LENNOX®

ENGINEERING DATA

PACKAGED COOLING

# CHA29

(2 To 5 Ton)
(7.0 To 17.6 kW)

# ELITE 10™
# PACKAGED COOLING

***23,400 to 58,000 Btuh (6.9 to 17.0 kW) Cooling Capacity**
**12,800 to 85,300 Btuh (3.8 To 25.0 Kw) Optional Electric Heat**

***ARI Certified Ratings**

Bulletin No. 210102
October 1997
Supersedes November 1996

## FEATURES

### Applications

- Designed for outdoor installations at ground level or rooftop for residential applications.

### Approvals

- Ratings are certified by E.T.L.
- Cooling ratings according to DOE test procedures.
- Cooling ratings in accordance with ARI Standard 210/240-94.
- Units are listed by E.T.L. for U.S. and Canada.
- Packaged unit and components within bonded for grounding to meet safety standards required by E.T.L.
- Developed in accordance with ISO 9001 quality standards.
- Each unit test operated at the factory before shipment ensuring dependable operation at start--up.

### Equipment Warranty

- Compressor – 5 year limited warranty.
- Parts -- 5 year limited warranty on covered components.
- Refer to warranty certificate included with unit for specific details.

### Cabinet

- Low Profile.
- Compact footprint.
- Fully insulated to minimize heat loss.
- Powder paint for maximum durability.
- Easy service access.
- Coil guard furnished.
- One piece “no leak” top design.
- Interchangeable panel for horizontal to down--flow airflow conversion (shipped for horizontal).

### Refrigeration System

- External service gauge ports.

### Compressor

- Heavy duty, high efficiency reciprocating compressor. Scroll compressor on –048 and 060 models.
- Overload protected.
- Running gear spring mounted within sealed housing (except --048, --060 models).
- Resiliently mounted on rubber mounts.
- Compressor cover reduces operating sound levels.

### Evaporator and Condenser Coils

- Copper tube with enhanced fin coils.

### Condenser Fan

- Weather protected heavy duty condenser fan motor with aluminum fan for long life.
- Totally enclosed motor.

### Supply Air Blower

- Insulated compartment to reduce sound.
- Easy service split ring design with quick plug--in wiring.
- Multi--speed motor for wide airflow range.
- PSC pre--lubricated motor for low maintenance and maximum efficiency.
- Dynamically balanced blower with resilient motor mounts for smooth and quiet operation.

### Controls

- Solid-state blower control.
- Two pole contactor for improved reliability.
- Trade available components.
- Color coded wiring for easy service.

### Air Filters (Required)

- Not furnished must be field provided.
- Filter rack furnished.

## OPTIONAL ACCESSORIES - Must Be Ordered Extra

### Thermostat (Optional)

- Not furnished must be ordered extra.

### Accessories (Optional)

- Electric Heat (5–25 kW)
- Outdoor Thermostat Kit
- Timed-Off Control (5 minutes)
- Low Ambient Control Kit
- High Pressure Switch Kit (Auto–Reset)

## SPECIFICATIONS

| Model No. | | CHA29-024 | CHA29-030 | CHA29-036 | CHA29-042 | CHA29-048 | CHA29-060 |
|---|---|---|---|---|---|---|---|
| [1]ARI Standard 210/240 Ratings | Total cooling capacity – Btuh (kW) | 23,400 (6.9) | 29,000 (8.5) | 35,000 (10.3) | 41,000 (12.0) | 47,000 (13.8) | 58,000 (17.0) |
| | Total unit watts | 2540 | 3150 | 3850 | 4460 | 5050 | 6445 |
| | SEER (Btuh/Watt) | 10.00 | | | | | |
| | EER (Btuh/Watt) | 9.2 | 9.2 | 9.1 | 9.2 | 9.3 | 9.0 |
| Sound Rating Number (db) | | 76 | | 80 | | | |
| Refrigerant Charge (HCFC–22) | | 3 lbs 4 oz. (1.47 kg) | 3 lbs. 3 oz. (1.45 kg) | 3 lbs. 10 oz. (1.64 kg) | 4 lbs. 9 oz. (2.07 kg) | 5 lbs. 13 oz. (2.64 kg) | 6 lbs. 14 oz. (3.12 kg) |
| Evaporator Blower | Blower wheel size dia. x width in. (mm) | 10 x 6 (152 x 203) | 10 x 8 (254 x 203) | | 10 x 9 (254 x 229) | 12 x 10 (305 x 254) | |
| | Motor horsepower (W) | 1/2 (373) | | | 1 (746) | | |
| Evaporator Coil | Net face area – sq. ft. ($m^2$) | 3.6 (0.33) | | | 4.2 (0.39) | 6.1 (0.57) | |
| | Tube diameter – in. (mm) & No. of rows | 3/8 (9.5) – 2 | | 3/8 (9.5) – 3 | | | |
| | Fins per inch (m) | 14 (551) | | | | 15 (591) | |
| Condenser Coil | Net face area – sq. ft. ($m^2$) | 9.3 (0.86) | 10.3 (0.96) | | 14.4 (1.34) | 15.4 (1.43) | 17.5 (1.63) |
| | Tube diameter – in. (mm) & No. of rows | 5/16 (7.9) – 1 | 3/8 (9.5) – 1 | | | | |
| | Fins per inch (m) | 18 (709) | | | | | |
| Condenser Coil Fan | Diameter – in. (mm) & No. of blades | 18 (457) – 3 | | 18 (457) – 4 | | 20 (508) – 4 | |
| | Air Volume – cfm (L/s) | 2100 (990) | | 2300 (1085) | | 3000 (1415) | |
| | Motor horsepower (W) | 1/8 (93) | | 1/4 (187) | | | |
| | Motor watts | 170 | | 250 | | 325 | |
| Condensate drain size fpt – in. (mm) | | (1) 3/4 (19) | | | | | |
| [2]No. & size of filters – in. (mm) | | (1) 24 x 25 x 1 (610 x 635 x 25) | | | (1) 28 x 25 x 1 (711 x 635 x 25) | (1) 30 x 30 x 1 (762 x 762 x 25) | |
| Net weight of basic unit – lbs. (kg) | | 260 (118) | 280 (127) | 300 (136) | 330 (150) | 420 (191) | 440 (200) |
| Shipping weight of basic unit – lbs. (kg) (1 Package) | | 275 (125) | 295 (134) | 315 (143) | 345 (157) | 435 (197) | 455 (206) |
| Electrical characteristics (60 hz) | | 208/230v–1ph | | | | | |
| **Optional Accessories – Must Be Ordered Extra** | | | | | | | |
| Electric Heat – kW range | | 05–07–10 | 05–07–10–15–20 | | | 10–15–20–25 | |
| Low Ambient Control Kit | | **42K88** | | | | | |
| Timed-Off Control | | **42K90** | | | | | |
| Outdoor Thermostat Kit | Thermostat Kit | LB-29740BA **(56A87)** | | | | | |
| | Mounting Box | M-1595 **(31461)** | | | | | |
| High Pressure Switch | | **42K89** | | | | | |

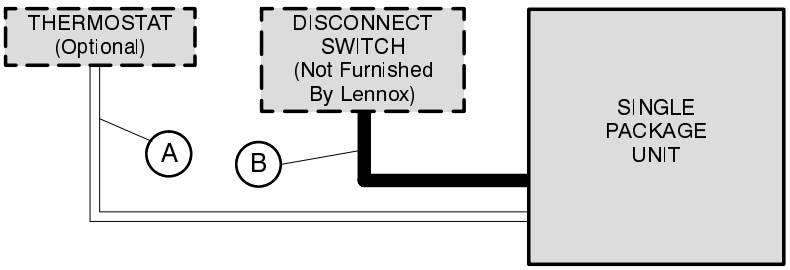
[1] Rated in accordance with ARI Standard 210/240; 95°F (35°C) outdoor air temperature, 80°F (27°C) db / 67°F (19°C) wb entering evaporator air.
[2] Filters are not furnished and must be field provided.

