



PACKAGE AIR CONDITIONERS

FORM NO. ATZ-179 REV. 2
Supersedes Form No. ATZ-179 Rev. 1

TZAH- SUPER HIGH EFFICIENCY 13-SEER SERIES NOMINAL SIZES 2-5 TONS [7-17.6 kW]

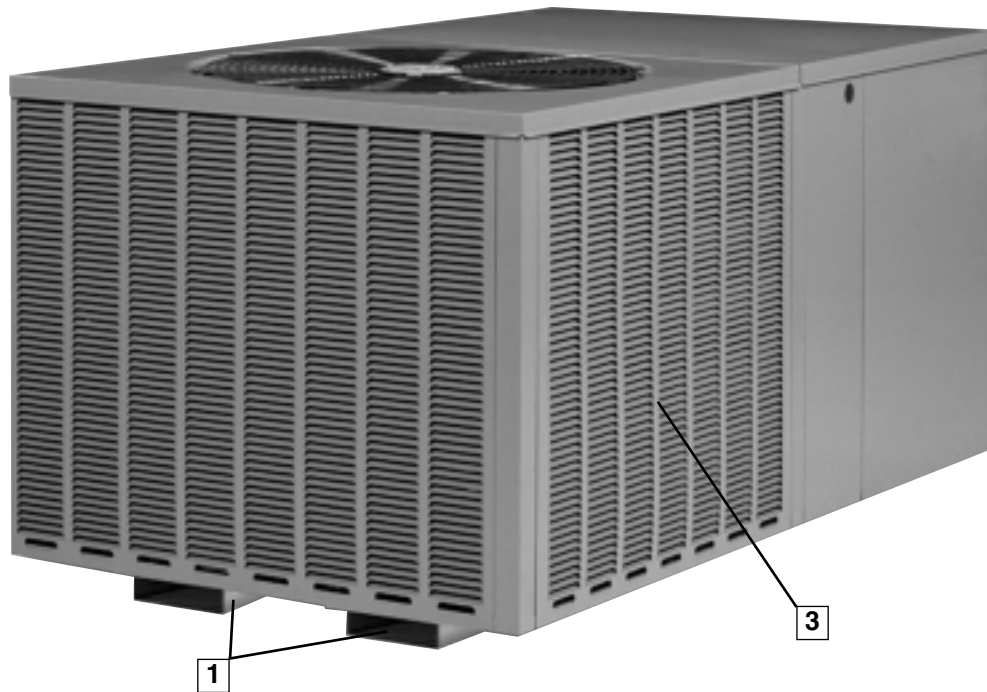


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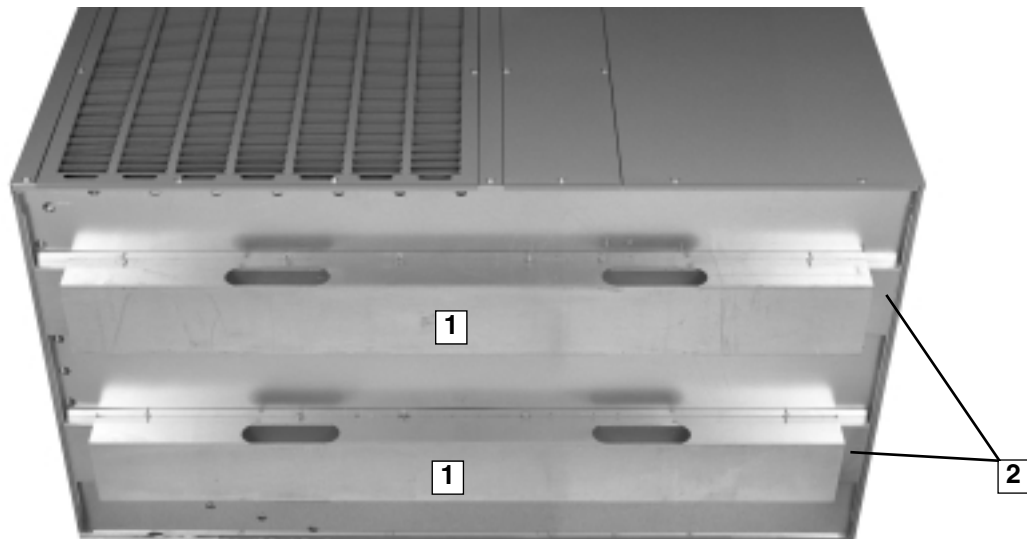
UNIT FEATURES & BENEFITS—TZAH- SERIES



The TZAH series of Package Air Conditioners is designed to be the most efficient, quickest to install, easiest to service, and most reliable units in the industry - while still maintaining an affordable price. This platform provides you with a full line of nominal capacities from 2 through 5 tons. TZAH Models are 13 SEER, each ARI-certified.

As with all units we started our design process with input from the customer. From fan grille to the base rails, Thermal Zone® has combined 30 years worth of package unit design experience with input from Dealers to meet the latest application requirements.

Starting at the bottom, the base rails (1) allow for separation between the unit base and the ground level, protecting the base from ground moisture and providing air circulation around the unit. Constructed from sturdy 14-gauge G-90 sheet metal, the base rails also allow for easier maneuverability during installation. In some instances, installers may choose to remove the base rails to allow for the lower installation clearances encountered in some homes. Once the base rails are removed, though, the base of the unit is still positioned above the pad by a shorter secondary base rail (2).



UNIT FEATURES & BENEFITS—TZAH- SERIES

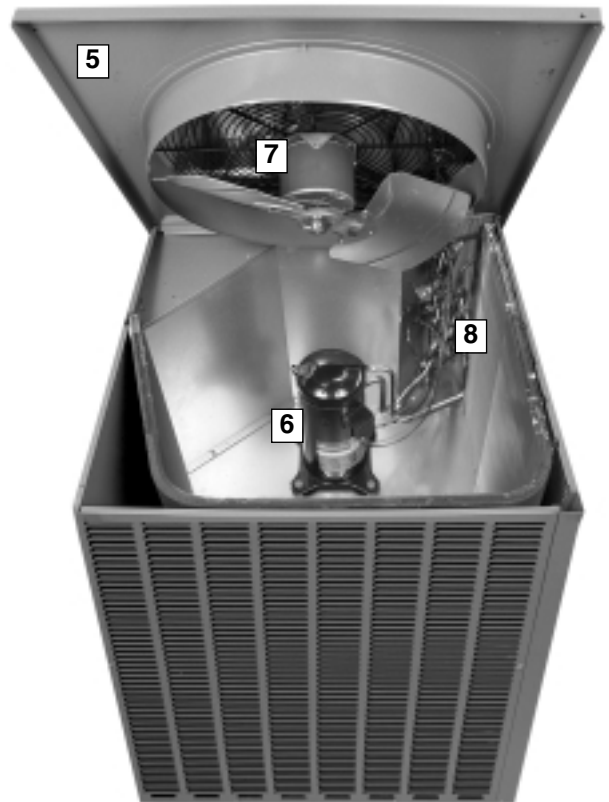


While other manufacturers have chosen to use pre-painted steel in their equipment, which exposes raw edges and invites rust and sharp edges, Thermal Zone® package equipment uses a powder-coat paint system, rated at 1000 hour salt spray per ASTM B117. The powder-coat process also greatly diminishes and dulls sharp edges, reducing the occurrence of cuts and torn clothes.

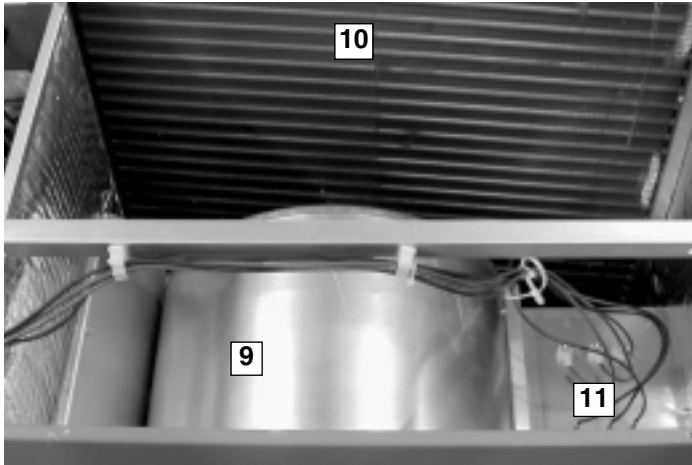
To provide flexibility in space-limited installations, the unit can be installed flush to the structure without blocking airflow over the outdoor coil or making any screws inaccessible for maintenance. Furthermore, the cabinet is a slim 33" wide. Full-louver coil protection (3) makes Thermal Zone® unique in the industry and also totally protects the outdoor coil from vandalism and weather extremes.

Two round 14" duct collar (4) are included with the unit, which makes attaching duct a snap. The collar is crimped around the leading edge, making it easier to install duct onto the collar. A metal bead around the circumference prevents the attached ducting from sliding off after installation.

Keeping service technicians in mind, Thermal Zone® takes pride providing easy access to internal components. The outdoor-section top cover (5) is easily removed to allow access to the the scroll compressor (6), outdoor fan motor (7), and refrigerant tubing (8).



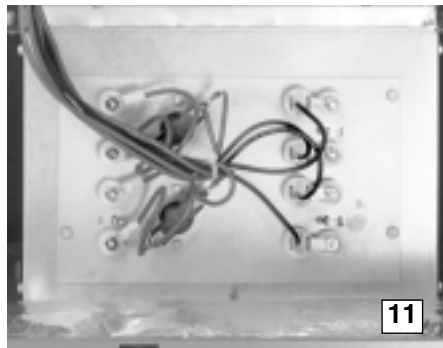
UNIT FEATURES & BENEFITS—TZAH- SERIES



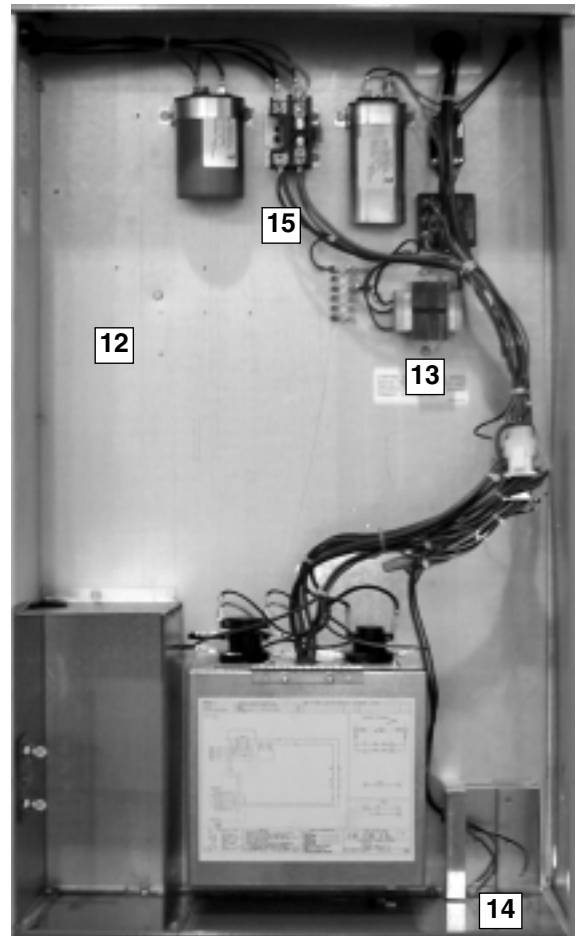
The indoor-section top cover also easily opens to access the removable blower housing and motor (9). This also gains total access to the indoor coil for cleaning and service (10).

The indoor motor and blower system will achieve nominal 400 CFM per ton up to a minimum of .8 inches of static pressure, which helps to eliminate customer dissatisfaction over poor airflow brought about by high-static duct designs.

Optional electric heat (11) can be specified as factory installed, or can be easily installed in the field, with either dual- or single-point power connections.

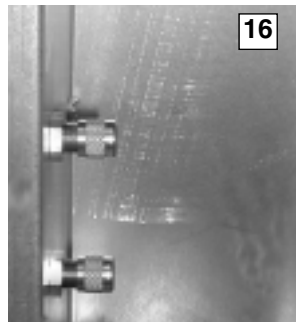


The controls are located in a large, easy-to-access control box (12), which provides plenty of space in which to troubleshoot. The transformer (13) is protected by an in-line fuse, which protects the transformer during a low-voltage electrical short. The low-voltage (14) and high-voltage (15) wiring connections are easily accessed and have ample room around which to maneuver. Troubleshooting is further aided with number- and color-coded wiring, which corresponds with the large, easy-to-read wiring diagram located on the inside of the control box access panel.



UNIT FEATURES & BENEFITS—TZAH- SERIES

High and low refrigerant pressure can easily and accurately be measured using the two gauge ports (16) located inside the control box.



Foil-faced insulation is securely glued and captured to the cabinet. On the base of the unit, closed-cell insulation is used to prevent moisture from being absorbed and help reduce mold content to provide better indoor air quality.

For reliability and long-lasting operation, Thermal Zone® uses 100% scroll compressor technology (19) on all package platforms. With over 12 years of history, the scroll compressor has proven to be reliable, efficient, and quiet during operation.



A small side panel grants access to a removable, sloped drain pan (17), which helps to ensure indoor air quality (IAQ) throughout the life of the unit. A 3/4" drain trap (18) assembly is provided for convenience.



