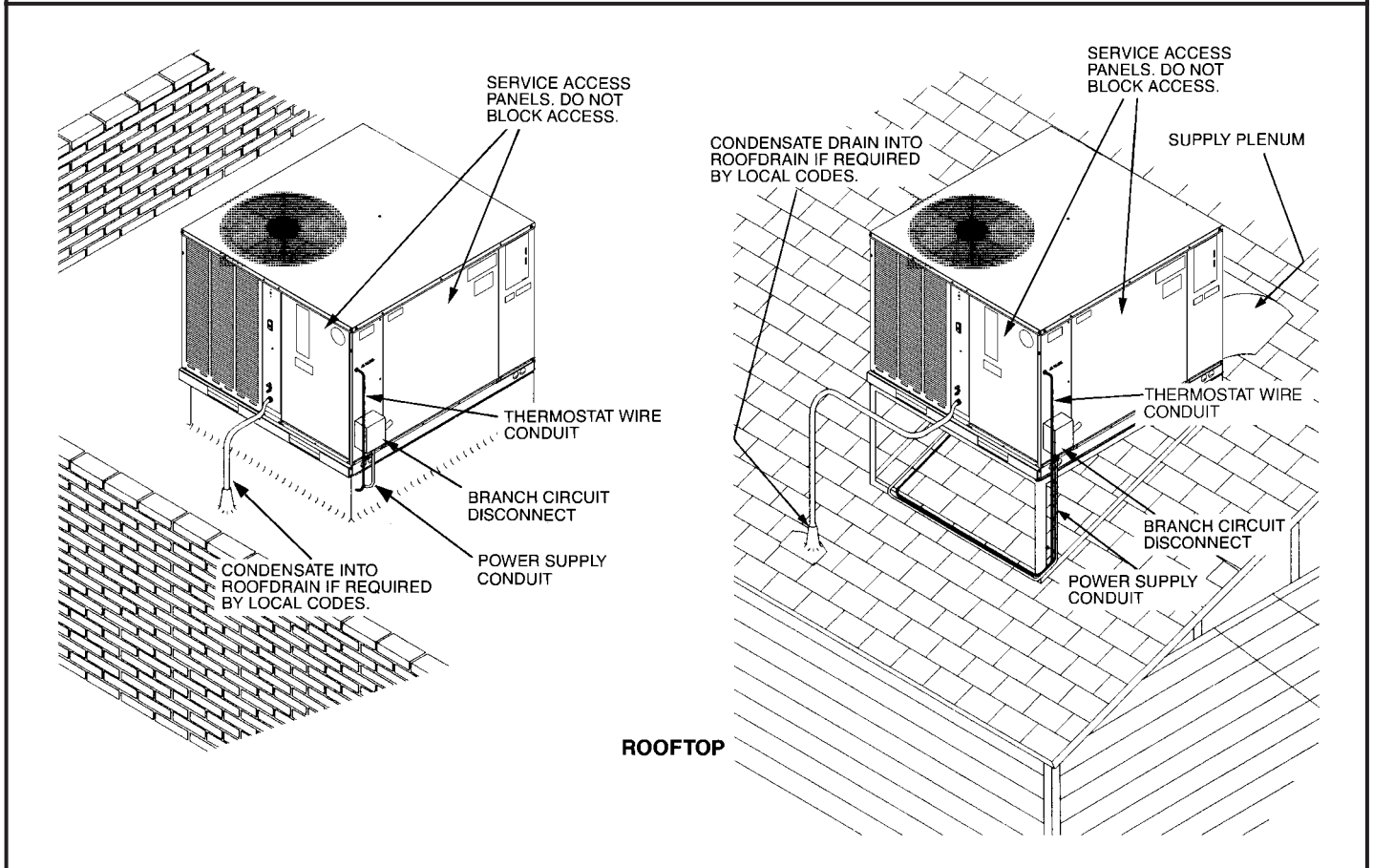
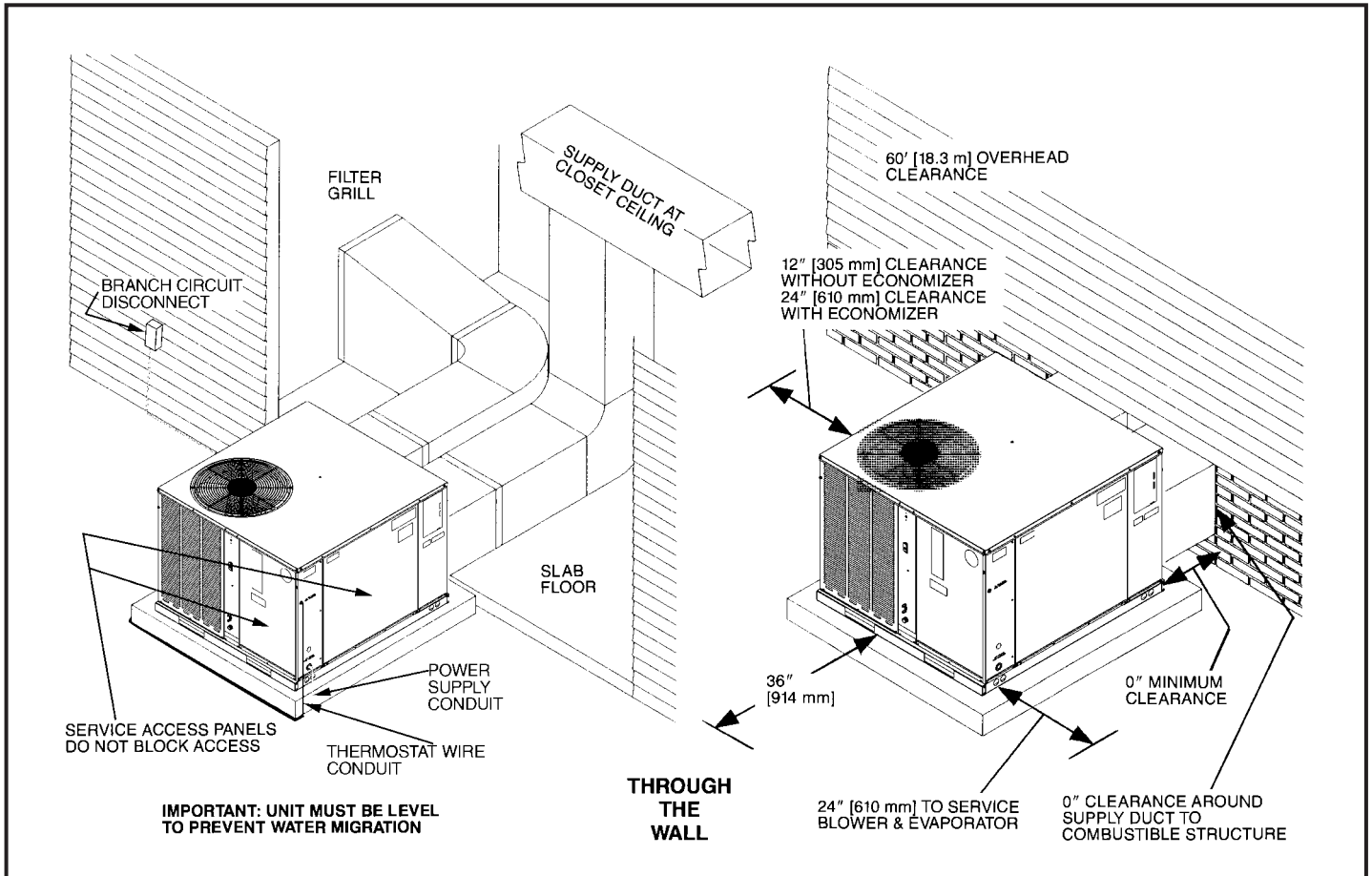
## REAR VIEW