## ELECTRICAL DATA

| Model No. | | CHA29-024 | CHA29-030 | CHA29-036 | CHA29-042 | CHA29-048 | CHA29-060 |
|---|---|---|---|---|---|---|---|
| Line voltage data – 60hz 1 phase | | 208/230v | | | | | |
| Compressor | Rated load amps | 10.5 | 13.7 | 16.4 | 17.2 | 21.8 | 25.0 |
| | Locked rotor amps | 56 | 76.1 | 96 | 105 | 116 | 170 |
| Condenser Coil Fan Motor | Full load amps | 0.9 | | 1.8 | | | |
| | Locked rotor amps | 1.7 | | 3.8 | | | |
| Evaporator Coil Blower Motor | Full load amps | 2.6 | | | 3.4 | 5.0 | |
| | Locked rotor amps | 5.5 | | | 8.3 | 10.9 | |
| [1] Recommended maximum fuse size or circuit breaker size (amps) | | 25 | 30 | | 35 | 40 | 45 |
| [2] Minimum Circuit Ampacity | | 16.6 | 20.8 | 24.9 | 26.7 | 34.1 | 38.1 |
| Unit power factor | | .98 | .99 | .95 | .93 | .98 | |

[2] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirement
[1] NOTE – Where current does not exceed 100 amps, HACR type circuit breaker may be used in place of fuse (U.S. only).
NOTE – Extremes of operating range are plus and minus 10% of line voltage.

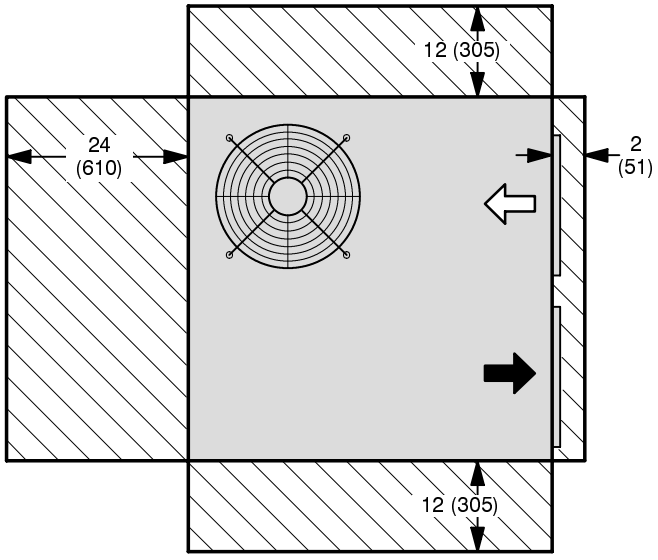
## FIELD WIRING




A– Four Wire Low Voltage (Electro-mechanical)
– Five Wire Low Voltage (Electronic)
B– Two Wire Power (See Electrical Data Table)
– Field Wiring Not Furnished –

NOTE -- All wiring must conform to NEC or CEC and local electrical codes.

## INSTALLATION CLEARANCES - inches (mm)




NOTE — Top Clearance Unobstructed.