MODEL IDENTIFICATION—TZAH- SERIES



| | | | | | | |
|------------------|---------------------|------------|----------|---|----------------------------------|-------------------------|
| <u>TZ</u> | <u>A</u> | <u>H</u> | <u>—</u> | <u>024</u> | <u>J</u> | <u>A</u> |
| Thermal Zone® | Air Conditioning | Horizontal | | Nominal Cooling Capacity (BTUH) [kW] | Voltage J = 208-230V-1PH-60Hz | A = R-22 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 [17.59 kW] | | |

[] Designates Metric Conversions

GENERAL DATA—TZAH- SERIES

NOMINAL SIZES 2-5 TON [7-17.6 kW]

| Model TZAH- Series | 24JA | 30JA | 36JA | 42JA |
|---|-------------------------|-------------------------|-------------------------|-------------------------|
| Cooling Performance¹ | | | | CONTINUED → |
| Gross Cooling Capacity Btu [kW] | 25,600 [7.5] | 30,400 [8.9] | 36,000 [10.5] | 42,000 [12.3] |
| EER/SEER ² | 11.9/13 | 11.45/13 | 11.5/13 | 11.3/13 |
| Nominal CFM/ARI Rated CFM [L/s] | 800/800 [378/378] | 1000/1000 [472/472] | 1200/1200 [566/566] | 1400/1400 [661/661] |
| ARI Net Cooling Capacity Btu [kW] | 24,600 [7.2] | 29,200 [8.6] | 34,600 [10.1] | 40,500 [11.9] |
| Net Sensible Capacity Btu [kW] | 18,400 [5.4] | 22,300 [6.5] | 27,300 [8] | 31,100 [9.1] |
| Net Latent Capacity Btu [kW] | 6200 [1.8] | 6900 [2] | 7300 [2.1] | 9400 [2.8] |
| Net System Power kW | 2.1 | 2.6 | 3 | 3.6 |
| Compressor | | | | |
| No./Type | 1/Scroll | 1/Scroll | 1/Scroll | 1/Scroll |
| Outdoor Sound Rating (dB) | 76 | 76 | 76 | 76 |
| Outdoor Coil—Fin Type | 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] | 10.44 [0.97] | 10.44 [0.97] | 12.65 [1.18] | 12.65 [1.18] |
| Rows / FPI [FPcm] | 1 / 16 [6] | 1 / 16 [6] | 1 / 22 [9] | 1 / 22 [9] |
| Indoor Coil—Fin Type | 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] | 4.33 [0.4] | 4.33 [0.4] | 4.33 [0.4] | 5.78 [0.54] |
| Rows / FPI [FPcm] | 2 / 15 [6] | 2 / 15 [6] | 2 / 15 [6] | 3 / 13 [5] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| Drain Connection No./Size in. [mm] ³ | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] |
| Outdoor Fan—Type | Propeller | Propeller | Propeller | Propeller |
| No. Used/Diameter in. [mm] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] |
| Drive Type/No. Speeds | Direct/1 | Direct/1 | Direct/1 | Direct/1 |
| CFM [L/s] | 3400 [1604] | 3400 [1604] | 3400 [1604] | 3400 [1604] |
| 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 |
| Indoor Fan—Type | 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] | 1/11x9 [279.4x228.6] |
| Drive Type/No. Speeds | Direct/2 | Direct/2 | Direct/2 | Direct/2 |
| No. Motors | 1 | 1 | 1 | 1 |
| Motor HP | 1/4 | 1/3 | 1/2 | 1/2 |
| Motor RPM (Nominal) | 1033 | 1080 | 1050 | 1075 |
| Motor Frame Size | 48 | 48 | 48 | 48 |
| Filter—Type | Field Supplied | Field Supplied | Field Supplied | Field Supplied |
| Furnished | No | No | No | No |
| (No.) Size Recommended in. [mm] | (1)1x20x16 [25x508x406] | (1)1x20x20 [25x508x508] | (1)1x24x24 [25x610x610] | (1)1x24x24 [25x610x610] |
| Refrigerant Charge Oz. [g] | 60 [1701] | 58 [1644] | 73 [2070] | 76 [2155] |
| Weights | | | | |
| Net Weight lbs. [kg] | 304 [138] | 306 [139] | 309 [140] | 333 [151] |
| Ship Weight lbs. [kg] | 328 [149] | 330 [150] | 333 [151] | 357 [162] |

See Page 10 for Notes.

[] Designates Metric Conversions

NOMINAL SIZES 2-5 TONS [7-17.6 kW]

| Model TZAH- Series | 48JA | 60JA |
|---|-------------------------|-------------------------|
| Cooling Performance¹ | | |
| Gross Cooling Capacity Btu [kW] | 48,000 [14.1] | 64,000 [18.8] |
| EER/SEER ² | 11.4/13 | 11.2/13 |
| Nominal CFM/ARI Rated CFM [L/s] | 1500/1600 [708/755] | 2000/1900 [944/897] |
| ARI Net Cooling Capacity Btu [kW] | 46,000 [13.5] | 61,000 [17.9] |
| Net Sensible Capacity Btu [kW] | 35,800 [10.5] | 46,400 [13.6] |
| Net Latent Capacity Btu [kW] | 10,200 [3] | 14,600 [4.3] |
| Net System Power kW | 4 | 5.5 |
| Compressor | | |
| No./Type | 1/Scroll | 1/Scroll |
| Outdoor Sound Rating (dB) | | |
| | 78 | 78 |
| Outdoor Coil—Fin Type | | |
| Tube Type | Louvered | Louvered |
| Tube Size in. [mm] OD | Rifled | Rifled |
| Face Area sq. ft. [sq. m] | 0.375 [9.5] | 0.375 [9.5] |
| Rows / FPI [FPcm] | 16.54 [1.54] | 16.54 [1.54] |
| | 1 / 22 [9] | 2 / 22 [9] |
| Indoor Coil—Fin Type | | |
| Tube Type | Louvered | Louvered |
| Tube Size in. [mm] | Rifled | Rifled |
| Face Area sq. ft. [sq. m] | 0.375 [9.5] | 0.375 [9.5] |
| Rows / FPI [FPcm] | 5.78 [0.54] | 5.78 [0.54] |
| | 3 / 13 [5] | 4 / 13 [5] |
| Refrigerant Control | TX Valves | TX Valves |
| Drain Connection No./Size in. [mm] ³ | 1/1 [25.4] | 1/1 [25.4] |
| Outdoor Fan—Type | | |
| | Propeller | Propeller |
| No. Used/Diameter in. [mm] | 1/24 [609.6] | 1/24 [609.6] |
| Drive Type/No. Speeds | Direct/1 | Direct/1 |
| CFM [L/s] | 4200 [1982] | 4000 [1888] |
| No. Motors/HP | 1 at 1/3 HP | 1 at 1/3 HP |
| Motor RPM | 1075 | 1075 |
| Indoor Fan—Type | | |
| | FC Centrifugal | FC Centrifugal |
| No. Used/Diameter in. [mm] | 1/11x9 [279.4x228.6] | 1/11x9 [279.4x228.6] |
| Drive Type/No. Speeds | Direct/2 | Direct/2 |
| No. Motors | 1 | 1 |
| Motor HP | 3/4 | 3/4 |
| Motor RPM (Nominal) | 1075 | 1075 |
| Motor Frame Size | 48 | 48 |
| Filter—Type | | |
| | Field Supplied | Field Supplied |
| Furnished | No | No |
| (No.) Size Recommended in. [mm] | (1)1x24x24 [25x610x610] | (1)1x24x24 [25x610x610] |
| Refrigerant Charge Oz. [g] | | |
| | 102 [2892] | 173 [4905] |
| Weights | | |
| Net Weight lbs. [kg] | 349 [158] | 364 [165] |
| Ship Weight lbs. [kg] | 375 [170] | 390 [177] |

See Page 10 for Notes.

[] Designates Metric Conversions

GENERAL DATA—TZAH- SERIES

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. Standard 3/4" PVC P-Trap provided.

SYSTEMS PERFORMANCE—TZAH- SERIES

GROSS SYSTEMS PERFORMANCE DATA—24JA

| | | 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] |
| | | DR ① | .13 | .11 | .08 | .13 | .11 | .08 | .13 | .11 | .08 |
| OUTDOOR DRY BULB TEMPERATURE °F [°C] | 75 [23.9] | Total BTUH [kW] | 28.9 [8.47] | 28.4 [8.32] | 27.6 [8.09] | 27.9 [8.18] | 27.4 [8.03] | 26.7 [7.83] | 25.5 [7.47] | 25.0 [7.33] | 24.3 [7.12] |
| | | Sens BTUH [kW] | 17.7 [5.19] | 16.9 [4.95] | 15.7 [4.60] | 21.3 [6.24] | 20.3 [5.95] | 18.9 [5.54] | 24.3 [7.12] | 23.2 [6.80] | 21.6 [6.33] |
| | | Power | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| | 80 [26.7] | Total BTUH [kW] | 28.7 [8.41] | 28.2 [8.26] | 27.4 [8.03] | 27.7 [8.12] | 27.2 [7.97] | 26.5 [7.77] | 25.3 [7.41] | 24.8 [7.27] | 24.1 [7.06] |
| | | Sens BTUH [kW] | 17.5 [5.13] | 16.7 [4.89] | 15.6 [4.57] | 21.1 [6.18] | 20.2 [5.92] | 18.8 [5.51] | 24.1 [7.06] | 23.0 [6.74] | 21.4 [6.27] |
| | | Power | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.5 |
| | 85 [29.4] | Total BTUH [kW] | 28.3 [8.29] | 27.8 [8.15] | 27.0 [7.91] | 27.3 [8.00] | 26.8 [7.85] | 26.1 [7.65] | 24.8 [7.27] | 24.4 [7.15] | 23.7 [6.95] |
| | | Sens BTUH [kW] | 17.3 [5.07] | 16.5 [4.84] | 15.4 [4.51] | 20.9 [6.13] | 20.0 [5.86] | 18.6 [5.45] | 23.9 [7.00] | 22.8 [6.68] | 21.2 [6.21] |
| | | Power | 1.7 | 1.7 | 1.6 | 1.7 | 1.7 | 1.6 | 1.7 | 1.6 | 1.6 |
| | 90 [32.2] | Total BTUH [kW] | 27.7 [8.12] | 27.2 [7.97] | 26.5 [7.77] | 26.7 [7.83] | 26.2 [7.68] | 25.5 [7.47] | 24.3 [7.12] | 23.8 [6.98] | 23.2 [6.80] |
| Sens BTUH [kW] | | 17.0 [4.98] | 16.2 [4.75] | 15.1 [4.43] | 20.6 [6.04] | 19.7 [5.77] | 18.3 [5.36] | 23.6 [6.92] | 22.5 [6.59] | 20.9 [6.13] | |
| Power | | 1.8 | 1.7 | 1.7 | 1.8 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | |
| 95 [35] | Total BTUH [kW] | 27.0 [7.91] | 26.5 [7.77] | 25.8 [7.56] | 26.0 [7.62] | 25.5 [7.47] | 24.8 [7.27] | 23.5 [6.89] | 23.1 [6.77] | 22.5 [6.59] | |
| | Sens BTUH [kW] | 16.6 [4.86] | 15.9 [4.66] | 14.8 [4.34] | 20.2 [5.92] | 19.3 [5.66] | 18.0 [5.28] | 23.2 [6.80] | 22.2 [6.51] | 20.6 [6.04] | |
| | Power | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | |
| 100 [37.8] | Total BTUH [kW] | 26.1 [7.65] | 25.7 [7.53] | 25.0 [7.33] | 25.1 [7.36] | 24.7 [7.24] | 24.0 [7.03] | 22.7 [6.65] | 22.3 [6.54] | 21.7 [6.36] | |
| | Sens BTUH [kW] | 16.2 [4.75] | 15.5 [4.54] | 14.4 [4.22] | 19.8 [5.80] | 18.9 [5.54] | 17.6 [5.16] | 22.7 [6.65] | 21.8 [6.39] | 20.3 [5.95] | |
| | Power | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | |
| 105 [40.6] | Total BTUH [kW] | 25.2 [7.39] | 24.8 [7.27] | 24.1 [7.06] | 24.2 [7.09] | 23.8 [6.98] | 23.1 [6.77] | 21.8 [6.39] | 21.4 [6.27] | 20.8 [6.10] | |
| | Sens BTUH [kW] | 15.8 [4.63] | 15.1 [4.43] | 14.1 [4.13] | 19.4 [5.69] | 18.6 [5.45] | 17.3 [5.07] | 21.8 [6.39] | 21.4 [6.27] | 19.9 [5.83] | |
| | Power | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | |
| 110 [43.3] | Total BTUH [kW] | 24.2 [7.09] | 23.8 [6.98] | 23.1 [6.77] | 23.2 [6.80] | 22.8 [6.68] | 22.2 [6.51] | 20.8 [6.10] | 20.4 [5.98] | 19.8 [5.80] | |
| | Sens BTUH [kW] | 15.4 [4.51] | 14.7 [4.31] | 13.7 [4.02] | 19.0 [5.57] | 18.2 [5.33] | 16.9 [4.95] | 20.8 [6.10] | 20.4 [5.98] | 19.6 [5.74] | |
| | Power | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | |
| 115 [46.1] | Total BTUH [kW] | 23.2 [6.80] | 22.8 [6.68] | 22.2 [6.51] | 22.2 [6.51] | 21.8 [6.39] | 21.2 [6.21] | 19.8 [5.80] | 19.4 [5.69] | 18.9 [5.54] | |
| | Sens BTUH [kW] | 15.1 [4.43] | 14.4 [4.22] | 13.4 [3.93] | 18.7 [5.48] | 17.8 [5.22] | 16.6 [4.86] | 19.8 [5.80] | 19.4 [5.69] | 18.9 [5.54] | |
| | Power | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | |

GROSS SYSTEMS PERFORMANCE DATA—30JA

| | | 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] |
| | | DR ① | .14 | .12 | .09 | .14 | .12 | .09 | .14 | .12 | .09 |
| OUTDOOR DRY BULB TEMPERATURE °F [°C] | 75 [23.9] | Total BTUH [kW] | 36.2 [10.61] | 35.5 [10.40] | 34.6 [10.14] | 34.3 [10.05] | 33.7 [9.88] | 32.8 [9.61] | 32.2 [9.44] | 31.7 [9.29] | 30.8 [9.03] |
| | | Sens BTUH [kW] | 22.4 [6.56] | 21.4 [6.27] | 19.9 [5.83] | 26.6 [7.80] | 25.4 [7.44] | 23.6 [6.92] | 30.8 [9.03] | 29.4 [8.62] | 27.3 [8.00] |
| | | Power | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 80 [26.7] | Total BTUH [kW] | 35.2 [10.32] | 34.6 [10.14] | 33.7 [9.88] | 33.4 [9.79] | 32.8 [9.61] | 31.9 [9.35] | 31.3 [9.17] | 30.7 [9.00] | 29.9 [8.76] |
| | | Sens BTUH [kW] | 21.8 [6.39] | 20.8 [6.10] | 19.3 [5.66] | 25.9 [7.59] | 24.8 [7.27] | 23.0 [6.74] | 30.1 [8.82] | 28.8 [8.44] | 26.7 [7.83] |
| | | Power | 1.9 | 1.9 | 1.9 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| | 85 [29.4] | Total BTUH [kW] | 34.4 [10.08] | 33.8 [9.91] | 32.8 [9.61] | 32.5 [9.52] | 31.9 [9.35] | 31.1 [9.11] | 30.4 [8.91] | 29.9 [8.76] | 29.1 [8.53] |
| | | Sens BTUH [kW] | 21.2 [6.21] | 20.3 [5.95] | 18.8 [5.51] | 25.4 [7.44] | 24.2 [7.09] | 22.5 [6.59] | 29.6 [8.67] | 28.2 [8.26] | 26.3 [7.71] |
| | | Power | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| | 90 [32.2] | Total BTUH [kW] | 33.5 [9.82] | 32.9 [9.64] | 32.0 [9.38] | 31.7 [9.29] | 31.1 [9.11] | 30.3 [8.88] | 29.6 [8.67] | 29.1 [8.53] | 28.3 [8.29] |
| Sens BTUH [kW] | | 20.7 [6.07] | 19.8 [5.80] | 18.4 [5.39] | 24.9 [7.30] | 23.8 [6.98] | 22.1 [6.48] | 29.1 [8.53] | 27.8 [8.15] | 25.8 [7.56] | |
| Power | | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | |
| 95 [35] | Total BTUH [kW] | 32.7 [9.58] | 32.1 [9.41] | 31.2 [9.14] | 30.9 [9.06] | 30.3 [8.88] | 29.5 [8.65] | 28.8 [8.44] | 28.2 [8.26] | 27.5 [8.06] | |
| | Sens BTUH [kW] | 20.3 [5.95] | 19.4 [5.69] | 18.1 [5.30] | 24.5 [7.18] | 23.4 [6.86] | 21.8 [6.39] | 28.6 [8.38] | 27.4 [8.03] | 25.5 [7.47] | |
| | Power | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | |
| 100 [37.8] | Total BTUH [kW] | 31.8 [9.32] | 31.3 [9.17] | 30.4 [8.91] | 30.0 [8.79] | 29.5 [8.65] | 28.7 [8.41] | 27.9 [8.18] | 27.4 [8.03] | 26.6 [7.80] | |
| | Sens BTUH [kW] | 20.0 [5.86] | 19.1 [5.60] | 17.7 [5.19] | 24.1 [7.06] | 23.1 [6.77] | 21.4 [6.27] | 27.9 [8.18] | 27.0 [7.91] | 25.1 [7.36] | |
| | Power | 2.4 | 2.4 | 2.3 | 2.4 | 2.4 | 2.3 | 2.4 | 2.4 | 2.3 | |
| 105 [40.6] | Total BTUH [kW] | 30.9 [9.06] | 30.3 [8.88] | 29.5 [8.65] | 29.1 [8.53] | 28.5 [8.35] | 27.8 [8.15] | 27.0 [7.91] | 26.5 [7.77] | 25.7 [7.53] | |
| | Sens BTUH [kW] | 19.6 [5.74] | 18.7 [5.48] | 17.4 [5.10] | 23.8 [6.98] | 22.7 [6.65] | 21.1 [6.18] | 27.0 [7.91] | 26.5 [7.77] | 24.8 [7.27] | |
| | Power | 2.5 | 2.5 | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.4 | |
| 110 [43.3] | Total BTUH [kW] | 29.8 [8.73] | 29.3 [8.59] | 28.5 [8.35] | 28.0 [8.21] | 27.5 [8.06] | 26.8 [7.85] | 25.9 [7.59] | 25.4 [7.44] | 24.7 [7.24] | |
| | Sens BTUH [kW] | 19.2 [5.63] | 18.4 [5.39] | 17.1 [5.01] | 23.4 [6.86] | 22.3 [6.54] | 20.8 [6.10] | 25.9 [7.59] | 25.4 [7.44] | 24.5 [7.18] | |
| | Power | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.5 | |
| 115 [46.1] | Total BTUH [kW] | 28.7 [8.41] | 28.1 [8.24] | 27.4 [8.03] | 26.8 [7.85] | 26.3 [7.71] | 25.6 [7.50] | 24.7 [7.24] | 24.3 [7.12] | 23.6 [6.92] | |
| | Sens BTUH [kW] | 18.8 [5.51] | 18.0 [5.28] | 16.7 [4.89] | 23.0 [6.74] | 21.9 [6.42] | 20.4 [5.98] | 24.7 [7.24] | 24.3 [7.12] | 23.6 [6.92] | |
| | Power | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 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 $[1.1 \times \text{CFM} \times (1 - \text{DR}) \times (\text{dbE} - 80)]$.

[] Designates Metric Conversions

SYSTEMS PERFORMANCE—TZAH- SERIES

GROSS SYSTEMS PERFORMANCE DATA—36JA

| | | 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] | 1020 [481] | |
| DR ① | | .01 | .08 | .04 | .01 | .08 | .04 | .01 | .08 | .04 | |
| OUTDOOR DRY BULB TEMPERATURE °F [°C] | 75 [23.9] | Total BTUH [kW] Sens BTUH [kW] Power | 42.9 [12.57] 26.6 [7.80] 2.2 | 42.1 [12.34] 25.4 [7.44] 2.1 | 41.0 [12.02] 23.6 [6.92] 2.1 | 40.2 [11.78] 31.7 [9.29] 2.1 | 39.5 [11.58] 30.3 [8.88] 2.1 | 38.4 [11.25] 28.1 [8.24] 2.1 | 38.2 [11.20] 35.9 [10.52] 2.1 | 37.5 [10.99] 34.3 [10.05] 2.1 | 36.5 [10.70] 31.9 [9.35] 2.1 |
| | 80 [26.7] | Total BTUH [kW] Sens BTUH [kW] Power | 42.0 [12.31] 26.1 [7.65] 2.3 | 41.2 [12.07] 24.9 [7.30] 2.3 | 40.1 [11.75] 23.2 [6.80] 2.2 | 39.2 [11.49] 31.2 [9.14] 2.3 | 38.5 [11.28] 29.8 [8.73] 2.2 | 37.5 [10.99] 27.7 [8.12] 2.2 | 37.2 [10.90] 35.4 [10.37] 2.3 | 36.6 [10.73] 33.9 [9.94] 2.2 | 35.6 [10.43] 31.5 [9.23] 2.2 |
| | 85 [29.4] | Total BTUH [kW] Sens BTUH [kW] Power | 41.1 [12.05] 25.7 [7.53] 2.4 | 40.3 [11.81] 24.5 [7.18] 2.4 | 39.2 [11.49] 22.8 [6.68] 2.3 | 38.3 [11.22] 30.8 [9.03] 2.4 | 37.6 [11.02] 29.4 [8.62] 2.4 | 36.6 [10.73] 27.4 [8.03] 2.3 | 36.3 [10.64] 35.1 [10.29] 2.4 | 35.7 [10.46] 33.5 [9.82] 2.4 | 34.7 [10.17] 31.1 [9.11] 2.3 |
| | 90 [32.2] | Total BTUH [kW] Sens BTUH [kW] Power | 40.2 [11.78] 25.3 [7.41] 2.5 | 39.5 [11.58] 24.2 [7.09] 2.5 | 38.4 [11.25] 22.5 [6.59] 2.5 | 37.5 [10.99] 30.4 [8.91] 2.5 | 36.8 [10.79] 29.0 [8.50] 2.5 | 35.8 [10.49] 27.0 [7.91] 2.4 | 35.5 [10.40] 34.7 [10.17] 2.5 | 34.8 [10.20] 33.1 [9.70] 2.5 | 33.9 [9.94] 30.8 [9.03] 2.5 |
| | 95 [35] | Total BTUH [kW] Sens BTUH [kW] Power | 39.4 [11.55] 24.9 [7.30] 2.6 | 38.7 [11.34] 23.8 [6.98] 2.6 | 37.6 [11.02] 22.1 [6.48] 2.6 | 36.6 [10.73] 30.0 [8.79] 2.6 | 36.0 [10.55] 28.7 [8.41] 2.6 | 35.0 [10.26] 26.7 [7.83] 2.6 | 34.6 [10.14] 34.2 [10.02] 2.6 | 34.0 [9.96] 32.7 [9.58] 2.6 | 33.1 [9.70] 30.4 [8.91] 2.6 |
| | 100 [37.8] | Total BTUH [kW] Sens BTUH [kW] Power | 38.5 [11.28] 24.5 [7.18] 2.8 | 37.8 [11.08] 23.4 [6.86] 2.7 | 36.8 [10.79] 21.8 [6.39] 2.7 | 35.8 [10.49] 29.6 [8.67] 2.7 | 35.1 [10.29] 28.3 [8.29] 2.7 | 34.2 [10.02] 26.3 [7.71] 2.7 | 33.8 [9.91] 33.8 [9.91] 2.7 | 33.2 [9.73] 32.3 [9.47] 2.7 | 32.3 [9.47] 30.1 [8.82] 2.7 |
| | 105 [40.6] | Total BTUH [kW] Sens BTUH [kW] Power | 37.6 [11.02] 24.0 [7.03] 2.9 | 36.9 [10.81] 23.0 [6.74] 2.9 | 35.9 [10.52] 21.4 [6.27] 2.8 | 34.8 [10.20] 29.2 [8.56] 2.9 | 34.2 [10.02] 27.9 [8.18] 2.8 | 33.3 [9.76] 25.9 [7.59] 2.8 | 32.8 [9.61] 32.8 [9.61] 2.9 | 32.3 [9.47] 31.9 [9.35] 2.8 | 31.4 [9.20] 29.7 [8.70] 2.8 |
| | 110 [43.3] | Total BTUH [kW] Sens BTUH [kW] Power | 36.6 [10.73] 23.6 [6.92] 3.0 | 35.9 [10.52] 22.5 [6.59] 3.0 | 35.0 [10.26] 20.9 [6.13] 2.9 | 33.8 [9.91] 28.7 [8.41] 3.0 | 33.2 [9.73] 27.4 [8.03] 3.0 | 32.3 [9.47] 25.5 [7.47] 2.9 | 31.9 [9.35] 31.9 [9.35] 3.0 | 31.3 [9.17] 31.3 [9.17] 3.0 | 30.4 [8.91] 29.2 [8.56] 2.9 |
| | 115 [46.1] | Total BTUH [kW] Sens BTUH [kW] Power | 35.5 [10.40] 23.0 [6.74] 3.1 | 34.9 [10.23] 22.0 [6.45] 3.1 | 33.9 [9.94] 20.4 [5.98] 3.1 | 32.8 [9.61] 28.1 [8.24] 3.1 | 32.2 [9.44] 26.8 [7.85] 3.1 | 31.3 [9.17] 25.0 [7.33] 3.0 | 30.8 [9.03] 30.8 [9.03] 3.1 | 30.2 [8.85] 30.2 [8.85] 3.1 | 29.4 [8.62] 28.7 [8.41] 3.0 |