[ ] Designates Metric Conversions

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

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



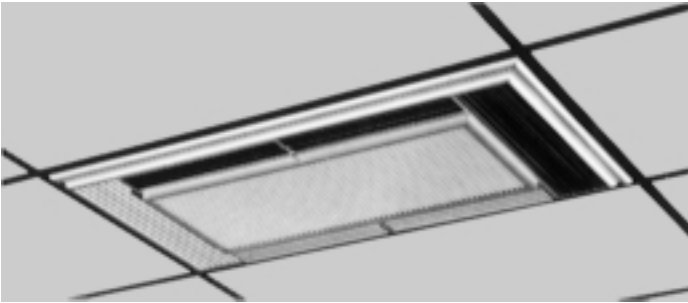
# ACCESSORIES

## ACCESSORY EQUIPMENT

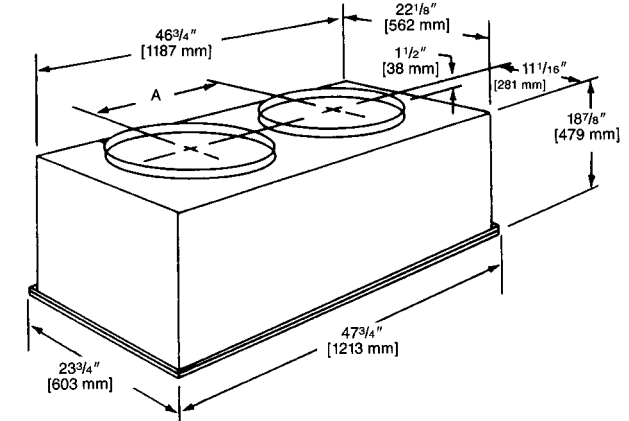
Accessory Description	Model Application	Accessory Model No.
Roofcurbs	TZAC-**-JL	RXSG-AAA08 (8" [203 mm] Height) RXSG-AAA14 (14" [356 mm] Height) RXSG-AAA24 (24" [610 mm] Height)
Supply & Return Diffusers	TZAC-**-JL	RXRN-D15
Economizers (Sideflow ONLY)	TZAC-**-JL	RXRE-CCA30 (3 Position) RXRD-CCM10 (Fully Modulating)
Economizers (Downflow ONLY)	TZAC-**-JL	RXRE-CAA30 (3 Position) RXRD-CAM10 (Fully Modulating)
Fresh Air Damper	TZAC-**-JL	RXRF-FAB1 (Motorized-35%) RXRF-FAA1 (Fixed-35%)
Rectangular to Round Transition (Downflow)	TZAC-**-JL	RXMC-CA02 (16" [406 mm] Ducts) RXMC-CA03 (18" [457 mm] Ducts)
Filter Kit	TZAC-**-JL	RXRY-01
Sideflow Rectangular to Round Transition	TZAC-**-JL	RXMC-A01
Low Ambient Control	TZAC-**-JL	RXRZ-01
High Pressure Control	TZAC-**-JL	RXAB-E01
Low Pressure Control	TZAC-**-JL	RXAC-C01

[ ] Designates Metric Conversions

## COMMON SUPPLY/RETURN CONCENTRIC AIR DIFFUSER



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.

## 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.	Diameter Inches [mm]	Shipping Wt. Lbs. [kg]	Dimension A Inches [mm]
RXRN-BD15	16 [406]	90 [40.82]	20 1/2 [521]

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

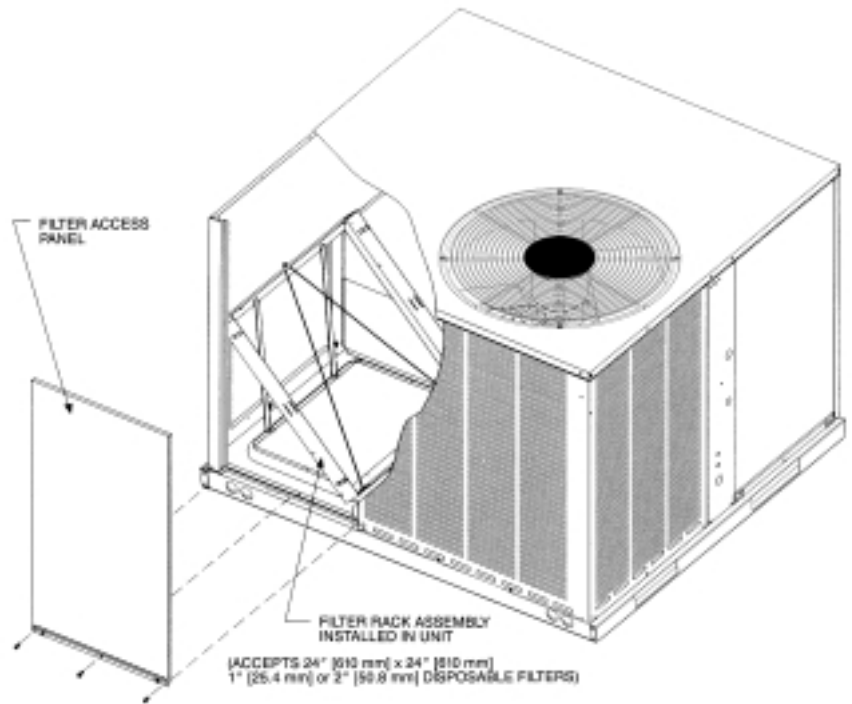
Accessory	Approximate CFM [L/s]-Supply Air			
	1300 [614]	1575 [743]	1800 [850]	2200 [1038]
Plenum & Supply/Return Duct	.07 [.017]	.10 [.024]	.12 [.030]	.17 [.042]
Diffuser	.09 [.022]	.13 [.032]	.16 [.040]	.24 [.060]
Economizer	.06 [.015]	.09 [.022]	.11 [.027]	.17 [.042]

## 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]

**FILTER KIT INSTALLATION  
RXRY-01**

For use in either vertical  
or horizontal discharge.



Airflow Pressure Drop, Inches W.C. [kPa]		
CFM [L/s]	1" Filter	2" Filter
500 [236]	.02 [.0050]	.03 [.0075]
600 [283]	.02 [.0050]	.03 [.0075]
700 [330]	.03 [.0075]	.04 [.0101]
800 [378]	.04 [.0101]	.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]

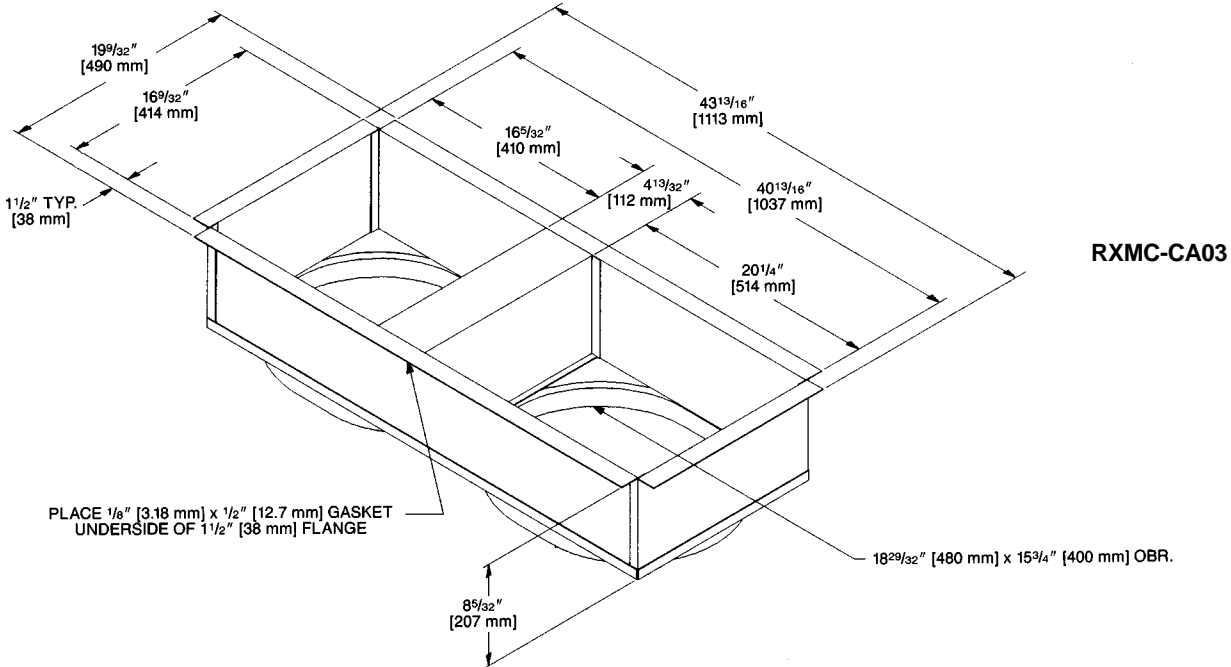
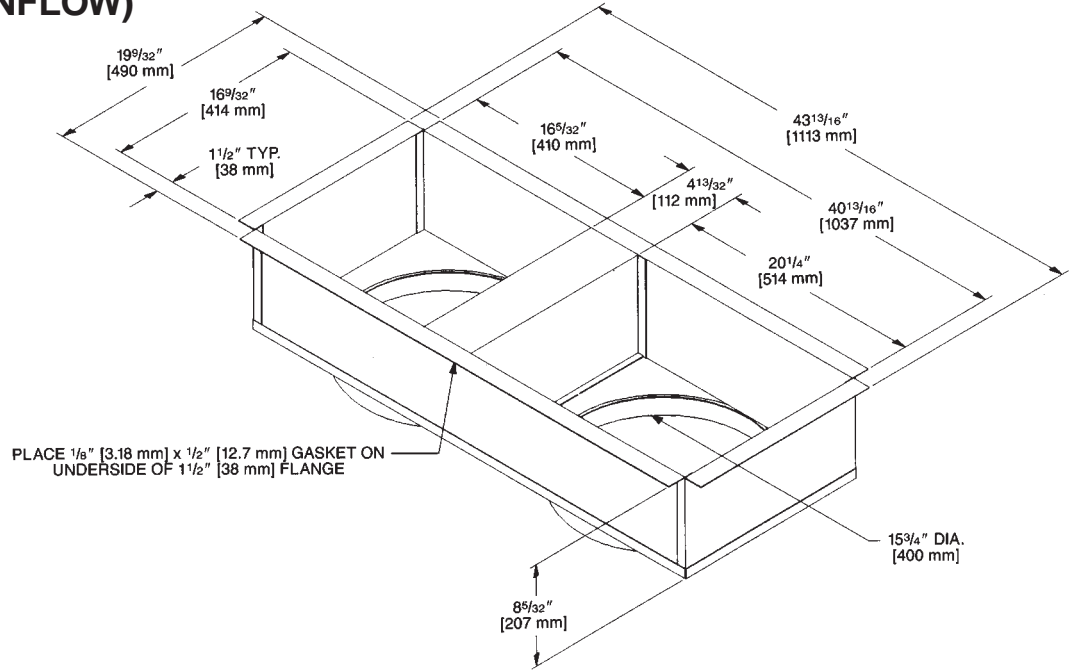
[ ] Designates Metric Conversions