## ELECTRIC HEAT DATA

| Packaged Unit Model No. | Electric Heater Model No. & Net Weight | kW Input | No. of Steps & Phase | Volts Input | Electric Heat kW Input | Electric Heat Btuh Input | Heater Only [1] Minimum Circuit Ampacity | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Circuit 1 | Circuit 2 |
| CHA29-024 | ECH29-05 **(71K18)** (4 lbs.) (2 kg) | 5 | 1 step (1 phase) | 208 | 3.8 | 12,800 | 25.8 | – – – – |
| | | | | 220 | 4.2 | 14,300 | 27.1 | – – – – |
| | | | | 230 | 4.6 | 15,700 | 28.3 | – – – – |
| | | | | 240 | 5.0 | 17,100 | 29.3 | – – – – |
| | ECH29-07 **(74K64)** (5 lbs.) (2 kg) | 7 | 1 step (1 phase) | 208 | 5.3 | 18,100 | 34.8 | – – – – |
| | | | | 220 | 5.9 | 20,100 | 36.7 | – – – – |
| | | | | 230 | 6.4 | 21,800 | 38.0 | – – – – |
| | | | | 240 | 7.0 | 23,900 | 39.7 | – – – – |
| | ECH29-10 **(71K19)** (5 lbs) (2 kg) | 10 | 1 step (1 phase) | 208 | 7.5 | 25,600 | 48.4 | – – – – |
| | | | | 220 | 8.4 | 28,700 | 51.1 | – – – – |
| | | | | 230 | 9.2 | 31,400 | 53.3 | – – – – |
| | | | | 240 | 10.0 | 34,100 | 55.3 | – – – – |
| CHA29-030 CHA29-036 | ECH29-05 **(71K18)** (4 lbs.) (2 kg) | 5 | 1 step (1 phase) | 208 | 3.8 | 12,800 | 25.8 | – – – – |
| | | | | 220 | 4.2 | 14,300 | 27.1 | – – – – |
| | | | | 230 | 4.6 | 15,700 | 28.3 | – – – – |
| | | | | 240 | 5.0 | 17,100 | 29.3 | – – – – |
| | ECH29-07 **(74K64)** (5 lbs.) (2 kg) | 7 | 1 step (1 phase) | 208 | 5.3 | 18,100 | 34.8 | – – – – |
| | | | | 220 | 5.9 | 20,100 | 36.7 | – – – – |
| | | | | 230 | 6.4 | 21,800 | 38.0 | – – – – |
| | | | | 240 | 7.0 | 23,900 | 39.7 | – – – – |
| | ECH29-10 **(71K19)** (5 lbs) (2 kg) | 10 | 1 step (1 phase) | 208 | 7.5 | 25,600 | 48.4 | – – – – |
| | | | | 220 | 8.4 | 28,700 | 51.1 | – – – – |
| | | | | 230 | 9.2 | 31,400 | 53.3 | – – – – |
| | | | | 240 | 10.0 | 34,100 | 55.3 | – – – – |
| | ECH29-15 **(71K20)** (17 lbs.) (8 kg) | 15 | 1 step (1 phase) | 208 | 11.3 | 38,600 | 48.4 | 22.6 |
| | | | | 220 | 12.6 | 43,000 | 51.1 | 23.8 |
| | | | | 230 | 13.8 | 47,100 | 53.3 | 25.0 |
| | | | | 240 | 15.0 | 51,200 | 55.3 | 26.0 |
| | ECH29-20 **(71K21)** (20 lbs.) (9 kg) | 20 | 1 step (1 phase) | 208 | 15.0 | 51,200 | 48.4 | 45.1 |
| | | | | 220 | 16.8 | 57,300 | 51.1 | 47.8 |
| | | | | 230 | 18.4 | 62,800 | 53.3 | 50.0 |
| | | | | 240 | 20.0 | 68,300 | 55.3 | 52.1 |
| CHA29-042 | ECH29-05 **(71K18)** (4 lbs.) (2 kg) | 5 | 1 step (1 phase) | 208 | 3.8 | 12,800 | 26.8 | – – – – |
| | | | | 220 | 4.2 | 14,300 | 28.1 | – – – – |
| | | | | 230 | 4.6 | 15,700 | 29.3 | – – – – |
| | | | | 240 | 5.0 | 17,100 | 30.3 | – – – – |
| | ECH29-07 **(74K64)** (5 lbs.) (2 kg) | 7 | 1 step (1 phase) | 208 | 5.3 | 18,100 | 35.8 | – – – – |
| | | | | 220 | 5.9 | 20,100 | 37.7 | – – – – |
| | | | | 230 | 6.4 | 21,800 | 39.0 | – – – – |
| | | | | 240 | 7.0 | 23,900 | 40.7 | – – – – |
| | ECH29-10 **(71K19)** (5 lbs) (2 kg) | 10 | 1 step (1 phase) | 208 | 7.5 | 25,600 | 49.4 | – – – – |
| | | | | 220 | 8.4 | 28,700 | 52.1 | – – – – |
| | | | | 230 | 9.2 | 31,400 | 54.3 | – – – – |
| | | | | 240 | 10.0 | 34,100 | 56.3 | – – – – |
| | ECH29-15 **(71K20)** (17 lbs.) (8 kg) | 15 | 1 step (1 phase) | 208 | 11.3 | 38,600 | 49.4 | 22.6 |
| | | | | 220 | 12.6 | 43,000 | 52.1 | 23.8 |
| | | | | 230 | 13.8 | 47,100 | 53.3 | 25.0 |
| | | | | 240 | 15.0 | 51,200 | 56.3 | 26.0 |
| | ECH29-20 **(71K21)** (20 lbs.) (9 kg) | 20 | 1 step (1 phase) | 208 | 15.0 | 51,200 | 49.4 | 45.1 |
| | | | | 220 | 16.8 | 57,300 | 52.1 | 23.8 |
| | | | | 230 | 18.4 | 62,800 | 53.3 | 25.0 |
| | | | | 240 | 20.0 | 68,300 | 56.3 | 52.1 |

[1] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

## ELECTRIC HEAT DATA

| Packaged Unit Model No. | Electric Heater Model No. & Net Weight | kW Input | No. of Steps & Phase | Volts Input | Electric Heat kW Input | Electric Heat Btuh Input | Heater Only [1] Minimum Circuit Ampacity | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Circuit 1 | Circuit 2 | Circuit 3 |
| CHA29-048 CHA29-060 | ECH29-10 **(71K19)** (5 lbs) (2 kg) | 10 | 1 step (1 phase) | 208 | 7.5 | 25,600 | 51.4 | – – – – | – – – – |
| | | | | 220 | 8.4 | 28,700 | 54.1 | – – – – | – – – – |
| | | | | 230 | 9.2 | 31,400 | 56.3 | – – – – | – – – – |
| | | | | 240 | 10.0 | 34,100 | 58.4 | – – – – | – – – – |
| | ECH29-15 **(71K20)** (18 lbs.) (8 kg) | 15 | 1 step (1 phase) | 208 | 11.3 | 38,600 | 51.4 | 22.6 | – – – – |
| | | | | 220 | 12.6 | 43,000 | 54.1 | 23.8 | – – – – |
| | | | | 230 | 13.8 | 47,100 | 56.3 | 25.0 | – – – – |
| | | | | 240 | 15.0 | 51,200 | 58.4 | 26.0 | – – – – |
| | ECH29-20 **(71K21)** (20 lbs.) (9 kg) | 20 | 1 step (1 phase) | 208 | 15.0 | 51,200 | 51.4 | 45.1 | – – – – |
| | | | | 220 | 16.8 | 57,300 | 54.1 | 47.8 | – – – – |
| | | | | 230 | 18.4 | 62,800 | 56.3 | 50.0 | – – – – |
| | | | | 240 | 20.0 | 68,300 | 58.4 | 52.1 | – – – – |
| | ECH29-25 **(71K22)** (20 lbs.) (9 kg) | 25 | 1 step (1 phase) | 208 | 18.8 | 64,200 | 51.7 | 45.1 | 22.6 |
| | | | | 220 | 21.0 | 71,700 | 54.1 | 47.8 | 23.8 |
| | | | | 230 | 23.0 | 78,500 | 56.3 | 50.0 | 25.0 |
| | | | | 240 | 25.0 | 85,300 | 58.4 | 52.1 | 26.0 |

[1] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167 °F (75°C).

## BLOWER DATA

### CHA29-024 BLOWER PERFORMANCE
[1] Horizontal Air Flow

| External Static Pressure | | Air Volume at Various Blower Speeds | | | | | |
|---|---|---|---|---|---|---|---|
| | | High | | Medium | | Low | |
| in. w.g. | Pa | cfm | L/s | cfm | L/s | cfm | L/s |
| .20 | 50 | 1350 | 635 | 1140 | 540 | 1050 | 495 |
| .30 | 75 | 1280 | 605 | 1090 | 515 | 1010 | 475 |
| .40 | 100 | 1220 | 575 | 1050 | 495 | 970 | 460 |
| .50 | 125 | 1140 | 540 | 980 | 460 | 900 | 425 |
| .60 | 150 | 1060 | 500 | 920 | 435 | 850 | 400 |
| .70 | 175 | 960 | 455 | 820 | 385 | 760 | 360 |
| .80 | 200 | 850 | 400 | 750 | 355 | 700 | 330 |

[1] For down-flow air volume, add 0.10 in. w.g. (25 Pa) to duct static.
NOTE — All air data is measured external to unit without air filters.