GROSS SYSTEMS PERFORMANCE DATA—42JA

| | | 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] | 1190 [562] | 1540 [727] | 1400 [661] | 1190 [562] | 1540 [727] | 1400 [661] | 1190 [562] | |
| DR ① | | .13 | .11 | .08 | .13 | .11 | .08 | .13 | .11 | .08 | |
| OUTDOOR DRY BULB TEMPERATURE °F [°C] | 75 [23.9] | Total BTUH [kW] Sens BTUH [kW] Power | 51.2 [15.01] 30.0 [8.79] 2.6 | 50.3 [14.74] 28.6 [8.38] 2.6 | 48.9 [14.33] 26.6 [7.80] 2.5 | 47.6 [13.95] 36.2 [10.61] 2.6 | 46.7 [13.69] 34.5 [10.11] 2.5 | 45.5 [13.33] 32.1 [9.41] 2.5 | 44.8 [13.13] 41.1 [12.05] 2.5 | 44.0 [12.90] 39.3 [11.52] 2.5 | 42.8 [12.54] 36.5 [10.70] 2.5 |
| | 80 [26.7] | Total BTUH [kW] Sens BTUH [kW] Power | 49.6 [14.54] 29.6 [8.67] 2.7 | 48.7 [14.27] 28.3 [8.29] 2.7 | 47.4 [13.89] 26.3 [7.71] 2.7 | 46.0 [13.48] 35.8 [10.49] 2.7 | 45.2 [13.25] 34.2 [10.02] 2.7 | 43.9 [12.87] 31.8 [9.32] 2.7 | 43.2 [12.66] 40.7 [11.93] 2.7 | 42.4 [12.43] 38.9 [11.40] 2.7 | 41.3 [12.10] 36.2 [10.61] 2.6 |
| | 85 [29.4] | Total BTUH [kW] Sens BTUH [kW] Power | 48.4 [14.18] 29.1 [8.53] 2.9 | 47.5 [13.92] 27.8 [8.15] 2.9 | 46.2 [13.54] 25.9 [7.59] 2.8 | 44.8 [13.13] 35.3 [10.35] 2.9 | 44.0 [12.90] 33.7 [9.88] 2.8 | 42.8 [12.54] 31.4 [9.20] 2.8 | 42.0 [12.31] 40.3 [11.81] 2.8 | 41.2 [12.07] 38.5 [11.28] 2.8 | 40.1 [11.75] 35.8 [10.49] 2.8 |
| | 90 [32.2] | Total BTUH [kW] Sens BTUH [kW] Power | 47.4 [13.89] 28.6 [8.38] 3.0 | 46.5 [13.63] 27.4 [8.03] 3.0 | 45.3 [13.28] 25.5 [7.47] 3.0 | 43.8 [12.84] 34.8 [10.20] 3.0 | 43.0 [12.60] 33.3 [9.76] 3.0 | 41.8 [12.25] 30.9 [9.06] 3.0 | 41.0 [12.02] 39.8 [11.66] 3.0 | 40.2 [11.78] 38.0 [11.14] 3.0 | 39.1 [11.46] 35.4 [10.37] 2.9 |
| | 95 [35] | Total BTUH [kW] Sens BTUH [kW] Power | 46.5 [13.63] 28.1 [8.24] 3.2 | 45.7 [13.39] 26.8 [7.85] 3.2 | 44.5 [13.04] 25.0 [7.33] 3.1 | 42.9 [12.57] 34.3 [10.05] 3.2 | 42.1 [12.34] 32.7 [9.58] 3.1 | 41.0 [12.02] 30.4 [8.91] 3.1 | 40.1 [11.75] 39.2 [11.49] 3.2 | 39.4 [11.55] 37.5 [10.99] 3.1 | 38.3 [11.22] 34.9 [10.23] 3.1 |
| | 100 [37.8] | Total BTUH [kW] Sens BTUH [kW] Power | 45.7 [13.39] 27.5 [8.06] 3.4 | 44.9 [13.16] 26.3 [7.71] 3.3 | 43.6 [12.78] 24.5 [7.18] 3.3 | 42.1 [12.34] 33.7 [9.88] 3.3 | 41.3 [12.10] 32.2 [9.44] 3.3 | 40.2 [11.78] 29.9 [8.76] 3.3 | 39.3 [11.52] 38.7 [11.34] 3.3 | 38.6 [11.31] 36.9 [10.81] 3.3 | 37.5 [10.99] 34.4 [10.08] 3.2 |
| | 105 [40.6] | Total BTUH [kW] Sens BTUH [kW] Power | 44.7 [13.10] 26.9 [7.88] 3.5 | 43.9 [12.87] 25.7 [7.53] 3.5 | 42.7 [12.51] 23.9 [7.00] 3.4 | 41.1 [12.05] 33.1 [9.70] 3.5 | 40.4 [11.84] 31.6 [9.26] 3.5 | 39.3 [11.52] 29.4 [8.62] 3.4 | 38.3 [11.22] 38.1 [11.17] 3.5 | 37.6 [11.02] 36.4 [10.67] 3.4 | 36.6 [10.73] 33.8 [9.91] 3.4 |
| | 110 [43.3] | Total BTUH [kW] Sens BTUH [kW] Power | 43.6 [12.78] 26.3 [7.71] 3.7 | 42.8 [12.54] 25.2 [7.39] 3.6 | 41.6 [12.19] 23.4 [6.86] 3.6 | 40.0 [11.72] 32.5 [9.52] 3.6 | 39.2 [11.49] 31.1 [9.11] 3.6 | 38.2 [11.20] 28.9 [8.47] 3.6 | 37.1 [10.87] 37.1 [10.87] 3.6 | 36.5 [10.70] 35.8 [10.49] 3.6 | 35.5 [10.40] 33.3 [9.76] 3.5 |
| | 115 [46.1] | Total BTUH [kW] Sens BTUH [kW] Power | 42.1 [12.34] 25.7 [7.53] 3.8 | 41.3 [12.10] 24.6 [7.21] 3.8 | 40.2 [11.78] 22.9 [6.71] 3.7 | 38.5 [11.28] 31.9 [9.35] 3.8 | 37.8 [11.08] 30.5 [8.94] 3.8 | 36.7 [10.76] 28.3 [8.29] 3.7 | 35.7 [10.46] 35.7 [10.46] 3.8 | 35.0 [10.26] 35.0 [10.26] 3.7 | 34.1 [9.99] 32.8 [9.61] 3.7 |

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—TZAH- SERIES

GROSS SYSTEMS PERFORMANCE DATA—48JA

| | | 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 | | .12 | .10 | .06 | .12 | .10 | .06 | .12 | .10 | .06 | |
| OUTDOOR DRY BULB TEMPERATURE °F [°C] | 75 [23.9] | Total BTUH [kW] | 55.9 [16.38] | 54.9 [16.09] | 53.4 [15.65] | 52.7 [15.44] | 51.7 [15.15] | 50.3 [14.74] | 49.8 [14.59] | 48.9 [14.33] | 47.6 [13.95] |
| | | Sens BTUH [kW] | 34.4 [10.08] | 32.9 [9.64] | 30.6 [8.97] | 41.5 [12.16] | 39.6 [11.61] | 36.8 [10.79] | 46.1 [13.51] | 44.0 [12.90] | 41.0 [12.02] |
| | | Power | 2.9 | 2.8 | 2.8 | 2.9 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| | 80 [26.7] | Total BTUH [kW] | 55.3 [16.21] | 54.3 [15.91] | 52.8 [15.47] | 52.1 [15.27] | 51.1 [14.98] | 49.7 [14.57] | 49.2 [14.42] | 48.3 [14.16] | 47.0 [13.77] |
| | | Sens BTUH [kW] | 33.8 [9.91] | 32.3 [9.47] | 30.1 [8.82] | 40.9 [11.99] | 39.1 [11.46] | 36.3 [10.64] | 45.5 [13.33] | 43.5 [12.75] | 40.5 [11.87] |
| | | Power | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.9 |
| | 85 [29.4] | Total BTUH [kW] | 54.4 [15.94] | 53.4 [15.65] | 52.0 [15.24] | 51.2 [15.01] | 50.3 [14.74] | 48.9 [14.33] | 48.3 [14.16] | 47.5 [13.92] | 46.2 [13.54] |
| | | Sens BTUH [kW] | 33.4 [9.79] | 31.9 [9.35] | 29.6 [8.67] | 40.4 [11.84] | 38.6 [11.31] | 35.9 [10.52] | 45.0 [13.19] | 43.0 [12.60] | 40.0 [11.72] |
| | | Power | 3.2 | 3.1 | 3.1 | 3.2 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 |
| | 90 [32.2] | Total BTUH [kW] | 53.3 [15.62] | 52.3 [15.33] | 50.9 [14.92] | 50.1 [14.68] | 49.2 [14.42] | 47.8 [14.01] | 47.2 [13.83] | 46.4 [13.60] | 45.1 [13.22] |
| Sens BTUH [kW] | | 32.9 [9.64] | 31.4 [9.20] | 29.2 [8.56] | 40.0 [11.72] | 38.2 [11.20] | 35.5 [10.40] | 44.6 [13.07] | 42.6 [12.48] | 39.6 [11.61] | |
| Power | | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.2 | |
| 95 [35] | Total BTUH [kW] | 52.0 [15.24] | 51.1 [14.98] | 49.7 [14.57] | 48.8 [14.30] | 47.9 [14.04] | 46.6 [13.66] | 46.0 [13.48] | 45.2 [13.25] | 43.9 [12.87] | |
| | Sens BTUH [kW] | 32.4 [9.50] | 31.0 [9.09] | 28.8 [8.44] | 39.5 [11.58] | 37.7 [11.05] | 35.1 [10.29] | 44.1 [12.92] | 42.2 [12.37] | 39.2 [11.49] | |
| | Power | 3.5 | 3.5 | 3.4 | 3.5 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | |
| 100 [37.8] | Total BTUH [kW] | 50.7 [14.86] | 49.8 [14.59] | 48.4 [14.18] | 47.4 [13.89] | 46.6 [13.66] | 45.3 [13.28] | 44.6 [13.07] | 43.8 [12.84] | 42.6 [12.48] | |
| | Sens BTUH [kW] | 31.9 [9.35] | 30.5 [8.94] | 28.4 [8.32] | 39.0 [11.43] | 37.2 [10.90] | 34.6 [10.14] | 43.6 [12.78] | 41.7 [12.22] | 38.8 [11.37] | |
| | Power | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.5 | |
| 105 [40.6] | Total BTUH [kW] | 49.2 [14.42] | 48.3 [14.16] | 47.0 [13.77] | 46.0 [13.48] | 45.2 [13.25] | 43.9 [12.87] | 43.1 [12.63] | 42.4 [12.43] | 41.2 [12.07] | |
| | Sens BTUH [kW] | 31.3 [9.17] | 29.9 [8.76] | 27.8 [8.15] | 38.3 [11.22] | 36.6 [10.73] | 34.1 [9.99] | 43.0 [12.60] | 41.1 [12.05] | 38.2 [11.20] | |
| | Power | 3.8 | 3.8 | 3.7 | 3.8 | 3.8 | 3.7 | 3.8 | 3.7 | 3.7 | |
| 110 [43.3] | Total BTUH [kW] | 47.8 [14.01] | 46.9 [13.75] | 45.6 [13.36] | 44.5 [13.04] | 43.7 [12.81] | 42.5 [12.46] | 41.7 [12.22] | 40.9 [11.99] | 39.8 [11.66] | |
| | Sens BTUH [kW] | 30.5 [8.94] | 29.1 [8.53] | 27.1 [7.94] | 37.5 [10.99] | 35.9 [10.52] | 33.4 [9.79] | 41.7 [12.22] | 40.3 [11.81] | 37.5 [10.99] | |
| | Power | 4.0 | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 | 3.8 | |
| 115 [46.1] | Total BTUH [kW] | 46.3 [13.57] | 45.5 [13.33] | 44.3 [12.98] | 43.1 [12.63] | 42.3 [12.40] | 41.2 [12.07] | 40.3 [11.81] | 39.6 [11.61] | 38.5 [11.28] | |
| | Sens BTUH [kW] | 29.5 [8.65] | 28.1 [8.24] | 26.2 [7.68] | 36.5 [10.70] | 34.9 [10.23] | 32.4 [9.50] | 40.3 [11.81] | 39.3 [11.52] | 36.6 [10.73] | |
| | Power | 4.1 | 4.1 | 4.0 | 4.1 | 4.1 | 4.0 | 4.1 | 4.0 | 4.0 | |