# ACCESSORIES

## DUCT ADAPTERS RECTANGULAR TO ROUND TRANSITIONS (DOWNFLOW)

RXMC-CA02



[ ] Designates Metric Conversions



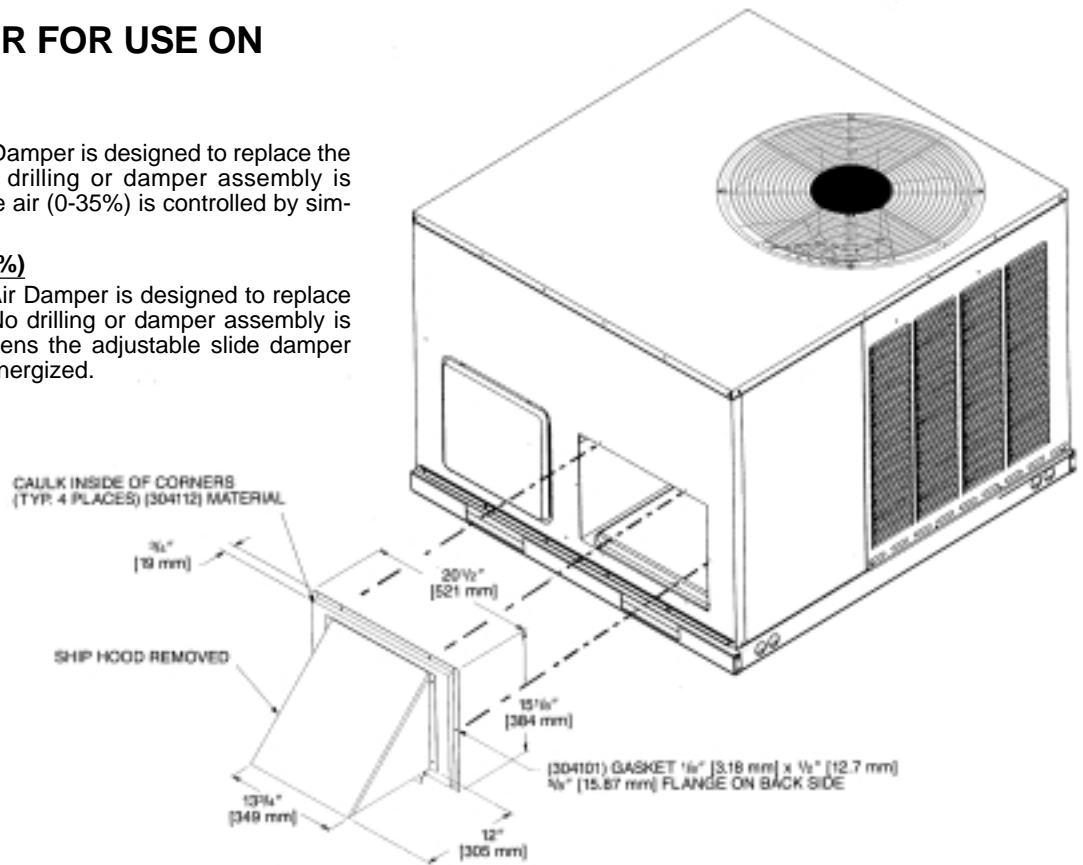
## FRESH AIR DAMPER FOR USE ON TZAC-\*\*JL SERIES

### 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.



## ECONOMIZERS

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

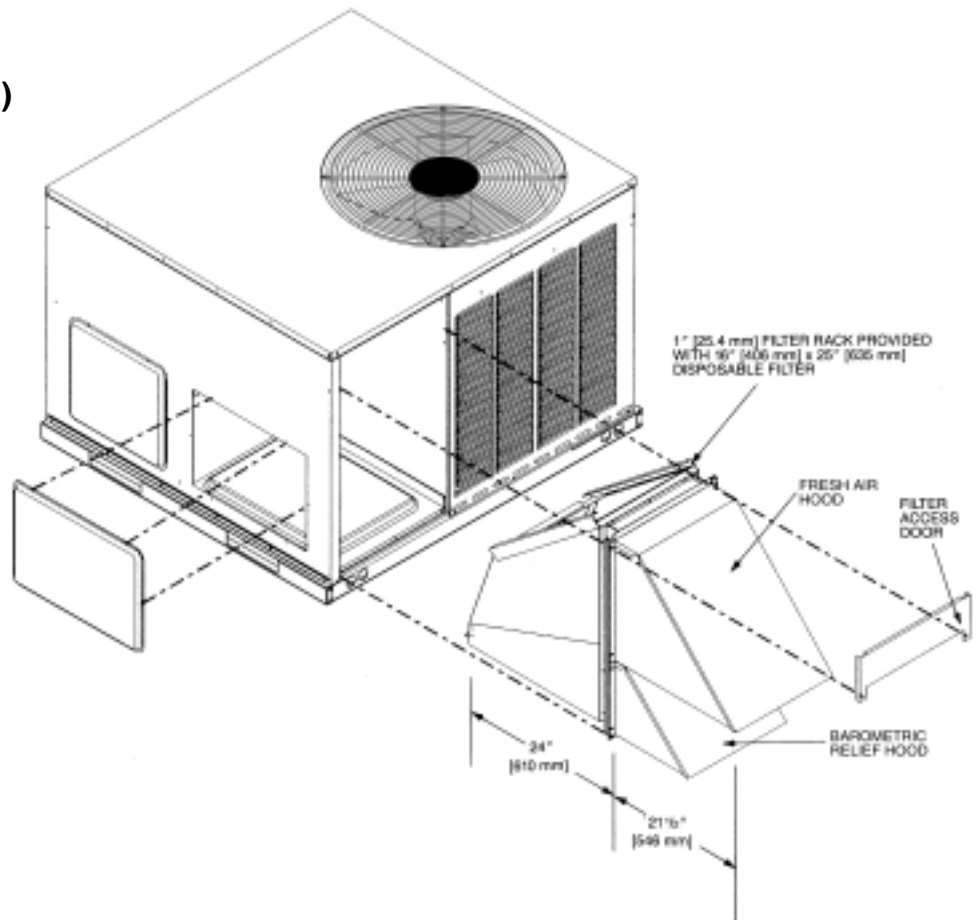
#### RXRE-CAA30 (3 Position)

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.



