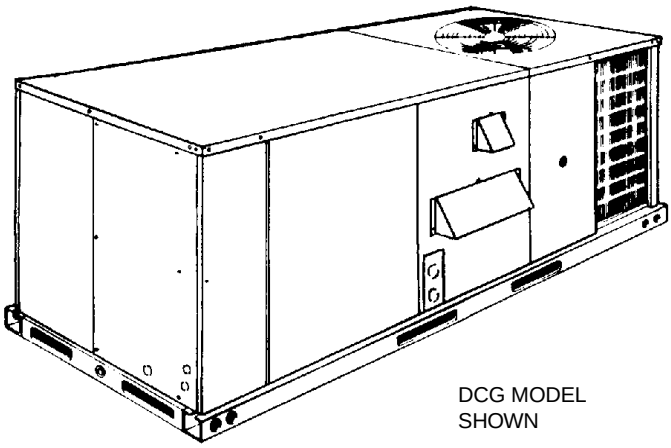


DCG MODEL
SHOWN

YORK®

# SINGLE PACKAGE AIR-COOLED AIR CONDITIONERS

**D4CE 036, 048, 060 & D2CE 072**
**D7CG 036, 048, 060 & D2CG 072**
**3, 4 AND 5 NOMINAL TONS (10 SEER)**
**AND 6 NOMINAL TONS (9 EER)**

# SUNLINE 2000™

## DESCRIPTION

YORK Sunline 2000 units are convertible single package air conditioners with a common cabinet and a common roof curb for the 3, 4, 5 and 6 ton sizes. The units were designed for light commercial and commercial applications. They can easily be installed on a roof curb, slab, roof jack or frame.

All units are self-contained and assembled on rigid full perimeter base rails with fork lift slots on three sides and holes for overhead rigging. Every unit is completely piped, wired, charged and tested at the factory to provide for a quick and easy field installation.

The units are available in cooling only, and cooling with gas heat. Electric heaters are available as field-installed accessories.

The cabinet is constructed of galvanized steel, painted with long lasting, durable, and aesthetically pleasing power paint. Paint finish meets 750 hour salt spray tests per ASTM-B117 standards.

All models include a 5-year limited warranty on scroll compressors and electric heating elements, a 10-year limited warranty on gas-fired heat exchangers and a 1-year limited warranty on all replacement parts.

## FEATURES

**COMMON FOOTPRINT/COMMON CABINET -** All model sizes and configurations share a common cabinet and a common roof curb. The installer has the flexibility of setting one curb and placing the proper tonnage unit on that curb after the internal load has been determined. He can even decide between gas or electric heat after the curb has been set.

**HIGH EFFICIENCY -** All units have a high cooling efficiency, and gas / electric models have a minimum AFUE of 80%. All efficiencies exceed legislated minimum levels and provide low operating costs.

**CONVERTIBLE AIRFLOW DESIGN -** Both the side and bottom duct openings are covered when they leave the factory. If a side supply / side return is desired, you simply remove the two side duct covers from the outside of the unit and discard them. If a bottom supply / bottom return is desired, you simply remove the two knockout panels from the base of the unit and discard them. No panel cutting or swapping is required! Convertible airflow design allows maximum field flexibility and minimum inventory. Economizers may be used on either bottom and side duct applications with no modifications required.

**FACTORY-INSTALLED OPTIONS -** Economizers can be installed at the factory. The economizers are shipped installed and wired. Only the rain hood needs to be field assembled and installed. Field labor dollars can be saved by having the components arrive already installed.

Adjustable belt drive blowers are available on all models from the factory for complete airflow flexibility.

**FIELD-INSTALLED ACCESSORIES -** Accessories were designed for quick and easy installation. The motorized damper and economizers simply slide in, and electrical connections are made by modular plugs. Electric heaters mount easily, and knockouts are provided in the internal partitions to connect the elements to the control box single point kit.

The motorized air damper includes a slid-in/plug-in damper assembly with a rainhood and filters. The outdoor air dampers open when the indoor fan motor is energized. The damper is capable of providing 0% through 100% of outdoor return air opening.

The manual outdoor damper provides 0% through 35% or 0% through 100% of return air opening (field adjustable). Designed for duct mounted side or bottom supply/return applications. Includes rain hood assembly and filter.

The 14" high roof curb is shipped knocked down. An insulated deck is not required because the bottom of the unit is insulated.

Low ambient controls are available to provide stable unit operation at outdoor temperatures down to 0°F.

Propane, high altitude and low NOx kits are also available to cover all gas heating applications.

**WIDE RANGE OF INDOOR AIRFLOWS -** All 3, 4 and 5-ton models operate over a wide range of design conditions with a

Cont'd.

## FEATURES - CONT'D.

3-speed direct-drive fan motor. The 6-ton unit has a single speed direct-drive fan motor. Belt-drive blowers are also available on all 3, 4, 5 and 6-ton models.

**FULL PERIMETER BASE RAILS -** The permanently attached base rails provide a solid foundation for the entire unit and protect the unit during shipment. The rails provide fork lift access from 3 sides, and rigging holes are also provided so that an overhead crane can be used to place the units on a roof.