GROSS SYSTEMS PERFORMANCE DATA—60JA

| | | 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] | | 2090 [986] | 1900 [897] | 1620 [765] | 2090 [986] | 1900 [897] | 1620 [765] | 2090 [986] | 1900 [897] | 1620 [765] | |
| DR ① | | .05 | .03 | 0 | .05 | .03 | 0 | .05 | .03 | 0 | |
| OUTDOOR DRY BULB TEMPERATURE °F [°C] | 75 [23.9] | Total BTUH [kW] | 73.8 [21.63] | 72.5 [21.25] | 70.5 [20.66] | 70.1 [20.54] | 68.9 [20.19] | 67.0 [19.64] | 64.3 [18.84] | 63.2 [18.52] | 61.5 [18.02] |
| | | Sens BTUH [kW] | 44.8 [13.13] | 42.8 [12.54] | 39.8 [11.66] | 53.8 [15.77] | 51.4 [15.06] | 47.8 [14.01] | 60.4 [17.70] | 57.7 [16.91] | 53.6 [15.71] |
| | | Power | 3.8 | 3.8 | 3.7 | 3.8 | 3.8 | 3.7 | 3.7 | 3.7 | 3.7 |
| | 80 [26.7] | Total BTUH [kW] | 73.6 [21.57] | 72.3 [21.19] | 70.3 [20.60] | 70.0 [20.51] | 68.7 [20.13] | 66.8 [19.58] | 64.2 [18.82] | 63.0 [18.46] | 61.3 [17.97] |
| | | Sens BTUH [kW] | 45.0 [13.19] | 43.0 [12.60] | 40.0 [11.72] | 54.0 [15.83] | 51.6 [15.12] | 48.0 [14.07] | 60.5 [17.73] | 57.8 [16.94] | 53.8 [15.77] |
| | | Power | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 3.9 | 4.0 | 3.9 | 3.9 |
| | 85 [29.4] | Total BTUH [kW] | 72.6 [21.28] | 71.3 [20.90] | 69.3 [20.31] | 68.9 [20.19] | 67.7 [19.84] | 65.8 [19.28] | 63.1 [18.49] | 62.0 [18.17] | 60.3 [17.67] |
| | | Sens BTUH [kW] | 44.6 [13.07] | 42.6 [12.48] | 39.6 [11.61] | 53.6 [15.71] | 51.2 [15.01] | 47.6 [13.95] | 60.2 [17.64] | 57.4 [16.82] | 53.4 [15.65] |
| | | Power | 4.3 | 4.2 | 4.2 | 4.2 | 4.2 | 4.1 | 4.2 | 4.1 | 4.1 |
| | 90 [32.2] | Total BTUH [kW] | 70.9 [20.78] | 69.6 [20.40] | 67.7 [19.84] | 67.2 [19.69] | 66.0 [19.34] | 64.2 [18.82] | 61.4 [17.99] | 60.3 [17.67] | 58.7 [17.20] |
| Sens BTUH [kW] | | 43.7 [12.81] | 41.8 [12.25] | 38.9 [11.40] | 52.7 [15.44] | 50.4 [14.77] | 46.8 [13.72] | 59.4 [17.41] | 56.6 [16.59] | 52.7 [15.44] | |
| Power | | 4.5 | 4.4 | 4.4 | 4.4 | 4.4 | 4.3 | 4.4 | 4.4 | 4.3 | |
| 95 [35] | Total BTUH [kW] | 68.7 [20.13] | 67.5 [19.78] | 65.7 [19.25] | 65.1 [19.08] | 63.9 [18.73] | 62.2 [18.23] | 59.3 [17.38] | 58.2 [17.06] | 56.6 [16.59] | |
| | Sens BTUH [kW] | 42.6 [12.48] | 40.7 [11.93] | 37.9 [11.11] | 51.6 [15.12] | 49.3 [14.45] | 45.8 [13.42] | 58.1 [17.03] | 55.6 [16.29] | 51.7 [15.15] | |
| | Power | 4.7 | 4.7 | 4.6 | 4.7 | 4.6 | 4.6 | 4.6 | 4.6 | 4.5 | |
| 100 [37.8] | Total BTUH [kW] | 66.3 [19.43] | 65.1 [19.08] | 63.4 [18.58] | 62.7 [18.38] | 61.6 [18.05] | 59.9 [17.55] | 56.9 [16.68] | 55.9 [16.38] | 54.3 [15.91] | |
| | Sens BTUH [kW] | 41.4 [12.13] | 39.5 [11.58] | 36.8 [10.79] | 50.4 [14.77] | 48.1 [14.10] | 44.8 [13.13] | 56.9 [16.68] | 54.4 [15.94] | 50.6 [14.83] | |
| | Power | 4.9 | 4.9 | 4.8 | 4.9 | 4.8 | 4.8 | 4.8 | 4.8 | 4.7 | |
| 105 [40.6] | Total BTUH [kW] | 63.9 [18.73] | 62.8 [18.40] | 61.1 [17.91] | 60.3 [17.67] | 59.2 [17.35] | 57.6 [16.88] | 54.5 [15.97] | 53.5 [15.68] | 52.0 [15.24] | |
| | Sens BTUH [kW] | 40.2 [11.78] | 38.4 [11.25] | 35.7 [10.46] | 49.2 [14.42] | 47.0 [13.77] | 43.7 [12.81] | 54.5 [15.97] | 53.3 [15.62] | 49.5 [14.51] | |
| | Power | 5.1 | 5.1 | 5.0 | 5.1 | 5.1 | 5.0 | 5.0 | 5.0 | 4.9 | |
| 110 [43.3] | Total BTUH [kW] | 61.7 [18.08] | 60.6 [17.76] | 58.9 [17.26] | 58.0 [17.00] | 57.0 [16.71] | 55.4 [16.24] | 52.2 [15.30] | 51.3 [15.03] | 49.9 [14.62] | |
| | Sens BTUH [kW] | 39.2 [11.49] | 37.5 [10.99] | 34.9 [10.23] | 48.2 [14.13] | 46.1 [13.51] | 42.9 [12.57] | 52.2 [15.30] | 51.3 [15.03] | 48.7 [14.27] | |
| | Power | 5.4 | 5.3 | 5.2 | 5.3 | 5.3 | 5.2 | 5.3 | 5.2 | 5.2 | |
| 115 [46.1] | Total BTUH [kW] | 59.8 [17.53] | 58.8 [17.23] | 57.2 [16.76] | 56.2 [16.47] | 55.2 [16.18] | 53.7 [15.74] | 50.4 [14.77] | 49.5 [14.51] | 48.1 [14.10] | |
| | Sens BTUH [kW] | 38.6 [11.31] | 36.9 [10.81] | 34.3 [10.05] | 47.6 [13.95] | 45.5 [13.33] | 42.3 [12.40] | 50.4 [14.77] | 49.5 [14.51] | 48.1 [14.10] | |
| | Power | 5.6 | 5.5 | 5.5 | 5.5 | 5.5 | 5.4 | 5.4 | 5.4 | 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—TZAH- SERIES

INDOOR AIRFLOW PERFORMANCE—230 VOLTS

| Nominal Cooling Capacity Tons [kW] | Motor Speed from Factory | Manufacturer Recommended Air-Flow Range (Min/Max) CFM | 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 [1.02] | 0.2 [0.05] | 0.3 [1.07] | 0.4 [1.10] | 0.5 [1.12] | 0.6 [1.15] | 0.7 [1.17] | 0.8 [1.20] | 0.9 [1.22] | 1.0 [1.25] | |
| 2.0 [7.03] | Low | 700/900 | 10x9 1/4 HP [186] 2 Speed Motor | Low | CFM | 827 [390] | 811 [383] | 782 [369] | 740 [349] | 684 [323] | 614 [290] | 531 [251] | 435 [205] | — | — |
| | | | | | RPM | 450 | 533 | 626 | 742 | 799 | 894 | 932 | 985 | — | — |
| | | | | | Watts | 278 | 273 | 289 | 254 | 244 | 227 | 216 | 198 | — | — |
| | High | 700/900 | 10x9 1/4 HP [186] 2 Speed Motor | High | CFM | 1230 [581] | 1223 [577] | 1216 [574] | 1211 [571] | 1187 [560] | 1125 [531] | 1020 [481] | 874 [412] | 696 [328] | 504 [238] |
| | | | | | RPM | 575 | 643 | 703 | 767 | 819 | 877 | 976 | 1001 | 1072 | 1092 |
| | | | | | Watts | 479 | 468 | 455 | 448 | 431 | 416 | 357 | 341 | 279 | 259 |
| 2.5 [8.79] | Low | 875/1125 | 10x9 1/3 HP [249] 2 Speed Motor | Low | CFM | 1032 [487] | 1030 [486] | 1014 [478] | 979 [462] | 923 [436] | 843 [398] | 735 [347] | 596 [281] | 423 [200] | — |
| | | | | | RPM | 533 | 570 | 659 | 746 | 795 | 863 | 934 | 1019 | 1050 | — |
| | | | | | Watts | 336 | 331 | 326 | 314 | 303 | 280 | 271 | 227 | 210 | — |
| | High | 875/1125 | 10x9 1/3 HP [249] 2 Speed Motor | High | CFM | 1312 [619] | 1301 [614] | 1292 [610] | 1276 [602] | 1246 [588] | 1196 [564] | 1117 [527] | 1003 [473] | 845 [399] | — |
| | | | | | RPM | 592 | 646 | 712 | 768 | 824 | 883 | 933 | 1012 | 1035 | — |
| | | | | | Watts | 482 | 473 | 466 | 454 | 433 | 421 | 401 | 349 | 329 | — |
| 3.0 [10.55] | Low | 1050/1350 | 10x9 1/2 HP [373] 2 Speed Motor | Low | CFM | 1302 [615] | 1280 [604] | 1253 [592] | 1217 [574] | 1165 [550] | 1091 [515] | 990 [467] | 855 [404] | 681 [321] | 461 [218] |
| | | | | | RPM | 588 | 662 | 738 | 772 | 831 | 884 | 976 | 995 | 1026 | 1086 |
| | | | | | Watts | 415 | 410 | 402 | 394 | 386 | 372 | 333 | 325 | 305 | 266 |
| | High | 1050/1350 | 10x9 1/2 HP [373] 2 Speed Motor | High | CFM | 2105 [993] | 2024 [955] | 1974 [932] | 1936 [914] | 1893 [893] | 1827 [862] | 1722 [813] | 1560 [736] | 1323 [624] | 994 [469] |
| | | | | | RPM | 843 | 875 | 902 | 927 | 957 | 980 | 1009 | 1036 | 1064 | 1106 |
| | | | | | Watts | 837 | 814 | 799 | 774 | 752 | 729 | 689 | 649 | 595 | 509 |
| 3.5 [12.31] | Low | 1225/1575 | 11x9 1/2 HP [373] 2 Speed Motor | Low | CFM | 1452 [685] | 1395 [658] | 1343 [634] | 1292 [610] | 1239 [585] | 1180 [557] | 1110 [524] | 1025 [484] | 922 [435] | — |
| | | | | | RPM | 552 | 602 | 663 | 704 | 746 | 797 | 836 | 871 | 920 | — |
| | | | | | Watts | 477 | 471 | 458 | 452 | 443 | 430 | 418 | 410 | 388 | — |
| | High | 1225/1575 | 11x9 1/2 HP [373] 2 Speed Motor | High | CFM | 1984 [936] | 1945 [918] | 1899 [896] | 1846 [871] | 1785 [842] | 1713 [808] | 1632 [770] | 1538 [726] | 1432 [676] | 1312 [619] |
| | | | | | RPM | 696 | 725 | 763 | 799 | 828 | 869 | 898 | 925 | 966 | 984 |
| | | | | | Watts | 769 | 758 | 740 | 725 | 709 | 689 | 665 | 643 | 607 | 587 |
| 4.0 [14.07] | Low | 1400/1800 | 11x9 3/4 HP [559] 2 Speed Motor | Low | CFM | 1601 [756] | 1567 [740] | 1527 [721] | 1480 [698] | 1426 [673] | 1366 [645] | 1298 [613] | 1224 [578] | 1143 [539] | 1055 [498] |
| | | | | | RPM | 566 | 620 | 677 | 713 | 752 | 787 | 829 | 878 | 908 | 947 |
| | | | | | Watts | 558 | 548 | 542 | 533 | 526 | 513 | 501 | 480 | 466 | 446 |
| | High | 1400/1800 | 11x9 3/4 HP [559] 2 Speed Motor | High | CFM | 1996 [942] | 1976 [933] | 1947 [919] | 1909 [901] | 1863 [879] | 1808 [853] | 1744 [823] | 1671 [789] | 1590 [750] | 1500 [708] |
| | | | | | RPM | 669 | 699 | 730 | 780 | 815 | 842 | 875 | 908 | 936 | 978 |
| | | | | | Watts | 770 | 767 | 754 | 745 | 726 | 719 | 695 | 676 | 653 | 618 |
| 5.0 [17.6] | Low | 1750/2250 | 11x9 3/4 HP [559] 2 Speed Motor | Low | CFM | 1988 [938] | 1975 [932] | 1950 [920] | 1912 [903] | 1862 [879] | 1799 [849] | 1724 [814] | 1636 [772] | 1536 [725] | 1423 [672] |
| | | | | | RPM | 697 | 706 | 749 | 775 | 805 | 846 | 879 | 909 | 953 | 991 |
| | | | | | Watts | 860 | 854 | 841 | 834 | 824 | 798 | 780 | 759 | 721 | 690 |
| | High | 1750/2250 | 11x9 3/4 HP [559] 2 Speed Motor | High | CFM | 2640 [1246] | 2619 [1236] | 2586 [1220] | 2542 [1200] | 2486 [1173] | 2419 [1142] | 2340 [1104] | 2249 [1061] | 2148 [1014] | 2034 [960] |
| | | | | | RPM | 905 | 913 | 920 | 930 | 949 | 965 | 979 | 997 | 1013 | 1030 |
| | | | | | Watts | 1408 | 1401 | 1394 | 1382 | 1356 | 1321 | 1292 | 1254 | 1210 | 1168 |