[ ] Designates Metric Conversions

## ECONOMIZERS

### RXRE-CAA30 (3 Position) and RXRD-CCM10 (Fully Modulating) for Horizontal Application

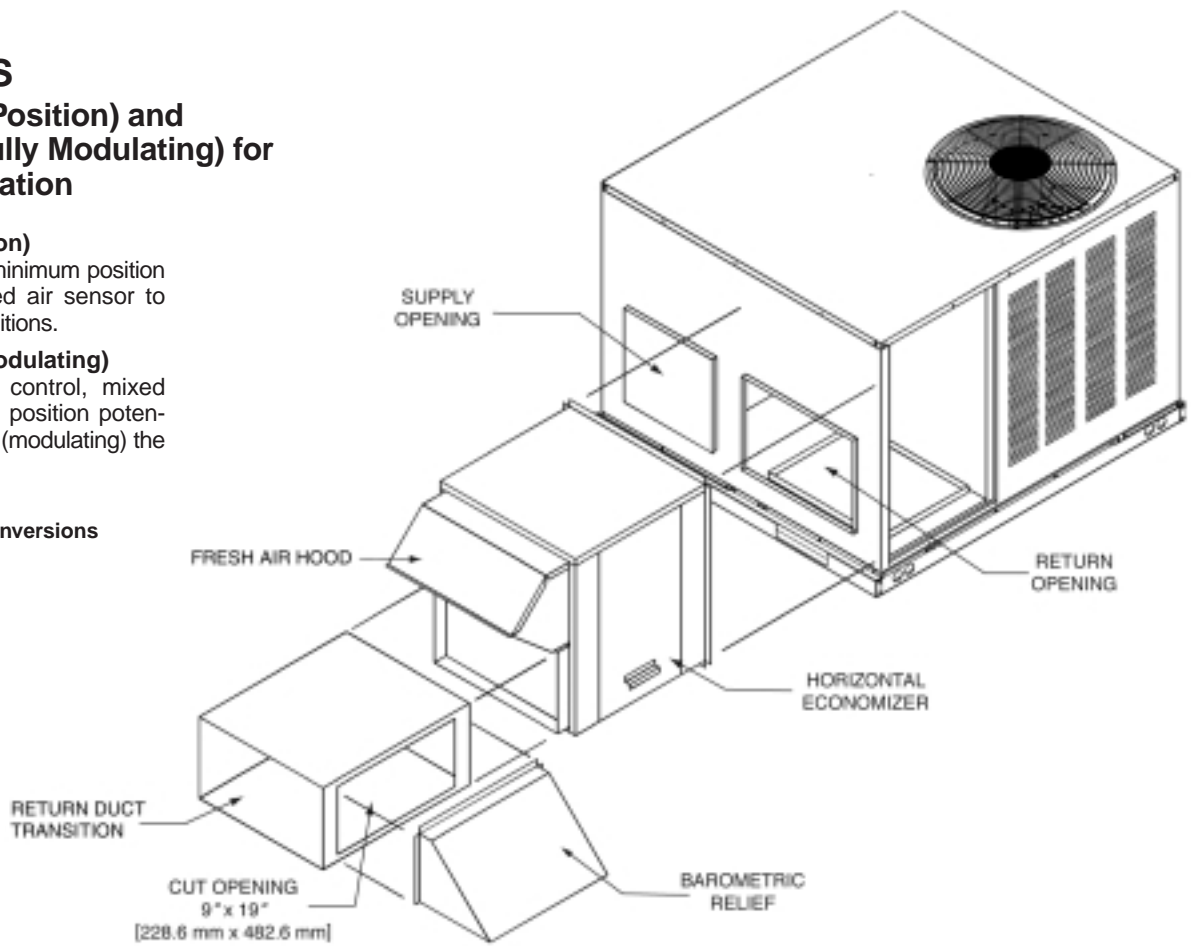
#### RXRE-CAA30 (3 Position)