### CHA29-042 BLOWER PERFORMANCE
[1] Horizontal Air Flow

| External Static Pressure | | Air Volume at Various Blower Speeds | | | | | |
|---|---|---|---|---|---|---|---|
| | | High | | Medium | | Low | |
| in. w.g. | Pa | cfm | L/s | cfm | L/s | cfm | L/s |
| .20 | 50 | 1590 | 750 | 1520 | 715 | 1470 | 695 |
| .30 | 75 | 1540 | 725 | 1470 | 695 | 1420 | 670 |
| .40 | 100 | 1460 | 690 | 1430 | 675 | 1350 | 640 |
| .50 | 125 | 1380 | 650 | 1340 | 630 | 1270 | 600 |
| .60 | 150 | 1300 | 615 | 1250 | 590 | 1200 | 565 |
| .70 | 175 | 1220 | 575 | 1190 | 560 | 1130 | 535 |
| .80 | 200 | 1130 | 525 | 1100 | 520 | 1050 | 495 |

[1] For down-flow air volume, add 0.10 in. w.g. (25 Pa) to duct static.
NOTE — All air data is measured external to unit without air filters.

### CHA29-030 AND CHA29-036 BLOWER PERFORMANCE
[1] Horizontal Air Flow

| External Static Pressure | | Air Volume at Various Blower Speeds | | | | | |
|---|---|---|---|---|---|---|---|
| | | High | | Medium | | Low | |
| in. w.g. | Pa | cfm | L/s | cfm | L/s | cfm | L/s |
| .20 | 50 | 1420 | 670 | 1170 | 550 | 1060 | 500 |
| .30 | 75 | 1360 | 640 | 1140 | 540 | 1040 | 490 |
| .40 | 100 | 1300 | 615 | 1100 | 520 | 1020 | 480 |
| .50 | 125 | 1220 | 575 | 1050 | 495 | 970 | 460 |
| .60 | 150 | 1140 | 540 | 990 | 470 | 920 | 435 |
| .70 | 175 | 1050 | 495 | 910 | 430 | 850 | 400 |
| .80 | 200 | 940 | 445 | 800 | 380 | 770 | 365 |

[1] For down-flow air volume, add 0.10 in. w.g. (25 Pa) to duct static.
NOTE — All air data is measured external to unit without air filters.

### CHA29-048 AND CHA29-060 BLOWER PERFORMANCE
[1] Horizontal Air Flow

| External Static Pressure | | Air Volume at Various Blower Speeds | | | | | |
|---|---|---|---|---|---|---|---|
| | | High | | Medium | | Low | |
| in. w.g. | Pa | cfm | L/s | cfm | L/s | cfm | L/s |
| .20 | 50 | 2360 | 1115 | 2140 | 1010 | 1820 | 860 |
| .30 | 75 | 2290 | 1080 | 2090 | 985 | 1800 | 850 |
| .40 | 100 | 2190 | 1035 | 2020 | 955 | 1780 | 840 |
| .50 | 125 | 2110 | 995 | 1920 | 905 | 1750 | 825 |
| .60 | 150 | 2010 | 950 | 1850 | 875 | 1680 | 790 |
| .70 | 175 | 1920 | 905 | 1780 | 840 | 1610 | 760 |
| .80 | 200 | 1820 | 860 | 1710 | 805 | 1470 | 695 |

[1] For down-flow air volume, add 0.10 in. w.g. (25 Pa) to duct static.
NOTE — All air data is measured external to unit without air filters.

# RATINGS

NOTE – For Temperatures and Capacities not shown in tables, see bulletin – Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

## CHA29–024 COOLING CAPACITY

| Entering Wet Bulb Temperature | Total Air Volume | | Outdoor Air Temperature Entering Outdoor Coil | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 85°F (29°C) | | | | | | 95°F (35°C) | | | | | | 105°F (41°C) | | | | | | 115°F (46°C) | | | | | |
| | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | |
| | L/s | cfm | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C |
| 63°F (17.2°C) | 330 | 700 | 2.3 | 22,900 | 1860 | 0.72 | 0.86 | 1.00 | 2.4 | 21,600 | 1980 | 0.74 | 0.86 | 1.00 | 2.5 | 19,300 | 2095 | 0.77 | 0.88 | 1.00 | 2.6 | 17,000 | 2215 | 0.82 | 0.90 | 1.00 |
| | 380 | 800 | 2.3 | 23,400 | 1875 | 0.73 | 0.88 | 1.00 | 2.5 | 22,000 | 1990 | 0.75 | 0.88 | 1.00 | 2.6 | 19,700 | 2110 | 0.78 | 0.90 | 1.00 | 2.7 | 17,300 | 2230 | 0.83 | 0.92 | 1.00 |
| | 425 | 900 | 2.4 | 23,800 | 1895 | 0.80 | 0.95 | 1.00 | 2.5 | 22,300 | 2010 | 0.82 | 0.95 | 1.00 | 2.7 | 20,000 | 2130 | 0.86 | 0.97 | 1.00 | 2.8 | 17,600 | 2250 | 0.92 | 0.99 | 1.00 |
| 67°F (19.4°C) | 330 | 700 | 2.3 | 24,400 | 1905 | 0.55 | 0.69 | 0.82 | 2.5 | 22,900 | 2025 | 0.57 | 0.71 | 0.85 | 2.6 | 20,500 | 2145 | 0.59 | 0.74 | 0.88 | 2.7 | 18,100 | 2265 | 0.63 | 0.78 | 0.93 |
| | 380 | 800 | 2.4 | 24,900 | 1920 | 0.56 | 0.70 | 0.85 | 2.5 | 23,400 | 2040 | 0.58 | 0.72 | 0.87 | 2.6 | 21,000 | 2160 | 0.60 | 0.75 | 0.91 | 2.7 | 18,500 | 2285 | 0.64 | 0.80 | 0.96 |
| | 425 | 900 | 2.4 | 25,300 | 1940 | 0.62 | 0.76 | 0.88 | 2.6 | 23,800 | 2060 | 0.63 | 0.78 | 0.91 | 2.7 | 21,300 | 2185 | 0.66 | 0.81 | 0.94 | 2.8 | 18,700 | 2305 | 0.70 | 0.86 | 0.99 |
| 71°F (21.7°C) | 330 | 700 | 2.4 | 26,100 | 1960 | 0.48 | 0.52 | 0.67 | 2.5 | 24,500 | 2085 | 0.50 | 0.54 | 0.69 | 2.7 | 22,000 | 2205 | 0.52 | 0.56 | 0.72 | 2.8 | 19,400 | 2330 | 0.55 | 0.60 | 0.77 |
| | 380 | 800 | 2.4 | 26,600 | 1975 | 0.49 | 0.53 | 0.68 | 2.6 | 25,000 | 2100 | 0.50 | 0.55 | 0.70 | 2.7 | 22,400 | 2220 | 0.53 | 0.57 | 0.73 | 2.8 | 19,700 | 2345 | 0.56 | 0.61 | 0.78 |
| | 425 | 900 | 2.5 | 27,000 | 1995 | 0.54 | 0.58 | 0.71 | 2.6 | 25,400 | 2120 | 0.55 | 0.59 | 0.73 | 2.8 | 22,800 | 2245 | 0.58 | 0.62 | 0.76 | 2.9 | 20,000 | 2370 | 0.62 | 0.66 | 0.81 |