[] Designates Metric Conversions

INDOOR AIRFLOW PERFORMANCE—208 VOLTS

| Nominal Cooling Capacity Tons [kW] | Motor Speed from Factory | Manufacturer Recommended Air-Flow Range (Min/Max) CFM | 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] | 0.8 [0.20] | 0.9 [0.22] | 1.0 [0.25] | | |
| 2.0 [7.03] | Low | 700/900 | 10x9 1/4 HP [186] 2 Speed Motor | Low | CFM | 723 [341] | 692 [327] | 654 [309] | 609 [287] | 556 [262] | 496 [234] | 428 [202] | — | — | — | |
| | | | | | RPM | 443 | 528 | 651 | 710 | 819 | 863 | 914 | — | — | — | |
| | | | | | Watts | 230 | 222 | 219 | 214 | 202 | 196 | 184 | — | — | — | |
| | High | 700/900 | 10x9 1/4 HP [186] 2 Speed Motor | High | CFM | 1062 [501] | 1062 [501] | 1058 [499] | 1043 [492] | 1013 [478] | 982 [454] | 884 [417] | 774 [365] | 627 [296] | 437 [206] | |
| | | | | | RPM | 528 | 618 | 674 | 735 | 812 | 895 | 936 | 985 | 1055 | 1080 | |
| | | | | | Watts | 396 | 393 | 384 | 376 | 361 | 335 | 318 | 297 | 244 | 223 | |
| 2.5 [8.79] | Low | 875/1125 | 10x9 1/3 HP [249] 2 Speed Motor | Low | CFM | 923 [436] | 904 [427] | 874 [412] | 832 [393] | 774 [365] | 698 [329] | 602 [284] | 483 [228] | — | — | |
| | | | | | RPM | 498 | 543 | 648 | 728 | 806 | 853 | 947 | 989 | — | — | |
| | | | | | Watts | 280 | 278 | 268 | 259 | 252 | 243 | 219 | 201 | — | — | |
| | High | 875/1125 | 10x9 1/3 HP [249] 2 Speed Motor | High | CFM | 1164 [549] | 1154 [545] | 1143 [539] | 1124 [530] | 1090 [514] | 1034 [488] | 948 [447] | 826 [390] | 660 [311] | 445 [210] | |
| | | | | | RPM | 526 | 596 | 670 | 744 | 803 | 864 | 945 | 971 | 1051 | 1078 | |
| | | | | | Watts | 401 | 398 | 388 | 379 | 371 | 350 | 322 | 310 | 259 | 235 | |
| 3.0 [10.55] | Low | 1050/1350 | 10x9 1/2 HP [373] 2 Speed Motor | Low | CFM | 1169 [552] | 1133 [535] | 1099 [519] | 1060 [500] | 1010 [477] | 942 [445] | 852 [402] | 732 [345] | 576 [272] | 379 [179] | |
| | | | | | RPM | 540 | 623 | 681 | 757 | 814 | 906 | 931 | 971 | 1018 | 1074 | |
| | | | | | Watts | 346 | 343 | 338 | 331 | 324 | 300 | 290 | 279 | 255 | 226 | |
| | High | 1050/1350 | 10x9 1/2 HP [373] 2 Speed Motor | High | CFM | 1915 [904] | 1842 [869] | 1798 [849] | 1767 [834] | 1731 [817] | 1676 [791] | 1586 [749] | 1443 [681] | 1233 [582] | 939 [443] | |
| | | | | | RPM | 778 | 812 | 849 | 887 | 924 | 958 | 985 | 1019 | 1055 | 1095 | |
| | | | | | Watts | 710 | 696 | 684 | 662 | 647 | 623 | 599 | 561 | 508 | 441 | |
| 3.5 [12.31] | Low | 1225/1575 | 11x9 1/2 HP [373] 2 Speed Motor | Low | CFM | 1259 [594] | 1221 [576] | 1178 [556] | 1129 [533] | 1075 [507] | 1013 [478] | 943 [445] | 864 [408] | 774 [365] | 672 [317] | |
| | | | | | RPM | 653 | 685 | 716 | 757 | 807 | 845 | 889 | 926 | 957 | 984 | |
| | | | | | Watts | 651 | 639 | 628 | 618 | 598 | 590 | 560 | 538 | 515 | 493 | |
| | High | 1225/1575 | 11x9 1/2 HP [373] 2 Speed Motor | High | CFM | 1766 [833] | 1727 [815] | 1684 [795] | 1636 [772] | 1581 [746] | 1518 [716] | 1445 [682] | 1360 [642] | 1261 [595] | 1147 [541] | |
| | | | | | RPM | 653 | 685 | 716 | 757 | 807 | 845 | 889 | 926 | 957 | 984 | |
| | | | | | Watts | 651 | 639 | 628 | 618 | 598 | 590 | 560 | 538 | 515 | 493 | |
| 4.0 [14.07] | Low | 1400/1800 | 11x9 3/4 HP [559] 2 Speed Motor | Low | CFM | 1403 [662] | 1382 [652] | 1350 [637] | 1308 [617] | 1254 [592] | 1189 [561] | 1113 [525] | 1026 [484] | 929 [438] | 820 [387] | |
| | | | | | RPM | 528 | 574 | 631 | 682 | 733 | 775 | 824 | 855 | 892 | 912 | 968 |
| | | | | | Watts | 465 | 456 | 449 | 443 | 440 | 432 | 416 | 406 | 385 | 357 | |
| | High | 1400/1800 | 11x9 3/4 HP [559] 2 Speed Motor | High | CFM | 1758 [830] | 1722 [813] | 1680 [793] | 1633 [771] | 1581 [746] | 1524 [719] | 1462 [690] | 1394 [658] | 1322 [624] | 1244 [587] | |
| | | | | | RPM | 619 | 652 | 698 | 738 | 781 | 816 | 856 | 887 | 927 | 956 | |
| | | | | | Watts | 651 | 639 | 624 | 619 | 610 | 599 | 586 | 569 | 544 | 527 | |
| 5.0 [17.6] | Low | 1750/2250 | 11x9 3/4 HP [559] 2 Speed Motor | Low | CFM | 1771 [836] | 1747 [824] | 1716 [810] | 1676 [791] | 1628 [768] | 1572 [742] | 1507 [711] | 1435 [677] | 1355 [639] | 1267 [598] | |
| | | | | | RPM | 628 | 657 | 697 | 738 | 775 | 816 | 865 | 899 | 937 | 968 | |
| | | | | | Watts | 716 | 712 | 704 | 692 | 685 | 669 | 651 | 632 | 604 | 586 | |
| | High | 1750/2250 | 11x9 3/4 HP [559] 2 Speed Motor | High | CFM | 2429 [1146] | 2413 [1139] | 2386 [1126] | 2346 [1107] | 2295 [1083] | 2232 [1053] | 2158 [1018] | 2071 [977] | 1973 [931] | 1863 [879] | |
| | | | | | RPM | 827 | 834 | 843 | 873 | 896 | 922 | 940 | 961 | 990 | 1018 | |
| | | | | | Watts | 1219 | 1214 | 1206 | 1193 | 1171 | 1148 | 1126 | 1096 | 1053 | 998 | |

[] Designates Metric Conversions

ELECTRICAL DATA—TZAH- SERIES

| Model No. TZAH- | Unit Information | | | | Evaporator Fan | | | | | |
|--------------------|------------------------------|--------------------------|--|--|----------------|---------|-------|-----|------------|------------|
| | Unit Operating Voltage Range | Minimum Circuit Ampacity | Minimum Overcurrent Protection Device Size | Maximum Overcurrent Protection Device Size | No. | Volts | Phase | HP | Amps (FLA) | Amps (LRA) |
| 24JA | 187-253 | 17/17 | 20/20 | 25/25 | 1 | 208/230 | 1 | 1/4 | 1.5 | 2.6 |
| 30JA | 187-253 | 21/21 | 25/25 | 35/35 | 1 | 208/230 | 1 | 1/3 | 1.8 | 2.6 |
| 36JA | 187-253 | 21/21 | 25/25 | 30/30 | 1 | 208/230 | 1 | 1/2 | 2.5 | 5 |
| 42JA | 187-253 | 25/25 | 30/30 | 40/40 | 1 | 208/230 | 1 | 1/2 | 2.8 | 4.6 |
| 48JA | 187-253 | 28/28 | 35/35 | 45/45 | 1 | 208/230 | 1 | 3/4 | 3.2 | 4.4 |
| 60JA | 187-253 | 40/40 | 50/50 | 60/60 | 1 | 208/230 | 1 | 3/4 | 5.8 | 9.6 |

| Model No. TZAH- | Compressor Motor | | | | | | | Condenser Motor | | | | | |
|--------------------|------------------|---------|-------|-----------------|------|-------------------------|-------------------------|-----------------|---------|-------|-----------------|-------------------------|-------------------------|
| | No. | Volts | Phase | HP ² | RPM | Amps ¹ (RLA) | Amps ¹ (LRA) | No. | Volts | Phase | HP ² | Amps ¹ (FLA) | Amps ¹ (LRA) |
| 24JA | 1 | 208/230 | 1 | 2 | 3450 | 10.9/10.9 | 54/54 | 1 | 208/230 | 1 | 1/3 | 1.5 | 3 |
| 30JA | 1 | 208/230 | 1 | 2.5 | 3450 | 14.1/14.1 | 68/68 | 1 | 208/230 | 1 | 1/3 | 1.5 | 3 |
| 36JA | 1 | 208/230 | 1 | 3 | 3450 | 13.5/13.5 | 73/73 | 1 | 208/230 | 1 | 1/3 | 1.5 | 3 |
| 42JA | 1 | 208/230 | 1 | 3.5 | 3450 | 16.5/16.5 | 95/95 | 1 | 208/230 | 1 | 1/3 | 1.5 | 3 |
| 48JA | 1 | 208/230 | 1 | 4 | 3450 | 17.9/17.9 | 104/104 | 1 | 208/230 | 1 | 1/3 | 1.8 | 4 |
| 60JA | 1 | 208/230 | 1 | 4.5 | 3450 | 25.3/25.3 | 141/141 | 1 | 208/230 | 1 | 1/3 | 1.8 | 4 |

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

2. Horsepower Per Compressor.

208-240 VOLT, SINGLE POWER SUPPLY FOR UNIT AND HEATER KIT

| Model No. TZAH- | RXQJ-C Heater Kit Nominal kW | No. of Elements | No. of Sequence Steps | Rated Heater kW @ 208-240 V | Heater KBTU/Hr @ 208-240 V | Heater Amps. @ 208-240 V | Unit Min. Ckt. Ampacity @ 208-240 V | Overcurrent Protective Device Size | |
|--------------------|------------------------------------|--------------------|-----------------------------|-----------------------------------|----------------------------------|--------------------------------|---|---------------------------------------|----------------------|
| | | | | | | | | Min./Max. @ 208 V | Min./Max. @ 240 V |
| 24JA | No Heat | — | — | — | — | — | 17/17 | 20/25 | 20/25 |
| | 05J | 1 | 1 | 3.6/4.8 | 12.28/16.38 | 17.33/20.00 | 24/27 | 25/25 | 30/30 |
| | 07J | 1 | 1 | 5.4/7.2 | 18.42/24.56 | 26.00/30.00 | 34/39 | 35/35 | 40/40 |
| | 10J | 2 | 1 | 7.2/9.6 | 24.57/32.76 | 34.67/40.00 | 45/52 | 50/50 | 60/60 |
| 30JA | No Heat | — | — | — | — | — | 21/21 | 25/35 | 25/35 |
| | 05J | 1 | 1 | 3.6/4.8 | 12.28/16.38 | 17.33/20.00 | 24/27 | 25/35 | 30/35 |
| | 07J | 1 | 1 | 5.4/7.2 | 18.42/24.56 | 26.00/30.00 | 35/40 | 35/35 | 40/40 |
| | 10J | 2 | 1 | 7.2/9.6 | 24.57/32.76 | 34.67/40.00 | 46/52 | 50/50 | 60/60 |
| 36JA | No Heat | — | — | — | — | — | 21/21 | 25/30 | 25/30 |
| | 05J | 1 | 1 | 3.6/4.8 | 12.28/16.38 | 17.33/20.00 | 25/28 | 25/30 | 30/30 |
| | 07J | 1 | 1 | 5.4/7.2 | 18.42/24.56 | 26.00/30.00 | 36/41 | 40/40 | 45/45 |
| | 10J | 2 | 1 | 7.2/9.6 | 24.57/32.76 | 34.67/40.00 | 47/53 | 50/50 | 60/60 |
| 42JA | No Heat | — | — | — | — | — | 21/21 | 25/30 | 25/30 |
| | 05J | 1 | 1 | 3.6/4.8 | 12.28/16.38 | 17.33/20.00 | 25/29 | 30/40 | 30/40 |
| | 07J | 1 | 1 | 5.4/7.2 | 18.42/24.56 | 26.00/30.00 | 36/41 | 40/40 | 45/45 |
| | 10J | 2 | 1 | 7.2/9.6 | 24.57/32.76 | 34.67/40.00 | 47/54 | 50/50 | 60/60 |
| 48JA | No Heat | — | — | — | — | — | 25/25 | 30/40 | 30/40 |
| | 05J | 1 | 1 | 3.6/4.8 | 12.28/16.38 | 17.33/20.00 | 28/28 | 35/45 | 35/45 |
| | 07J | 1 | 1 | 5.4/7.2 | 18.42/24.56 | 26.00/30.00 | 28/29 | 35/45 | 35/45 |
| | 10J | 2 | 1 | 7.2/9.6 | 24.57/32.76 | 34.67/40.00 | 37/42 | 40/40 | 45/45 |
| 60JA | No Heat | — | — | — | — | — | 47/54 | 50/50 | 60/60 |
| | 05J | 1 | 1 | 3.6/4.8 | 12.28/16.38 | 17.33/20.00 | 47/54 | 50/50 | 60/60 |
| | 07J | 1 | 1 | 5.4/7.2 | 18.42/24.56 | 26.00/30.00 | 69/79 | 70/70 | 80/80 |
| | 10J | 2 | 1 | 7.2/9.6 | 24.57/32.76 | 34.67/40.00 | 69/79 | 70/70 | 80/80 |
| 60JA | No Heat | — | — | — | — | — | 91/104 | 100/100 | 110/110 |
| | 05J | 1 | 1 | 3.6/4.8 | 12.28/16.38 | 17.33/20.00 | 91/104 | 100/100 | 110/110 |
| | 07J | 1 | 1 | 5.4/7.2 | 18.42/24.56 | 26.00/30.00 | 40/40 | 50/60 | 50/60 |
| | 10J | 2 | 1 | 7.2/9.6 | 24.57/32.76 | 34.67/40.00 | 40/45 | 50/60 | 50/60 |
| 60JA | No Heat | — | — | — | — | — | 51/57 | 60/60 | 60/60 |
| | 05J | 1 | 1 | 3.6/4.8 | 12.28/16.38 | 17.33/20.00 | 51/57 | 60/60 | 60/60 |
| | 07J | 1 | 1 | 5.4/7.2 | 18.42/24.56 | 26.00/30.00 | 72/82 | 80/80 | 90/90 |
| | 10J | 2 | 1 | 7.2/9.6 | 24.57/32.76 | 34.67/40.00 | 72/82 | 80/80 | 90/90 |
| 60JA | No Heat | — | — | — | — | — | 94/107 | 100/100 | 110/110 |
| | 05J | 1 | 1 | 3.6/4.8 | 12.28/16.38 | 17.33/20.00 | 94/107 | 100/100 | 110/110 |
| | 07J | 1 | 1 | 5.4/7.2 | 18.42/24.56 | 26.00/30.00 | 69.33/80.00 | 69.33/80.00 | 69.33/80.00 |
| | 10J | 2 | 1 | 7.2/9.6 | 24.57/32.76 | 34.67/40.00 | 69.33/80.00 | 69.33/80.00 | 69.33/80.00 |