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

#### RXRD-CCM10 (Fully Modulating)

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

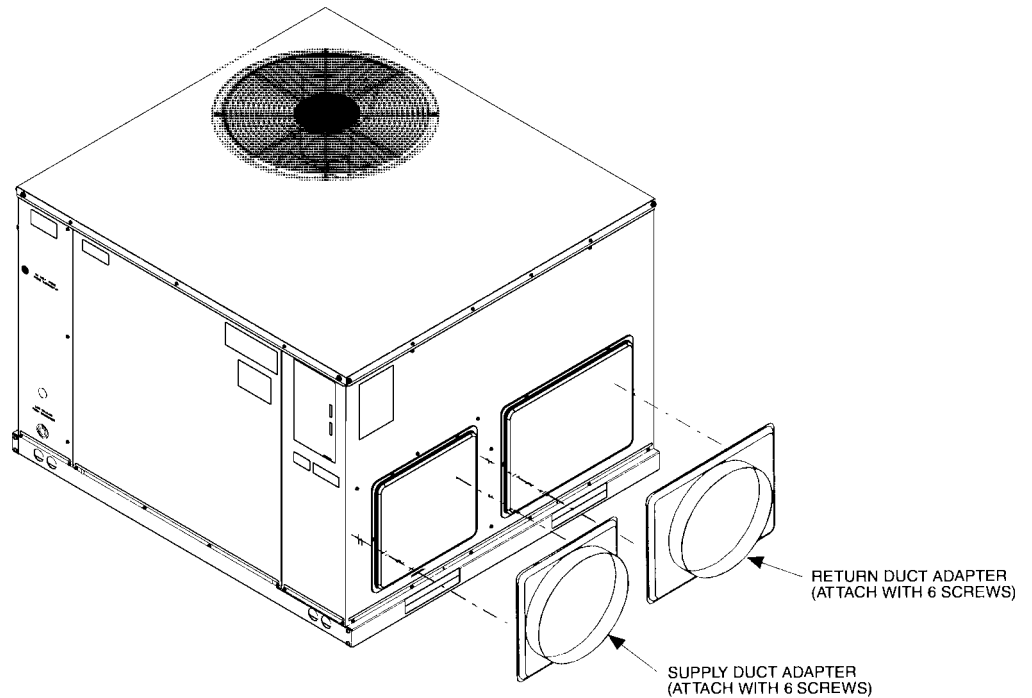
[ ] Designates Metric Conversions



**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



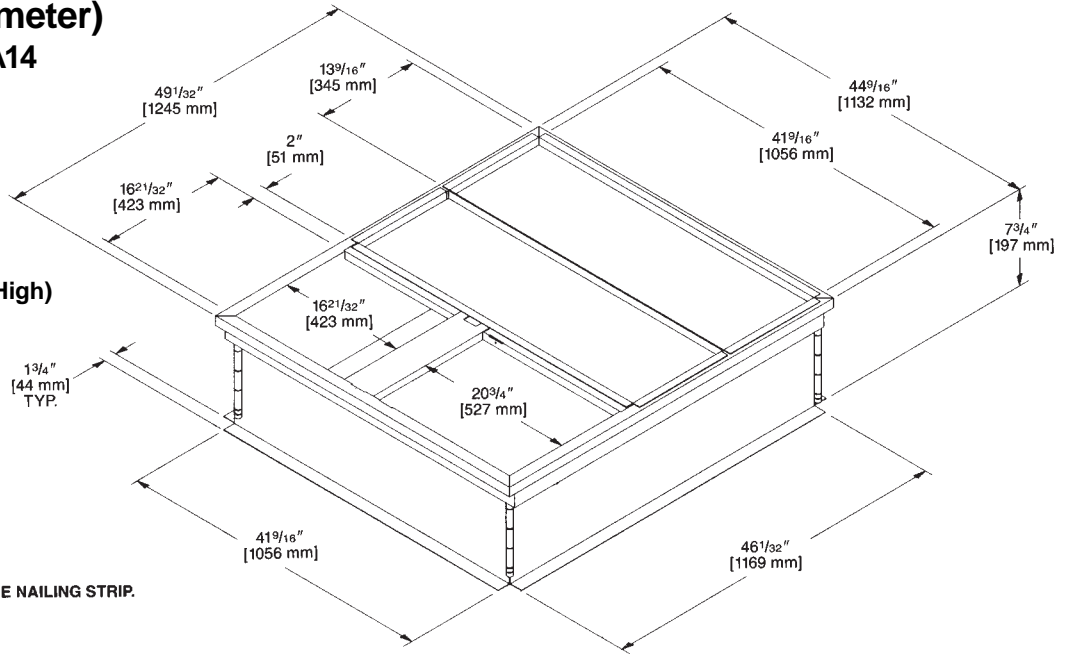
# ACCESSORIES

## ROOFCURB (Full Perimeter)

RXSG-AAA08, RXSG-AAA14  
and RXSG-AAA24

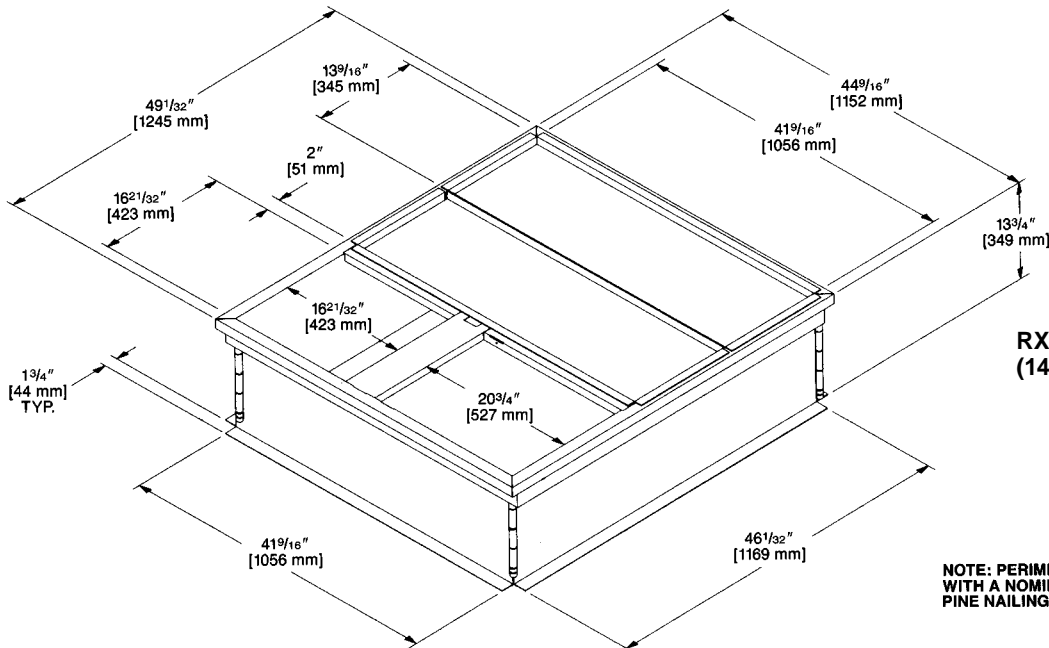
Hinged corners make for  
fast, easy set-up.

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



NOTE: PERIMETER OF ROOFCURB IS SUPPLIED  
WITH A NOMINAL  $1\frac{1}{2}$ " [25.4 mm] x  $4$ " [102 mm] PINE NAILING STRIP.

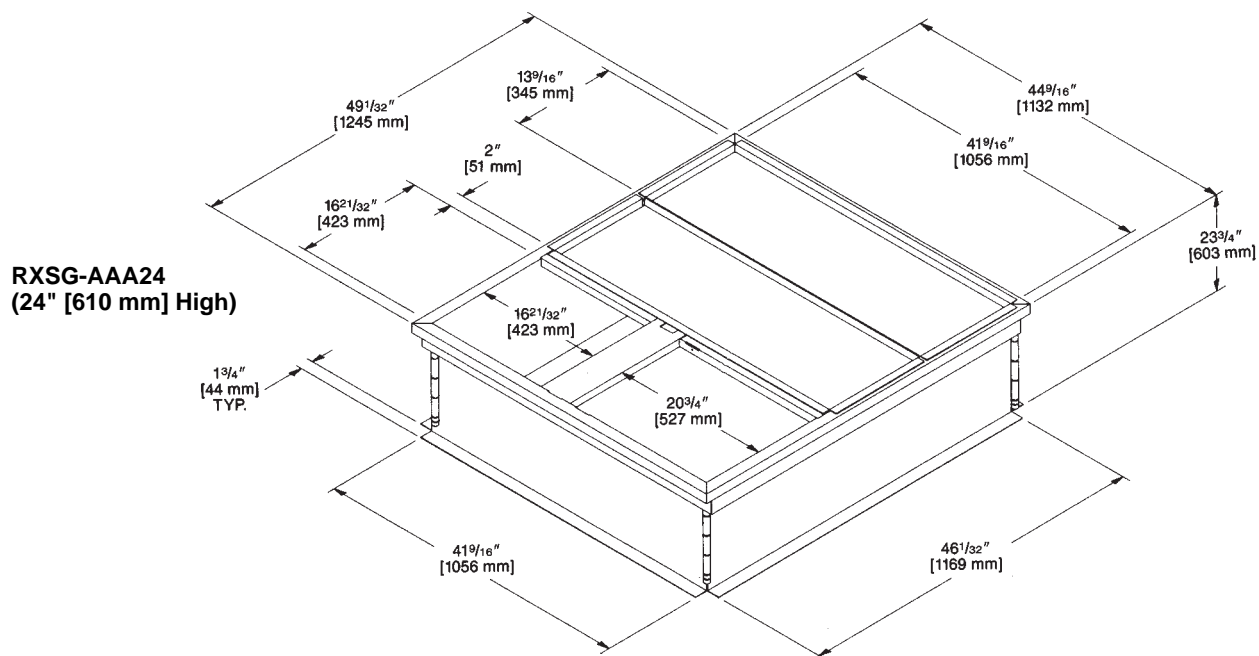
**RXSG-AAA14**  
**(14" [356 mm] High)**



NOTE: PERIMETER OF ROOFCURB IS SUPPLIED  
WITH A NOMINAL  $1\frac{1}{2}$ " [25.4 mm] x  $4$ " [102 mm]  
PINE NAILING STRIP.

[ ] Designates Metric Conversions

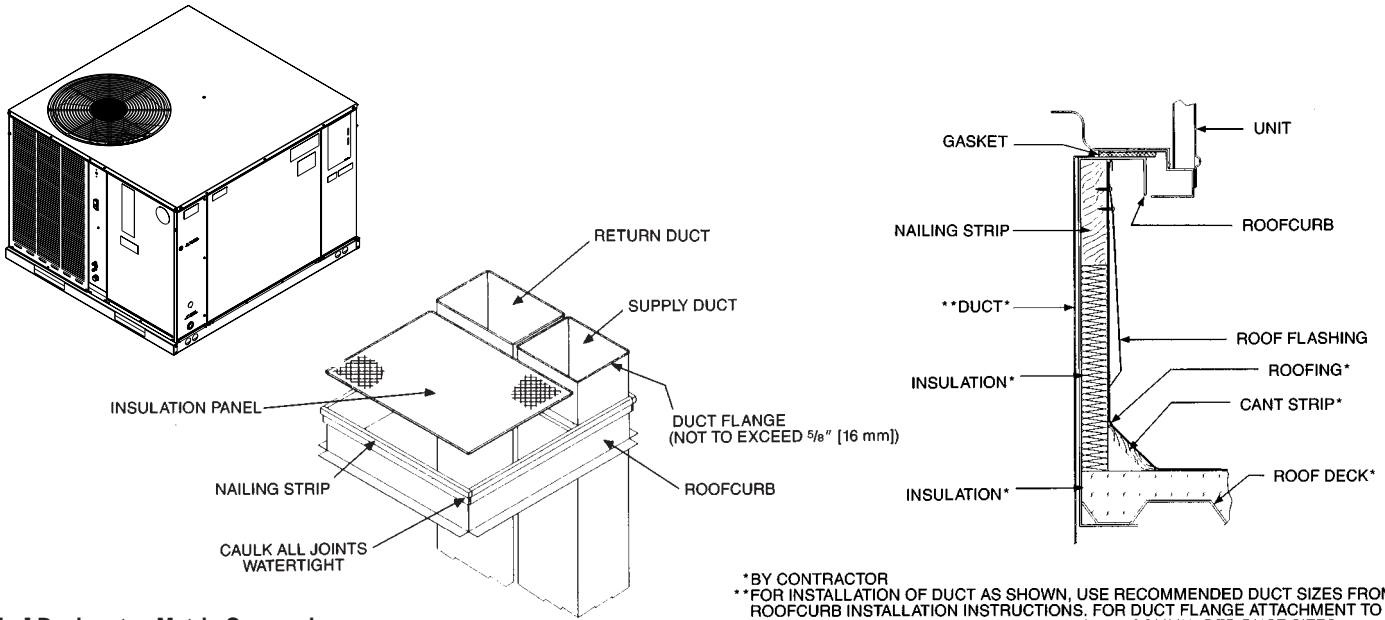
ROOFCURB (Full Perimeter) (Cont.)