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## CHA29–030 COOLING CAPACITY

| Entering Wet Bulb Temperature | Total Air Volume | | Outdoor Air Temperature Entering Outdoor Coil | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 85°F (29°C) | | | | | | 95°F (35°C) | | | | | | 105°F (41°C) | | | | | | 115°F (46°C) | | | | | |
| | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | |
| | L/s | cfm | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C |
| 63°F (17.2°C) | 415 | 875 | 2.9 | 28,400 | 2425 | 0.74 | 0.89 | 1.00 | 3.1 | 26,700 | 2575 | 0.76 | 0.88 | 1.00 | 3.2 | 24,200 | 2715 | 0.78 | 0.89 | 1.00 | 3.3 | 21,000 | 2810 | 0.84 | 0.92 | 1.00 |
| | 470 | 1000 | 3.0 | 29,000 | 2440 | 0.75 | 0.91 | 1.00 | 3.1 | 27,300 | 2595 | 0.77 | 0.90 | 1.00 | 3.3 | 24,700 | 2735 | 0.79 | 0.91 | 1.00 | 3.4 | 21,500 | 2825 | 0.85 | 0.94 | 1.00 |
| | 530 | 1125 | 3.0 | 29,400 | 2465 | 0.82 | 0.98 | 1.00 | 3.2 | 27,700 | 2620 | 0.85 | 0.98 | 1.00 | 3.4 | 25,100 | 2760 | 0.87 | 0.98 | 1.00 | 3.5 | 21,800 | 2855 | 0.94 | 0.99 | 1.00 |
| 67°F (19.4°C) | 415 | 875 | 3.0 | 30,200 | 2485 | 0.57 | 0.70 | 0.84 | 3.2 | 28,400 | 2640 | 0.59 | 0.73 | 0.87 | 3.3 | 25,700 | 2780 | 0.60 | 0.74 | 0.89 | 3.4 | 22,400 | 2875 | 0.65 | 0.80 | 0.95 |
| | 470 | 1000 | 3.0 | 30,900 | 2500 | 0.58 | 0.72 | 0.87 | 3.2 | 29,000 | 2660 | 0.59 | 0.74 | 0.90 | 3.4 | 26,300 | 2800 | 0.61 | 0.76 | 0.92 | 3.5 | 22,800 | 2895 | 0.66 | 0.82 | 0.98 |
| | 530 | 1125 | 3.1 | 31,300 | 2525 | 0.63 | 0.78 | 0.91 | 3.3 | 29,400 | 2685 | 0.65 | 0.80 | 0.93 | 3.4 | 26,700 | 2830 | 0.67 | 0.82 | 0.96 | 3.6 | 23,200 | 2925 | 0.72 | 0.89 | 1.00 |
| 71°F (21.7°C) | 415 | 875 | 3.0 | 32,400 | 2555 | 0.50 | 0.54 | 0.69 | 3.3 | 30,400 | 2715 | 0.51 | 0.55 | 0.71 | 3.4 | 27,600 | 2860 | 0.53 | 0.57 | 0.73 | 3.5 | 23,900 | 2955 | 0.57 | 0.61 | 0.78 |
| | 470 | 1000 | 3.1 | 33,000 | 2570 | 0.50 | 0.55 | 0.70 | 3.3 | 31,000 | 2735 | 0.52 | 0.56 | 0.72 | 3.4 | 28,100 | 2880 | 0.53 | 0.58 | 0.74 | 3.6 | 24,400 | 2980 | 0.57 | 0.63 | 0.80 |
| | 530 | 1125 | 3.2 | 33,500 | 2595 | 0.55 | 0.59 | 0.73 | 3.4 | 31,500 | 2760 | 0.57 | 0.61 | 0.75 | 3.6 | 28,500 | 2905 | 0.59 | 0.63 | 0.77 | 3.7 | 24,800 | 3010 | 0.63 | 0.68 | 0.83 |

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## CHA29–036 COOLING CAPACITY

| Entering Wet Bulb Temperature | Total Air Volume | | Outdoor Air Temperature Entering Outdoor Coil | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 85°F (29°C) | | | | | | 95°F (35°C) | | | | | | 105°F (41°C) | | | | | | 115°F (46°C) | | | | | |
| | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | |
| | L/s | cfm | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C |
| 63°F (17.2°C) | 495 | 1050 | 3.5 | 34,300 | 2905 | 0.73 | 0.88 | 1.00 | 3.8 | 32,200 | 3090 | 0.75 | 0.87 | 1.00 | 4.0 | 29,500 | 3295 | 0.78 | 0.89 | 1.00 | 4.2 | 27,300 | 3380 | 0.79 | 0.87 | 1.00 |
| | 565 | 1200 | 3.6 | 35,000 | 2925 | 0.74 | 0.89 | 1.00 | 3.8 | 32,900 | 3110 | 0.76 | 0.89 | 1.00 | 4.0 | 30,100 | 3320 | 0.79 | 0.91 | 1.00 | 4.2 | 27,800 | 3400 | 0.80 | 0.89 | 1.00 |
| | 635 | 1350 | 3.7 | 35,500 | 2955 | 0.81 | 0.97 | 1.00 | 4.0 | 33,400 | 3140 | 0.84 | 0.96 | 1.00 | 4.2 | 30,600 | 3350 | 0.87 | 0.98 | 1.00 | 4.4 | 28,200 | 3435 | 0.88 | 0.95 | 1.00 |
| 67°F (19.4°C) | 495 | 1050 | 3.6 | 36,500 | 2975 | 0.56 | 0.70 | 0.83 | 3.9 | 34,300 | 3165 | 0.58 | 0.72 | 0.86 | 4.1 | 31,400 | 3375 | 0.60 | 0.74 | 0.89 | 4.3 | 29,000 | 3460 | 0.61 | 0.75 | 0.90 |
| | 565 | 1200 | 3.7 | 37,200 | 2995 | 0.57 | 0.71 | 0.86 | 3.9 | 35,000 | 3185 | 0.58 | 0.73 | 0.88 | 4.1 | 32,100 | 3400 | 0.61 | 0.76 | 0.92 | 4.3 | 29,600 | 3485 | 0.62 | 0.77 | 0.92 |
| | 635 | 1350 | 3.8 | 37,800 | 3025 | 0.62 | 0.77 | 0.89 | 4.1 | 35,500 | 3220 | 0.64 | 0.79 | 0.92 | 4.3 | 32,500 | 3435 | 0.67 | 0.82 | 0.96 | 4.5 | 30,000 | 3520 | 0.68 | 0.83 | 0.95 |
| 71°F (21.7°C) | 495 | 1050 | 3.7 | 39,000 | 3060 | 0.49 | 0.53 | 0.68 | 4.0 | 36,700 | 3250 | 0.51 | 0.55 | 0.70 | 4.2 | 33,600 | 3470 | 0.53 | 0.57 | 0.73 | 4.4 | 31,000 | 3560 | 0.53 | 0.58 | 0.74 |
| | 565 | 1200 | 3.8 | 39,800 | 3080 | 0.50 | 0.54 | 0.69 | 4.0 | 37,400 | 3275 | 0.51 | 0.56 | 0.71 | 4.3 | 34,300 | 3495 | 0.53 | 0.58 | 0.74 | 4.4 | 31,700 | 3585 | 0.54 | 0.59 | 0.75 |
| | 635 | 1350 | 3.9 | 40,400 | 3110 | 0.55 | 0.58 | 0.72 | 4.2 | 38,000 | 3310 | 0.56 | 0.60 | 0.74 | 4.4 | 34,800 | 3530 | 0.59 | 0.63 | 0.77 | 4.6 | 32,100 | 3620 | 0.59 | 0.63 | 0.78 |