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.

ELECTRIC HEATER KITS—TZAH- SERIES

208-240 VOLT, SEPARATE POWER SUPPLY FOR UNIT AND HEATER KIT

| Model No. TZAH- | RXQJ-C Heater Kit Nominal kW | Heater Kit Min. Ckt. Ampacity | Heater Kit Max. Fuse Size | Heated Pump Min. Ckt. Ampacity @ 208-240 V | Overcurrent Protective Device Size | |
|--------------------|------------------------------------|-------------------------------------|---------------------------------|--|---------------------------------------|----------------------|
| | | | | | Min./Max. @ 208 V | Min./Max. @ 240 V |
| 24JA | No Heat | — | — | 17/17 | 20/25 | 20/25 |
| | 05J | 22/25 | 25/25 | — | — | — |
| | 07J | 33/38 | 35/40 | — | — | — |
| | 10J | 44/50 | 45/50 | — | — | — |
| 30JA | No Heat | — | — | 21/21 | 25/35 | 25/35 |
| | 05J | 22/25 | 25/25 | — | — | — |
| | 07J | 33/38 | 35/40 | — | — | — |
| | 10J | 44/50 | 45/50 | — | — | — |
| 36JA | No Heat | — | — | 21/21 | 25/30 | 25/30 |
| | 05J | 22/25 | 25/25 | — | — | — |
| | 07J | 33/38 | 35/40 | — | — | — |
| | 10J | 44/50 | 45/50 | — | — | — |
| 42JA | No Heat | — | — | 25/25 | 30/40 | 30/40 |
| | 05J | 22/25 | 25/25 | — | — | — |
| | 07J | 33/38 | 35/40 | — | — | — |
| | 10J | 44/50 | 45/50 | — | — | — |
| 48JA | No Heat | — | — | 28/28 | 35/45 | 35/45 |
| | 05J | 22/25 | 25/25 | — | — | — |
| | 07J | 33/38 | 35/40 | — | — | — |
| | 10J | 44/50 | 45/50 | — | — | — |
| 60JA | No Heat | — | — | 40/40 | 50/60 | 50/60 |
| | 05J | 22/25 | 25/25 | — | — | — |
| | 07J | 33/38 | 35/40 | — | — | — |
| | 10J | 44/50 | 45/50 | — | — | — |

WARNING

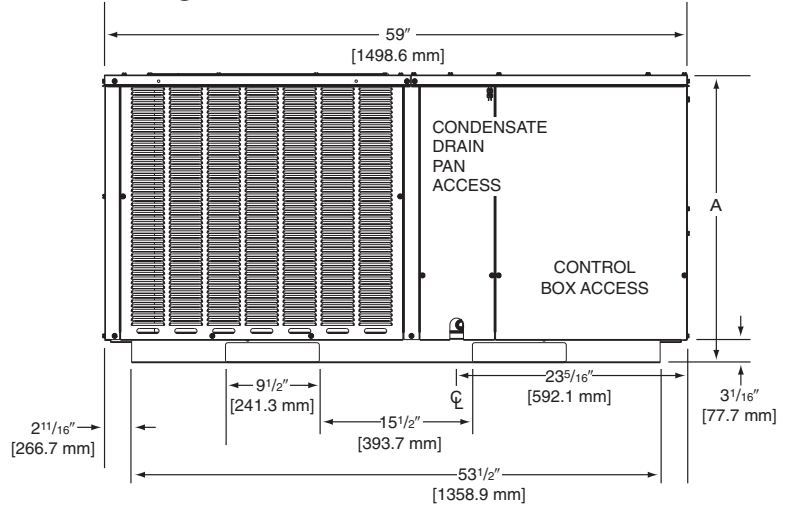
ONLY ELECTRIC HEATER KITS SUPPLIED BY THIS MANUFACTURER AS DESCRIBED IN THIS PUBLICATION HAVE BEEN DESIGNED, TESTED, AND EVALUATED BY A NATIONALLY RECOGNIZED SAFETY TESTING AGENCY FOR USE WITH THIS UNIT. USE OF ANY OTHER MANUFACTURED ELECTRIC HEATERS INSTALLED WITHIN THIS UNIT MAY CAUSE HAZARDOUS CONDITIONS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

UNIT DIMENSIONS—TZAH- SERIES

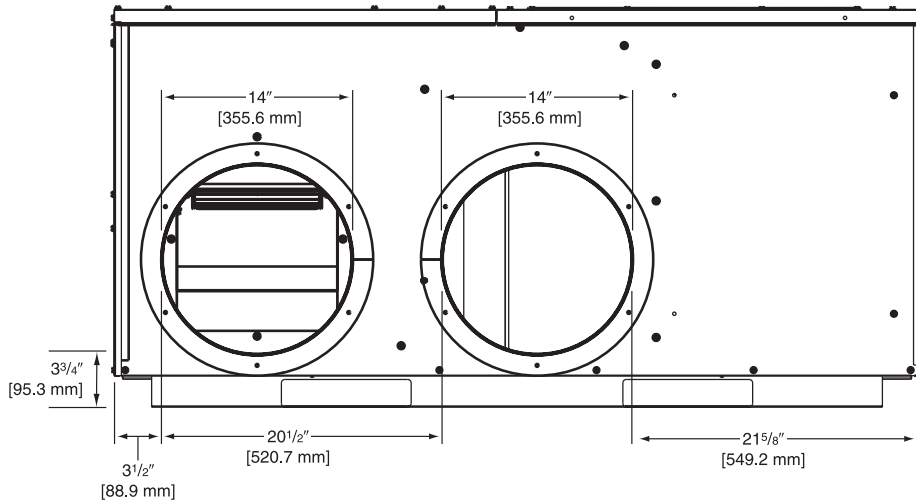
DIMENSIONS

| Model | Height "A" |
|--------------------|------------|
| 024, 030, 036, 042 | 29 1/8" |
| 048, 060 | 37 1/8" |