[ ] Designates Metric Conversions

# ACCESSORIES

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

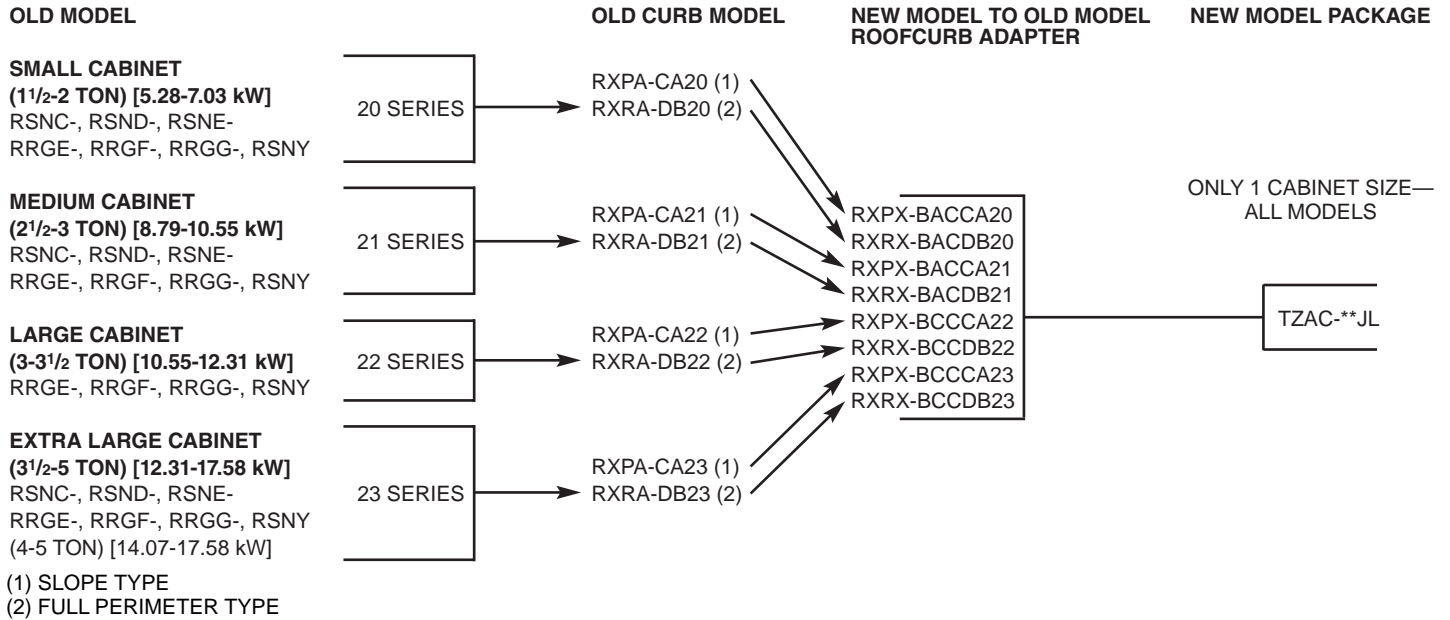


\*BY CONTRACTOR  
 \*\*FOR INSTALLATION OF DUCT AS SHOWN, USE RECOMMENDED DUCT SIZES FROM ROOFCURB INSTALLATION INSTRUCTIONS. FOR DUCT FLANGE ATTACHMENT TO UNIT, SEE UNIT INSTALLATION INSTRUCTIONS FOR RECOMMENDED DUCT SIZES.

[ ] Designates Metric Conversions

## ROOFCURB ADAPTERS

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



**ELECTRIC HEATER KITS—TZAC-\*\* JL**

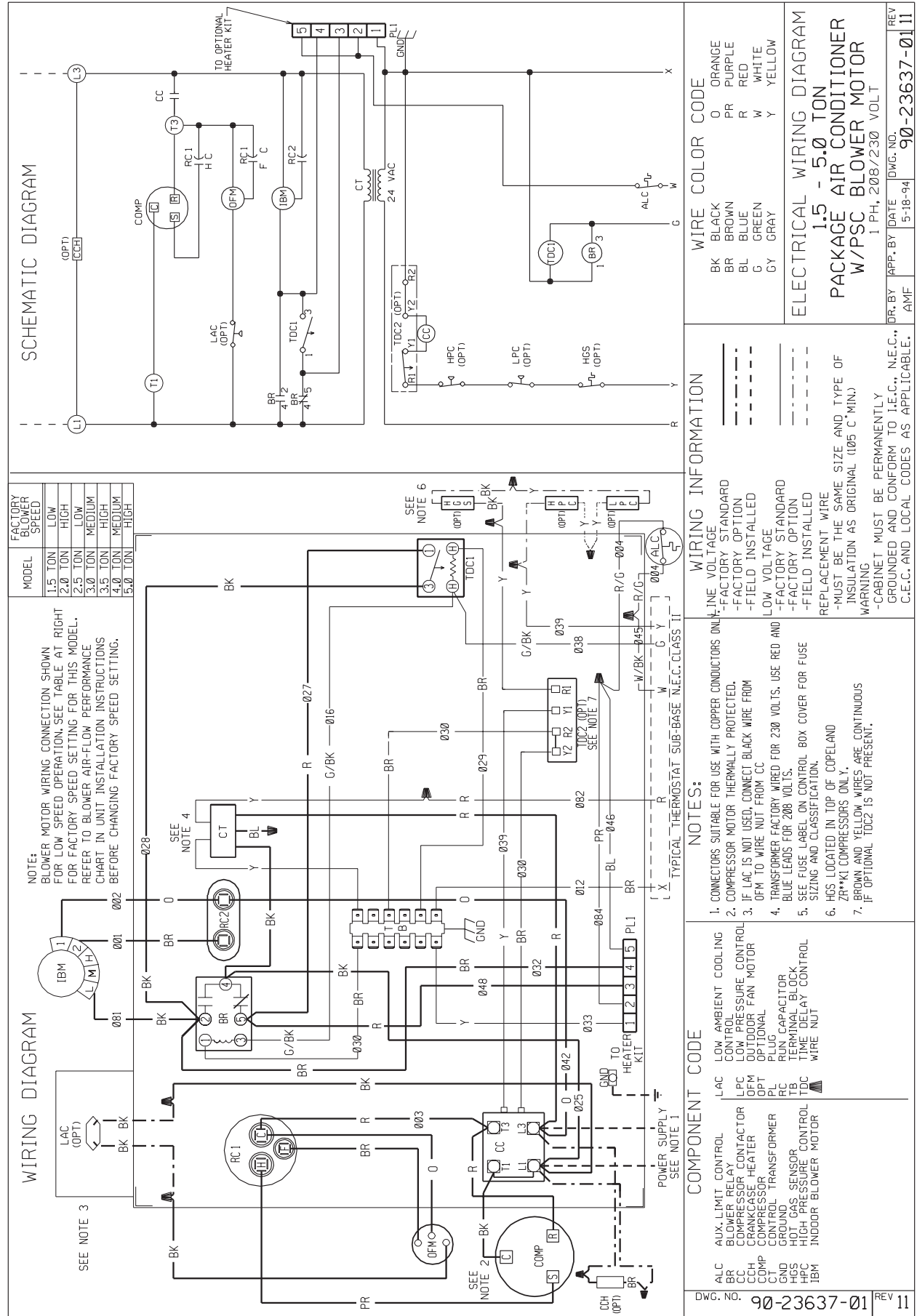
Unit Model Application	Electric Heater Kit Models
324JL	RXQJ-A05J (208-240 volt, 1-ph, 5kW)
	RXQJ-A10J (208-240 volt, 1-ph, 10kW)
330JL	RXQJ-A05J (208-240 volt, 1-ph, 5kW)
	RXQJ-A10J (208-240 volt, 1-ph, 10kW)
336JL	RXQJ-A10J (208-240 volt, 1-ph, 10kW)
	RXQJ-A15J (208-240 volt, 1-ph, 15kW)
342JL	RXQJ-A10J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