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## CHA29–042 COOLING CAPACITY

| Entering Wet Bulb Temperature | Total Air Volume | | Outdoor Air Temperature Entering Outdoor Coil | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 85°F (29°C) | | | | | | 95°F (35°C) | | | | | | 105°F (41°C) | | | | | | 115°F (46°C) | | | | | |
| | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | |
| | L/s | cfm | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C |
| 63°F (17.2°C) | 590 | 1250 | 4.0 | 40,200 | 3310 | 0.74 | 0.89 | 1.00 | 4.3 | 37,800 | 3520 | 0.76 | 0.88 | 1.00 | 4.4 | 36,300 | 3695 | 0.78 | 0.89 | 1.00 | 4.6 | 31,100 | 3905 | 0.82 | 0.90 | 1.00 |
| | 660 | 1400 | 4.1 | 41,000 | 3335 | 0.75 | 0.91 | 1.00 | 4.4 | 38,500 | 3545 | 0.77 | 0.90 | 1.00 | 4.5 | 37,000 | 3720 | 0.79 | 0.91 | 1.00 | 4.7 | 31,800 | 3935 | 0.83 | 0.92 | 1.00 |
| | 730 | 1550 | 4.2 | 41,600 | 3365 | 0.82 | 0.98 | 1.00 | 4.5 | 39,100 | 3580 | 0.85 | 0.98 | 1.00 | 4.7 | 37,600 | 3755 | 0.87 | 0.98 | 1.00 | 4.9 | 32,200 | 3975 | 0.92 | 0.99 | 1.00 |
| 67°F (19.4°C) | 590 | 1250 | 4.1 | 42,800 | 3390 | 0.57 | 0.70 | 0.84 | 4.4 | 40,200 | 3605 | 0.59 | 0.73 | 0.87 | 4.5 | 38,600 | 3785 | 0.60 | 0.74 | 0.89 | 4.7 | 33,100 | 4000 | 0.63 | 0.78 | 0.93 |
| | 660 | 1400 | 4.2 | 43,600 | 3415 | 0.58 | 0.72 | 0.87 | 4.5 | 41,000 | 3630 | 0.59 | 0.74 | 0.90 | 4.6 | 39,400 | 3810 | 0.61 | 0.76 | 0.92 | 4.8 | 33,800 | 4030 | 0.64 | 0.80 | 0.96 |
| | 730 | 1550 | 4.3 | 44,300 | 3450 | 0.63 | 0.78 | 0.91 | 4.6 | 41,600 | 3665 | 0.65 | 0.80 | 0.93 | 4.8 | 40,000 | 3850 | 0.67 | 0.82 | 0.96 | 5.0 | 34,300 | 4070 | 0.70 | 0.86 | 0.99 |
| 71°F (21.7°C) | 590 | 1250 | 4.3 | 45,700 | 3485 | 0.50 | 0.54 | 0.69 | 4.5 | 43,000 | 3705 | 0.51 | 0.55 | 0.71 | 4.7 | 41,300 | 3890 | 0.53 | 0.57 | 0.73 | 4.9 | 35,400 | 4115 | 0.55 | 0.60 | 0.77 |
| | 660 | 1400 | 4.3 | 46,700 | 3510 | 0.50 | 0.55 | 0.70 | 4.6 | 43,900 | 3730 | 0.52 | 0.56 | 0.72 | 4.8 | 42,100 | 3920 | 0.53 | 0.58 | 0.74 | 5.0 | 36,200 | 4145 | 0.56 | 0.61 | 0.78 |
| | 730 | 1550 | 4.5 | 47,400 | 3545 | 0.55 | 0.59 | 0.73 | 4.7 | 44,500 | 3770 | 0.57 | 0.61 | 0.75 | 4.9 | 42,700 | 3955 | 0.59 | 0.63 | 0.77 | 5.1 | 36,700 | 4185 | 0.62 | 0.66 | 0.81 |

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## RATINGS

NOTE – For Temperatures and Capacities not shown in tables, see bulletin – Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

### CHA29–048 COOLING CAPACITY

| Entering Wet Bulb Temperature | Total Air Volume | | Outdoor Air Temperature Entering Outdoor Coil | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 85°F (29°C) | | | | | | 95°F (35°C) | | | | | | 105°F (41°C) | | | | | | 115°F (46°C) | | | | | |
| | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | |
| | L/s | cfm | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C |
| 63°F (17.2°C) | 660 | 1400 | 4.6 | 46,100 | 3595 | 0.74 | 0.89 | 1.00 | 4.9 | 43,100 | 3805 | 0.76 | 0.88 | 1.00 | 5.3 | 38,900 | 4200 | 0.85 | 0.89 | 1.00 | 5.7 | 34,900 | 4625 | 0.89 | 0.89 | 1.00 |
| | 755 | 1600 | 4.7 | 47,000 | 3620 | 0.75 | 0.91 | 1.00 | 5.0 | 44,000 | 3835 | 0.77 | 0.90 | 1.00 | 5.4 | 39,700 | 4230 | 0.86 | 0.91 | 1.00 | 5.8 | 35,600 | 4660 | 0.90 | 0.91 | 1.00 |
| | 850 | 1800 | 4.8 | 47,700 | 3655 | 0.82 | 0.98 | 1.00 | 5.1 | 44,700 | 3870 | 0.85 | 0.98 | 1.00 | 5.5 | 40,200 | 4275 | 0.95 | 0.98 | 1.00 | 6.0 | 36,100 | 4705 | 0.99 | 0.98 | 1.00 |
| 67°F (19.4°C) | 660 | 1400 | 4.7 | 49,000 | 3685 | 0.57 | 0.70 | 0.84 | 5.0 | 46,100 | 3915 | 0.59 | 0.73 | 0.87 | 5.4 | 43,900 | 4295 | 0.60 | 0.74 | 0.89 | 5.8 | 40,200 | 4750 | 0.63 | 0.77 | 0.92 |
| | 755 | 1600 | 4.8 | 50,000 | 3710 | 0.58 | 0.72 | 0.87 | 5.1 | 47,000 | 3945 | 0.59 | 0.74 | 0.90 | 5.5 | 44,800 | 4325 | 0.61 | 0.76 | 0.92 | 5.9 | 41,000 | 4780 | 0.63 | 0.79 | 0.95 |
| | 850 | 1800 | 4.9 | 50,800 | 3745 | 0.63 | 0.78 | 0.91 | 5.2 | 47,700 | 3985 | 0.65 | 0.80 | 0.93 | 5.6 | 45,500 | 4365 | 0.67 | 0.82 | 0.96 | 6.1 | 41,600 | 4830 | 0.70 | 0.85 | 0.98 |
| 71°F (21.7°C) | 660 | 1400 | 4.8 | 52,400 | 3785 | 0.50 | 0.54 | 0.69 | 5.0 | 51,100 | 3970 | 0.51 | 0.55 | 0.66 | 5.4 | 48,300 | 4385 | 0.53 | 0.57 | 0.67 | 5.9 | 44,600 | 4860 | 0.55 | 0.59 | 0.69 |
| | 755 | 1600 | 4.9 | 53,500 | 3815 | 0.50 | 0.55 | 0.70 | 5.1 | 52,100 | 3995 | 0.52 | 0.56 | 0.67 | 5.5 | 49,200 | 4415 | 0.53 | 0.58 | 0.68 | 6.0 | 45,500 | 4895 | 0.55 | 0.60 | 0.70 |
| | 850 | 1800 | 5.1 | 54,300 | 3850 | 0.55 | 0.59 | 0.73 | 5.3 | 52,900 | 4035 | 0.57 | 0.61 | 0.70 | 5.7 | 50,000 | 4460 | 0.59 | 0.63 | 0.71 | 6.2 | 46,100 | 4945 | 0.61 | 0.65 | 0.73 |