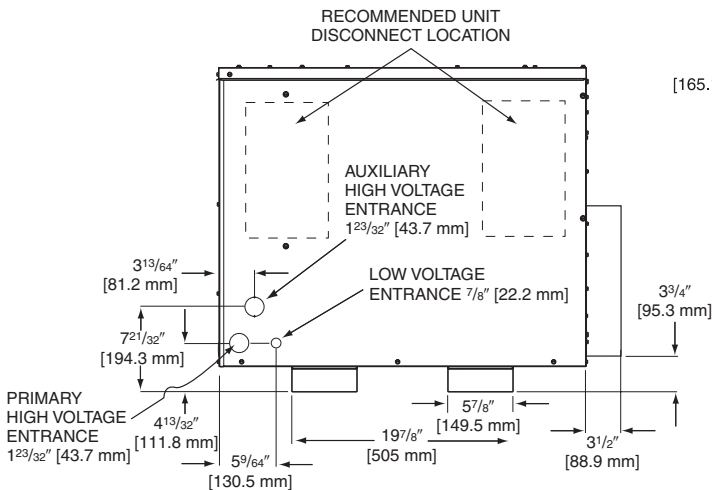
FRONT VIEW



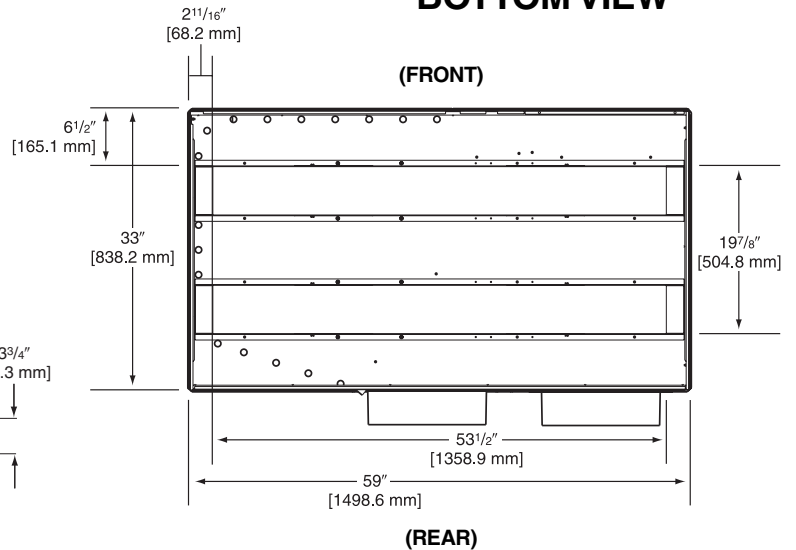
REAR VIEW



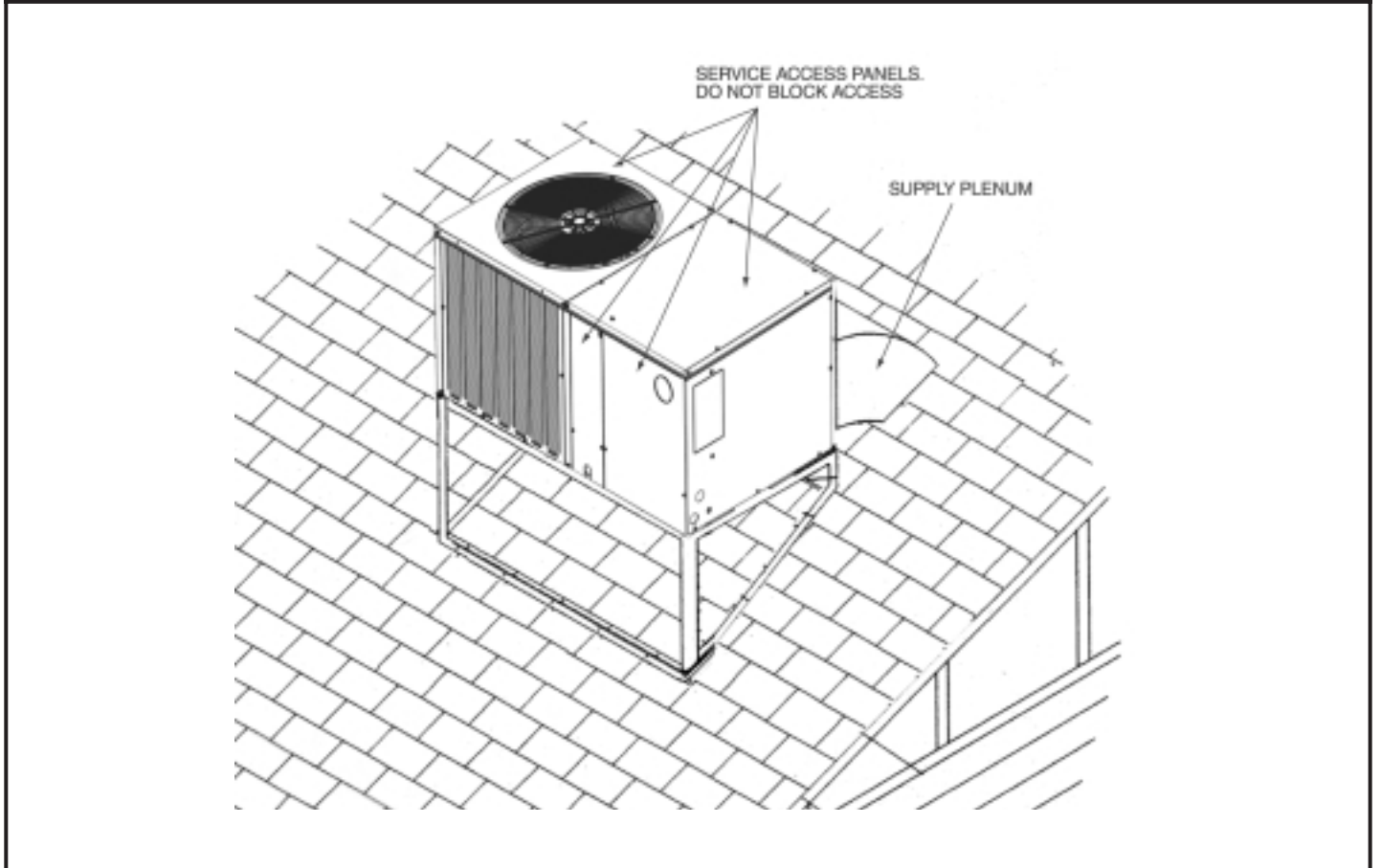
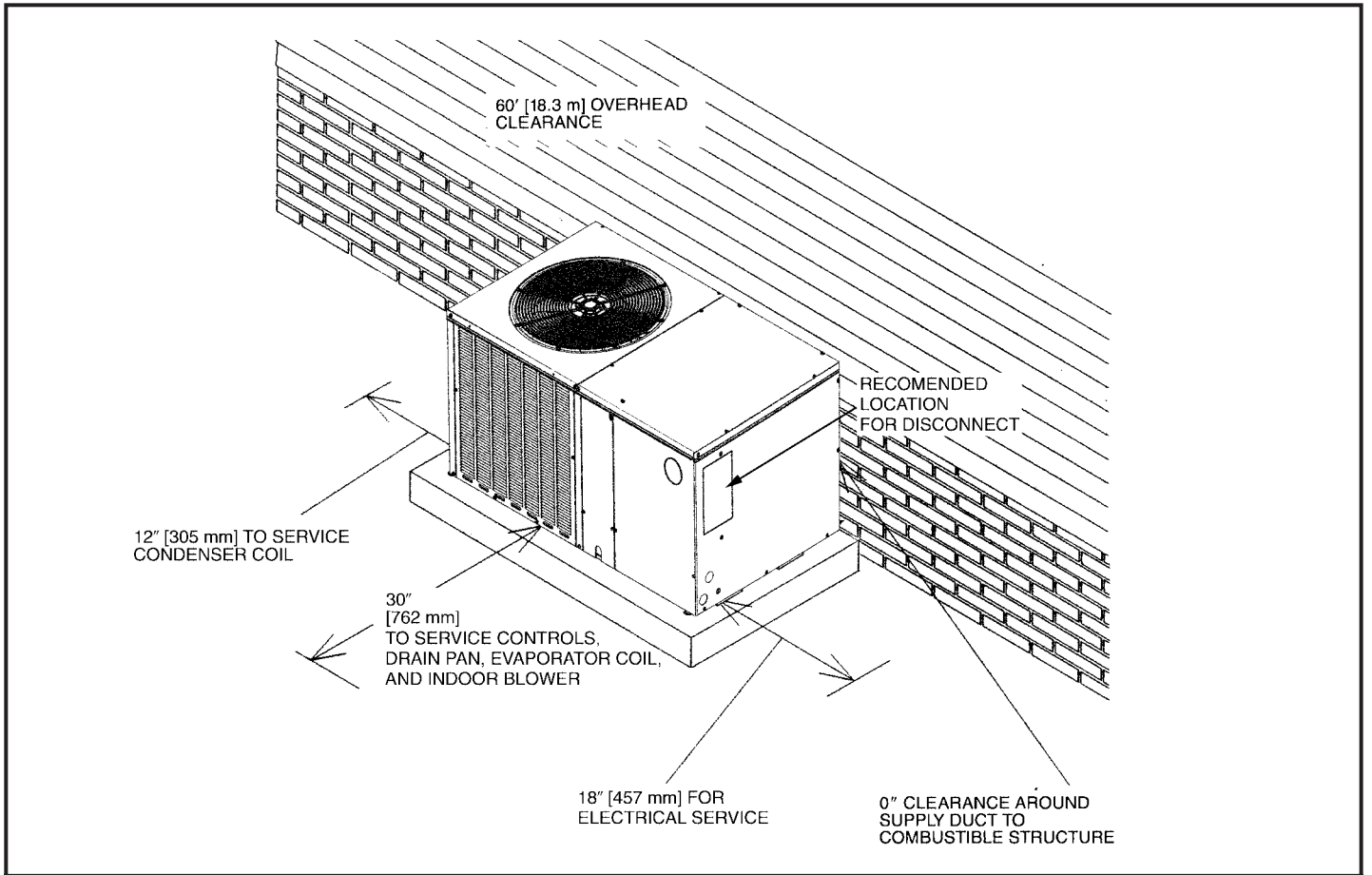
ELECTRICAL CONNECTIONS



BOTTOM VIEW



TYPICAL INSTALLATIONS



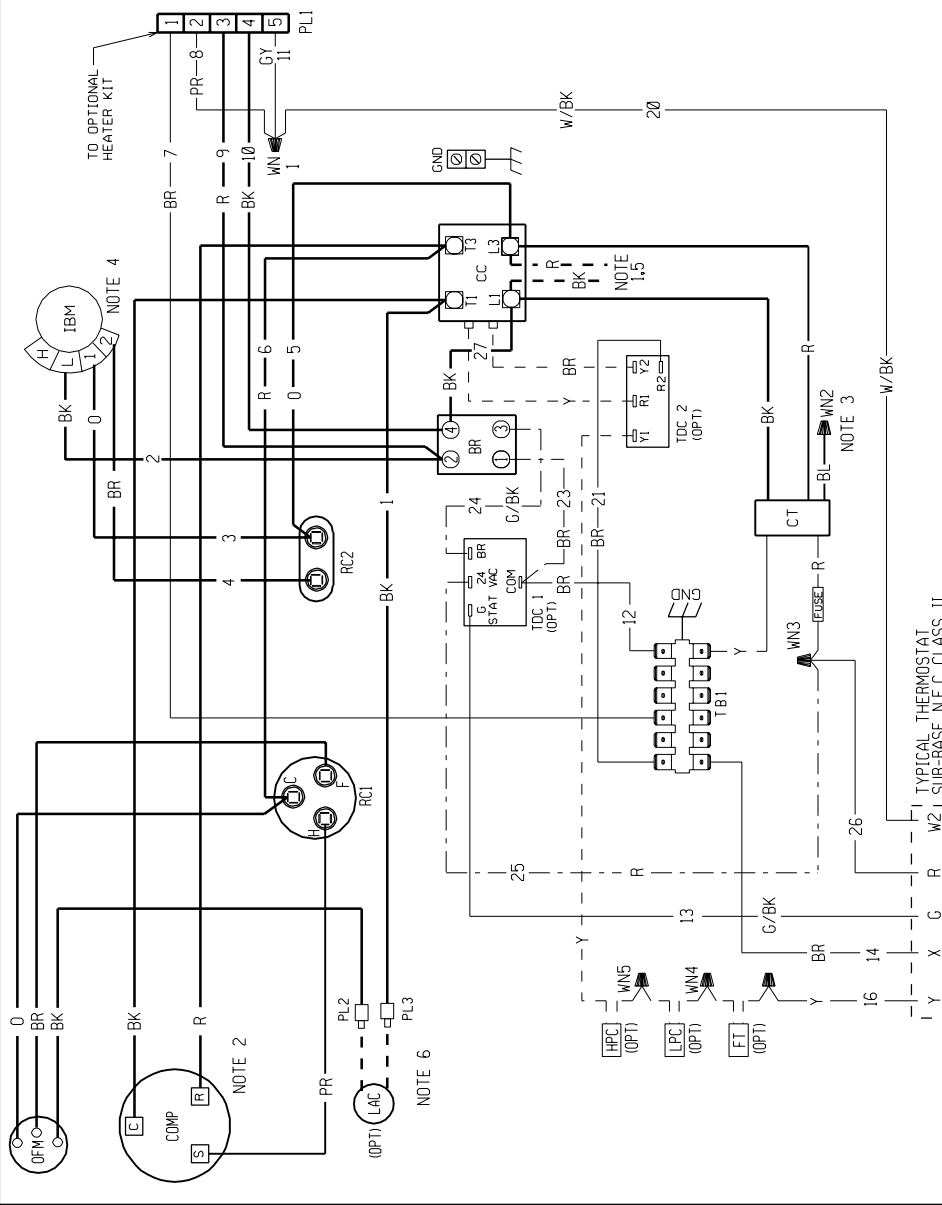
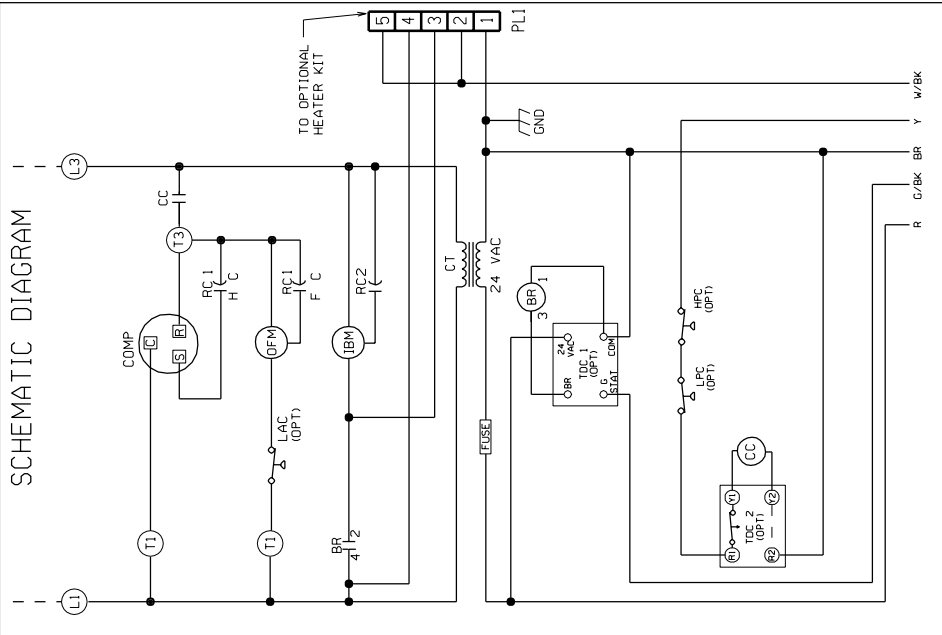
ACCESSORY EQUIPMENT

| Accessory Description | Model Application | Accessory Model No. |
|------------------------------|--------------------------|----------------------------|
| Outdoor Thermostat | TZAH | RXPT-A01 |

[] Designates Metric Conversions

WIRING SCHEMATICS—TZAH- SERIES

SCHEMATIC DIAGRAM



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

ELECTRICAL WIRING DIAGRAM
PACKAGE AIR CONDITIONER
 1 PH, 208-230 VOLT - 60 HZ
 1 PH, 220-240 VOLT - 50 HZ

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., NATIONAL WIRING REGULATIONS, AND LOCAL CODES AS APPLICABLE.

| NOTES: | |
|--------|--|
| 1. | CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY. |
| 2. | COMPRESSOR MOTOR THERMALLY PROTECTED. |
| 3. | TRANSFORMER FACTORY WIRE FOR 230 VOLTS. USE RED AND BLUE LEADS FOR 208 VOLTS. |
| 4. | MOTOR FACTORY WIRE FOR LOW SPEED. SEE AIRFLOW TABLES IN INSTALLATION INSTRUCTIONS TO DETERMINE CORRECT SPEED FOR UNIT APPLICATION. |
| 5. | FIELD WIRING OR CONNECTION FROM HEATER KIT FUSE BLOCK. |
| 6. | PL2 & PL3 ARE CONNECTED WHEN LAC IS NOT PRESENT. |

| COMPONENT CODE | |
|----------------|-----------------------------|
| BR | BLOWER RELAY |
| CC | COMPRESSOR |
| COMP | CONTROL TRANSFORMER |
| CT | CONTACTOR |
| FT | FAN MOTOR |
| FT | FAN MOTOR |
| GND | GROUND |
| HPC | HIGH PRESSURE CONTROL |
| IBM | INDOOR BLOWER MOTOR |
| LAC | LOW AMBIENT COOLING CONTROL |
| LPC | LOW PRESSURE CONTROL |
| OPT | OPTIONAL |
| PL | PLUG |
| RC | RELAY |
| RC | RELAY |
| STAT | STAT |
| TB | TERMINAL BLOCK |
| TDC | TIME DELAY CONTROL |
| WIRE NUT | WIRE NUT |

| | | | |
|----------|-------------|----------|-------------|
| DWG. NO. | 90-23637-05 | REV | 03 |
| DR. BY | BJL | APP. BY | DATE |
| | | | 03-09-04 |
| | | DWG. NO. | 90-23637-05 |
| | | REV | 03 |

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.

Compressor.....Five (5) Years
*Any Other Part.....Five (5) Years

***All other parts and components carry a limited warranty of five years, provided they are single-phase products installed in a residential application. Products installed in commercial applications have a one (1) year limited parts warranty.**

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."