[ ] Designates Metric Conversions

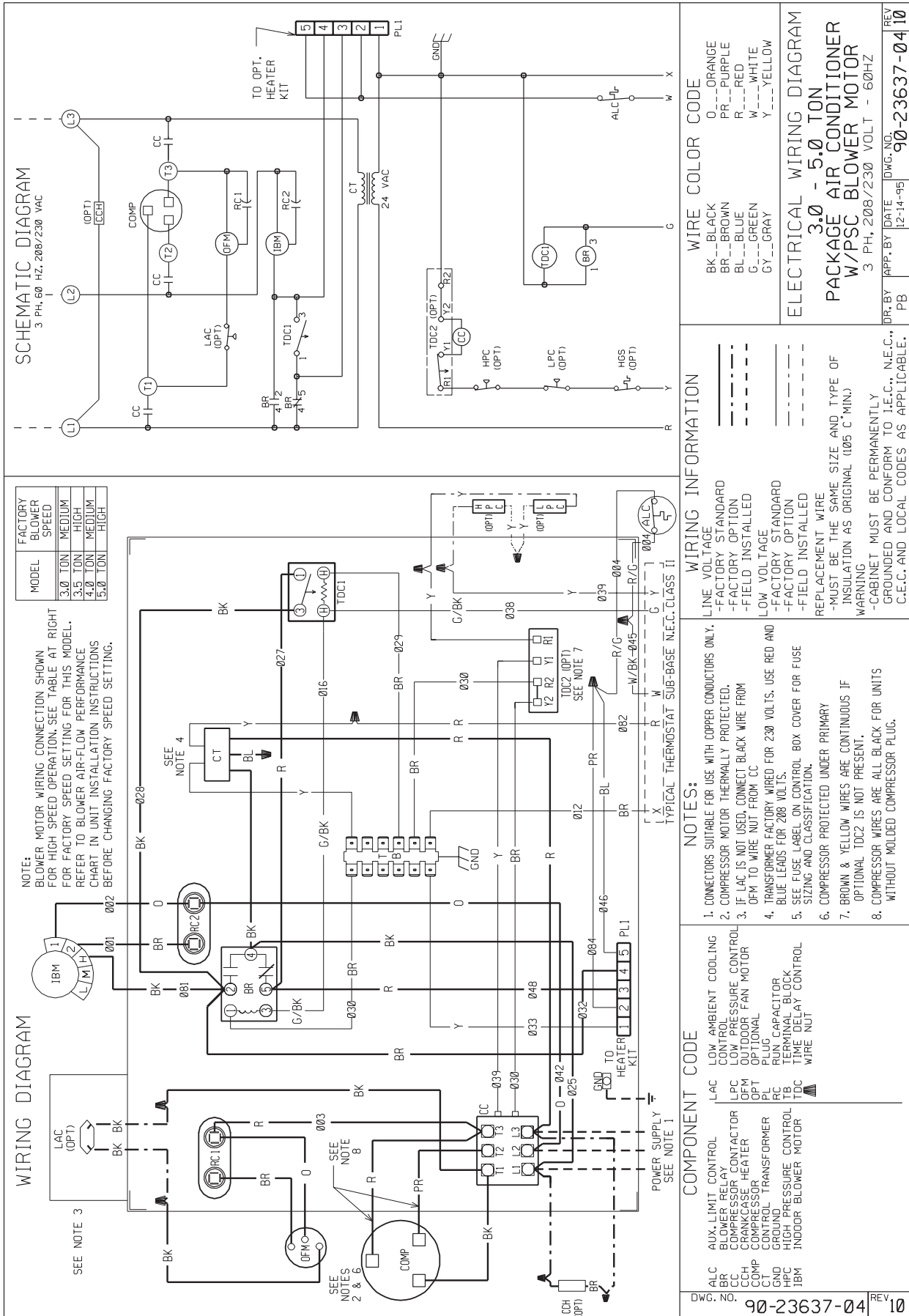
**WARNING**

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.

# WIRING SCHEMATICS—TZAC-\*\*JL SERIES







**FACTORY BLOWER SPEED**

MODEL	3.0 TON	3.5 TON	4.0 TON	5.0 TON
LOW	MEDIUM	HIGH	MEDIUM	HIGH
HIGH	HIGH	MEDIUM	HIGH	HIGH

**NOTE:**  
 BLOWER MOTOR WIRING CONNECTION SHOWN FOR HIGH SPEED OPERATION. SEE TABLE AT RIGHT FOR FACTORY SPEED SETTING FOR THIS MODEL. REFER TO BLOWER AIR-FLOW PERFORMANCE CHART IN UNIT INSTALLATION INSTRUCTIONS BEFORE CHANGING FACTORY SPEED SETTING.

### WIRING DIAGRAM

SEE NOTE 3  
 SEE NOTE 2 & 6  
 SEE NOTE 8  
 SEE NOTE 4

POWER SUPPLY  
 SEE NOTE 1

TO OPT. HEATER KIT

PL1

24 VAC

CT

TO OPT. HEATER KIT

ALC

BR

CC

COMP

CUD

LFC

OFM

PL

SPC

IBM

INDOOR BLOWER MOTOR

WIRE NUT

TIME DELAY CONTROL

TERMINAL BLOCK

PLUC CAPACITOR

INDOOR FAN MOTOR

OPTIONAL

OUTDOOR FAN MOTOR

CONTROL TRANSFORMER

CRANKCASE HEATER

COMPRESSOR

LOW PRESSURE CONTROL

AUX. LIMIT CONTROL

BLOWER RELAY

ALC

DWG. NO.

90-23637-04

REV. 10

INDOOR BLOWER MOTOR

INDOOR BLOWER MOTOR

INDOOR BLOWER MOTOR

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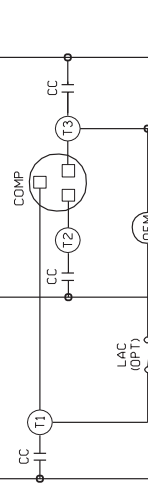
INDOOR BLOWER MOTOR

INDOOR BLOWER MOTOR

INDOOR BLOWER MOTOR

INDOOR BLOWER MOTOR

### SCHEMATIC DIAGRAM



3 PH, 60 HZ, 208/230 VAC

PL1

24 VAC

CT

TO OPT. HEATER KIT

ALC

BR

CC

COMP

CCH

CUD

LFC

OFM

PL

SPC

IBM

INDOOR BLOWER MOTOR

WIRE NUT

TIME DELAY CONTROL

TERMINAL BLOCK

PLUC CAPACITOR

INDOOR FAN MOTOR

OPTIONAL

OUTDOOR FAN MOTOR

CONTROL TRANSFORMER

CRANKCASE HEATER

COMPRESSOR

LOW PRESSURE CONTROL

AUX. LIMIT CONTROL

BLOWER RELAY

ALC

DWG. NO.

90-23637-04

REV. 10

INDOOR BLOWER MOTOR

INDOOR BLOWER MOTOR

INDOOR BLOWER MOTOR

INDOOR BLOWER MOTOR

INDOOR BLOWER MOTOR

INDOOR BLOWER MOTOR

### WIRING INFORMATION

- 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.
- COMPRESSOR PROTECTED UNDER PRIMARY
- BROWN & YELLOW WIRES ARE CONTINUOUS IF OPTIONAL TDC2 IS NOT PRESENT.
- COMPRESSOR WIRES ARE ALL BLACK FOR UNITS WITHOUT MOLDED COMPRESSOR PLUG.