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

### CHA29–060 COOLING CAPACITY

| Entering Wet Bulb Temperature | Total Air Volume | | Outdoor Air Temperature Entering Outdoor Coil | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 85°F (29°C) | | | | | | 95°F (35°C) | | | | | | 105°F (41°C) | | | | | | 115°F (46°C) | | | | | |
| | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | | Total Cooling Capacity | | Compressor Motor Watts Input | Sensible To Total Ratio (S/T) Dry Bulb | | |
| | L/s | cfm | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C | kW | Btuh | | 75°F 24°C | 80°F 27°C | 85°F 29°C |
| 63°F (17.2°C) | 825 | 1750 | 5.8 | 56,800 | 4610 | 0.74 | 0.89 | 1.00 | 6.1 | 54,000 | 4890 | 0.72 | 0.88 | 1.00 | 6.6 | 47,700 | 5355 | 0.83 | 0.89 | 1.00 | 7.2 | 42,400 | 5945 | 0.88 | 0.89 | 1.00 |
| | 945 | 2000 | 5.9 | 58,000 | 4640 | 0.75 | 0.91 | 1.00 | 6.3 | 55,100 | 4925 | 0.73 | 0.90 | 1.00 | 6.8 | 48,700 | 5390 | 0.84 | 0.91 | 1.00 | 7.3 | 43,300 | 5985 | 0.89 | 0.91 | 1.00 |
| | 1060 | 2250 | 6.0 | 58,900 | 4685 | 0.82 | 0.98 | 1.00 | 6.5 | 56,000 | 4970 | 0.80 | 0.98 | 1.00 | 6.9 | 49,400 | 5445 | 0.92 | 0.98 | 1.00 | 7.6 | 44,000 | 6045 | 0.96 | 0.98 | 1.00 |
| 67°F (19.4°C) | 825 | 1750 | 5.9 | 60,500 | 4720 | 0.57 | 0.70 | 0.84 | 6.3 | 56,800 | 5020 | 0.59 | 0.73 | 0.87 | 6.8 | 52,900 | 5530 | 0.60 | 0.74 | 0.89 | 7.3 | 47,900 | 6080 | 0.63 | 0.77 | 0.92 |
| | 945 | 2000 | 6.0 | 61,700 | 4755 | 0.58 | 0.72 | 0.87 | 6.4 | 58,000 | 5055 | 0.59 | 0.74 | 0.90 | 6.9 | 54,000 | 5570 | 0.61 | 0.76 | 0.92 | 7.5 | 48,900 | 6120 | 0.63 | 0.79 | 0.95 |
| | 1060 | 2250 | 6.2 | 62,600 | 4800 | 0.63 | 0.78 | 0.91 | 6.6 | 58,900 | 5105 | 0.65 | 0.80 | 0.93 | 7.1 | 54,800 | 5625 | 0.67 | 0.82 | 0.96 | 7.7 | 49,700 | 6180 | 0.70 | 0.85 | 0.97 |
| 71°F (21.7°C) | 825 | 1750 | 6.1 | 64,700 | 4855 | 0.50 | 0.54 | 0.69 | 6.4 | 62,000 | 5110 | 0.51 | 0.55 | 0.65 | 6.9 | 58,000 | 5680 | 0.53 | 0.57 | 0.68 | 7.5 | 54,200 | 6260 | 0.55 | 0.59 | 0.70 |
| | 945 | 2000 | 6.2 | 66,000 | 4885 | 0.50 | 0.55 | 0.70 | 6.5 | 63,200 | 5145 | 0.52 | 0.56 | 0.66 | 7.1 | 59,200 | 5720 | 0.53 | 0.58 | 0.69 | 7.6 | 55,300 | 6305 | 0.55 | 0.60 | 0.71 |
| | 1060 | 2250 | 6.4 | 67,000 | 4935 | 0.55 | 0.59 | 0.73 | 6.7 | 64,200 | 5200 | 0.57 | 0.61 | 0.69 | 7.3 | 60,100 | 5775 | 0.59 | 0.63 | 0.72 | 7.8 | 56,100 | 6365 | 0.61 | 0.65 | 0.74 |

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

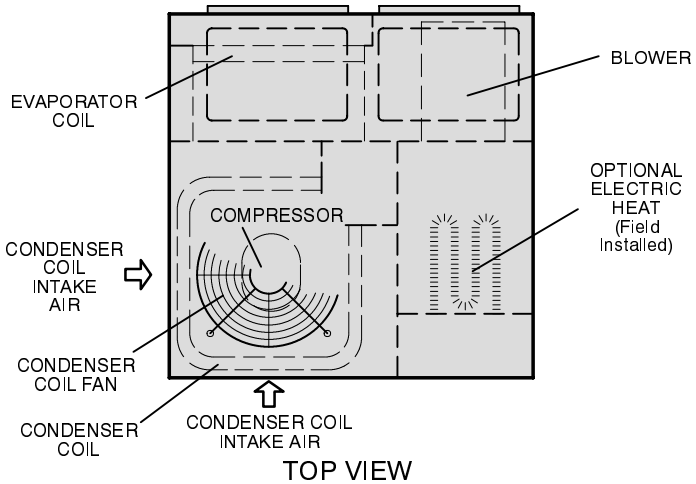
## DIMENSIONS - inches (mm)

### CORNER WEIGHTS — lbs. (kg)

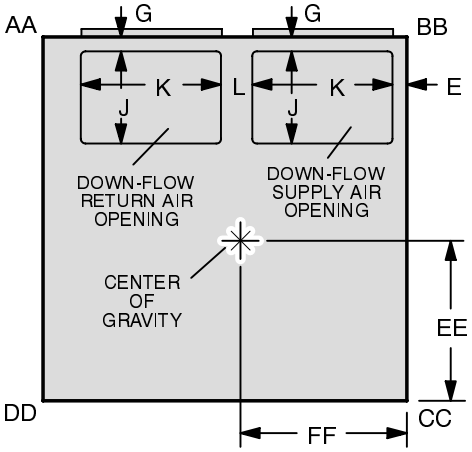
| Model Number | AA | | BB | | CC | | DD | |
|---|---|---|---|---|---|---|---|---|
| | lbs. | kg | lbs. | kg | lbs. | kg | lbs. | kg |
| CHA29-024 | 76 | 34 | 54 | 24 | 59 | 27 | 81 | 37 |
| CHA29-030 | 80 | 36 | 58 | 26 | 64 | 29 | 88 | 40 |
| CHA29-036 | 86 | 39 | 62 | 28 | 68 | 31 | 94 | 43 |
| CHA29-042 | 94 | 43 | 68 | 31 | 75 | 34 | 103 | 47 |
| CHA29-048 | 120 | 54 | 86 | 39 | 94 | 43 | 130 | 59 |
| CHA29-060 | 125 | 57 | 91 | 41 | 98 | 44 | 136 | 62 |

### CENTER OF GRAVITY — inches (mm)

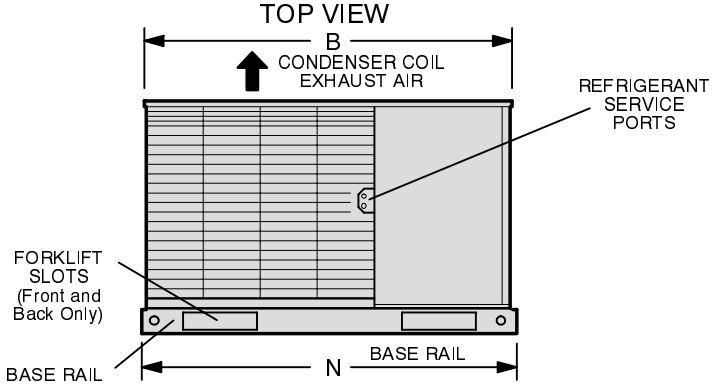
| Model Number | EE | | FF | |
|---|---|---|---|---|
| | inch | mm | inch | mm |
| CHA29-024 | 21-7/8 | 556 | 26-1/2 | 673 |
| CHA29-030 | 21-7/8 | 556 | 26-1/2 | 673 |
| CHA29-036 | 21-7/8 | 556 | 26-1/2 | 673 |
| CHA29-042 | 21-7/8 | 556 | 26-1/2 | 673 |
| CHA29-048 | 23-3/4 | 603 | 31-3/4 | 806 |
| CHA29-060 | 23-3/4 | 603 | 31-3/4 | 806 |



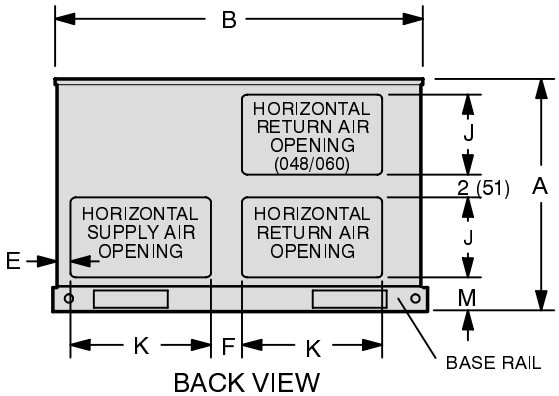

TOP VIEW



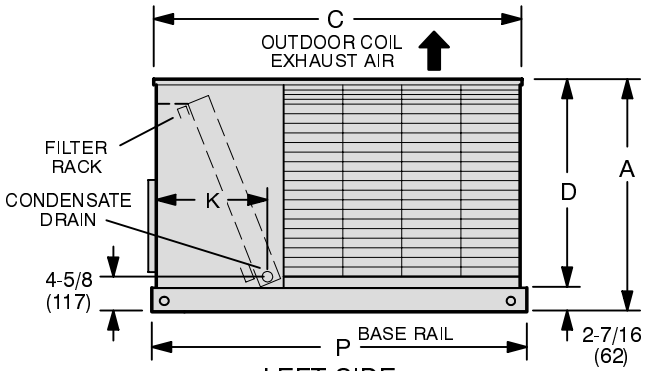

TOP VIEW BASE SECTION



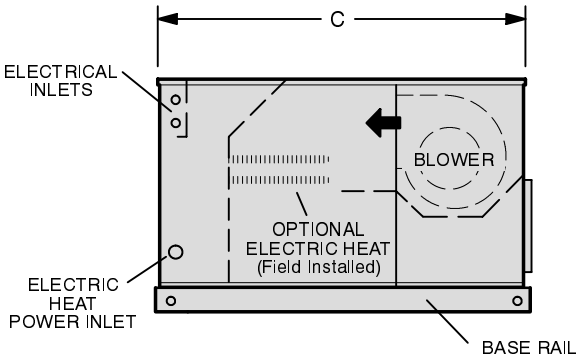

FRONT VIEW




BACK VIEW




LEFT SIDE




RIGHT SIDE

| Model Number | A | | B | | C | | D | | E | | F | | G | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm |
| CHA29-024, 030, 036 | 27-11/16 | 703 | 45-5/8 | 1159 | 45-5/8 | 1159 | 25-1/4 | 641 | 1-13/16 | 46 | 4 | 102 | 1-7/8 | 48 |
| CHA29-042 | 31-11/16 | 805 | 45-5/8 | 1159 | 45-5/8 | 1159 | 29-1/4 | 743 | 1-13/16 | 46 | 4 | 102 | 1-7/8 | 48 |
| CHA29-048, 060 | 33-11/16 | 856 | 54-11/16 | 1389 | 49-5/8 | 1260 | 31-7/16 | 799 | 1-1/8 | 29 | 6-1/4 | 159 | 2-1/4 | 57 |

| Model Number | H | | J | | K | | L | | M | | N | | P | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm |
| CHA29-024, 030, 036 | 15-5/8 | 397 | 11-1/2 | 292 | 17-1/2 | 445 | 4 | 102 | 5 | 127 | 46-3/8 | 1179 | 46-3/8 | 1179 |
| CHA29-042 | 15-5/8 | 397 | 11-1/2 | 292 | 17-1/2 | 445 | 4 | 102 | 5 | 127 | 46-3/8 | 1179 | 46-3/8 | 1179 |
| CHA29-048, 060 | 17-1/8 | 435 | 12 | 305 | 21-1/2 | 546 | 5-5/8 | 143 | 4-1/8 | 105 | 55-1/4 | 1403 | 50-1/2 | 1283 |