### 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 (05 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.

### WIRE COLOR CODE

- 0---ORANGE
- BR---BROWN
- BL---BLUE
- G---GREEN
- GY---GRAY
- R---RED
- W---WHITE
- Y---YELLOW

### ELECTRICAL WIRING DIAGRAM

3.0 - 5.0 TON  
 PACKAGE AIR CONDITIONER  
 W/PC BLOWER MOTOR

3 PH, 208/230 VOLT - 60HZ

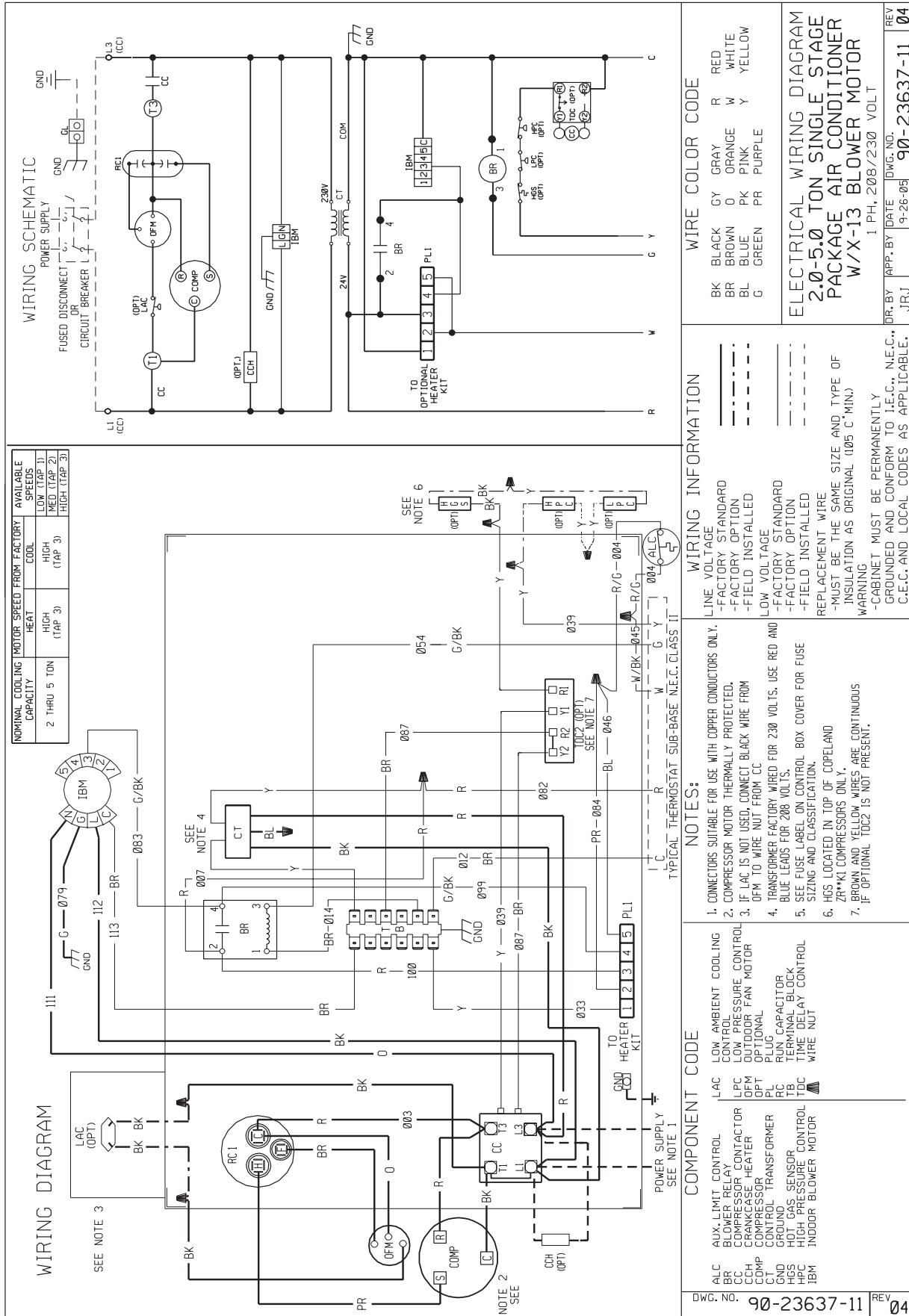
DR. BY [ ] DATE [ ] DWG. NO. 90-23637-04

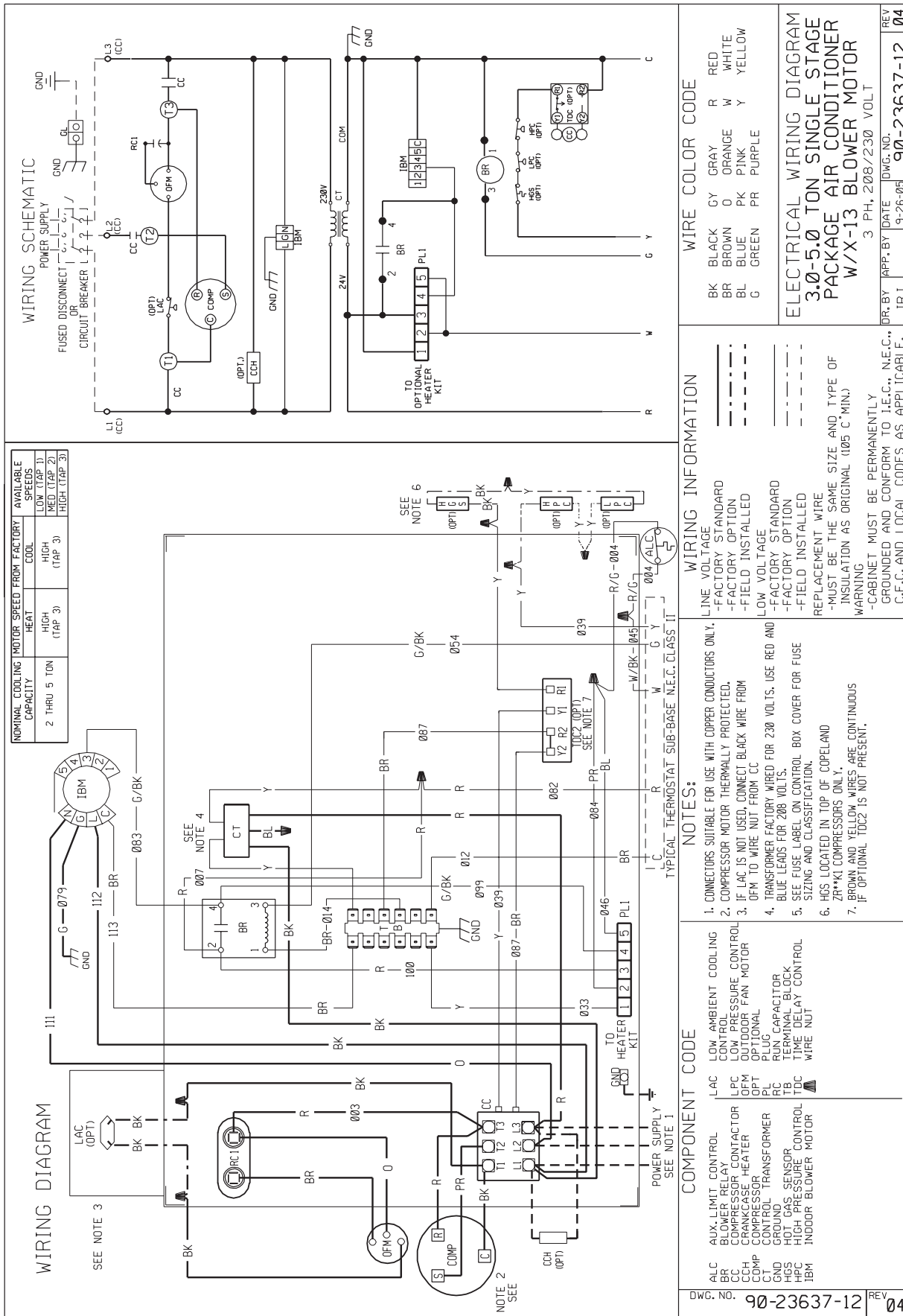
REV. 10

INDOOR BLOWER MOTOR

INDOOR BLOWER MOTOR

# WIRING SCHEMATICS—TZAC-\*\*JL SERIES





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

**WIRING DIAGRAM**

**WIRING SCHEMATIC**

**WIRE COLOR CODE**

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

**ELECTRICAL WIRING DIAGRAM**  
**3.0-5.0 TON SINGLE STAGE PACKAGE AIR CONDITIONER W/X-13 BLOWER MOTOR**

DR:BY APP:BY DATE DWG. NO. REV  
 JRJ 9-26-05 90-23637-12 04

**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.)  
 -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
  - BROWN AND YELLOW WIRES ARE CONTINUOUS IF OPTIONAL TDCC IS NOT PRESENT.

**COMPONENT CODE**

ALC	AUX. LIMIT CONTROL
BL	BLOWER RELAY
CC	COMPRESSOR CONTACTOR
CH	COMPRESSOR HEATER
CH	COMPRESSOR
CT	CONTROL TRANSFORMER
GND	GROUND
HGS	HOT GAS SENSOR
HPC	HIGH PRESSURE CONTROL
IBM	INDOOR BLOWER MOTOR
LAC	LOW AMBIENT COOLING CONTROL
LPC	LOW PRESSURE CONTROL
OFM	OPTIONAL FAN MOTOR
OPT	OPTIONAL
PL	PLUG
RC	RUN CAPACITOR
TB	TERMINAL BLOCK
TDC	TIME DELAY CONTROL
WIRE NUT	WIRE NUT

DWG. NO. REV  
 90-23637-12 04

**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.**

Conditional Parts Warranty (Residential Applications)  
(Registration Required) .....Ten (10) Years  
Compressor:  
1-Phase Models  
(Residential Applications) .....Ten (10) Years  
1 & 3-Phase Models  
(Commercial Applications).....Five (5) Years  
Heating Elements .....Five (5) Years  
Any Other Part  
1 & 3-Phase Models  
(Commercial Applications) .....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."*