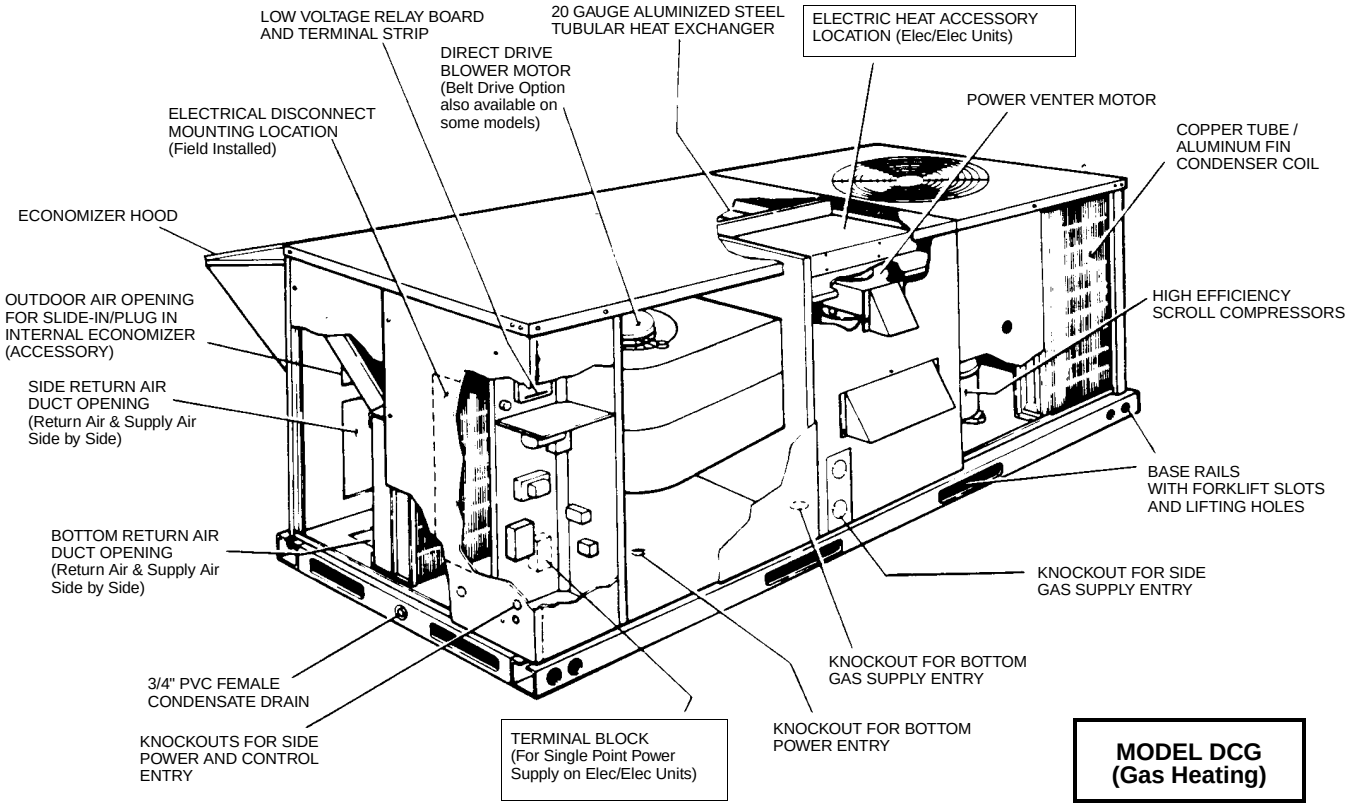
**SYSTEM PROTECTION -** Internal overload protection are standard on all scroll compressors. Every unit has a liquid line filter-drier, high and low pressure/lose at charge switches and a suction line freezestat to protect all system components. All units will provide cooling at ambient temperatures down to 45°F.

**UTILITY CONNECTIONS MADE EASY -** Gas and electric utility knockouts are provided in the unit base as well as the side of the unit. A clearly identified location is provided to mount a field supplied electrical disconnect switch. Utility connections can be made quickly and with a minimum amount of field labor.

**SIMPLE CONTROL CIRCUIT -** A low voltage printed circuit board contains a scroll compressor lockout indicator light and a low voltage terminal strip. An additional set of pin connectors is also provided to simplify the field interface of external controls. Mate-n-lock plug connectors are used where line and low voltage wires pass thru internal bulkheads. This allows for easier troubleshooting and component replacement. The electrical control box is not located in the scroll compressor compartment so the access cover can be removed for troubleshooting without affecting the normal system operating pressures. All wiring internal to the unit is color/number coded.

**AIR FILTERS -** Units are shipped with 1" disposable filters. The unit filter racks can accommodate 1" or 2" filters without any modifications.

YORK® **SUNLINE 2000™**




**MODEL DCG (Gas Heating)**

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# RATINGS

## CAPACITY RATINGS - Cooling / Electric Heating

| MODEL | ARI RATINGS[1] | | | | NOMINAL ELECTRIC HEAT CAPACITY[3] (KW) | | | STANDARD CFM |
|---|---|---|---|---|---|---|---|---|
| | COOLING CAPACITY 80 / 67-95°F | | | SOUND RATING[2] (dbels) | | | | |
| | MBH | SEER | EER | | 240V | 480V | 600V | |
| DCE036 | 36.0 | 10.00 | 9.10 | 82 | 5, 7, 10, 15 & 20 | 7, 10, 15 & 20 | 10, 15 & 20 | 1.300 |
| DCE048 | 47.4 | 10.00 | 9.00 | 82 | 5, 7, 10, 15 & 20 | 7, 10, 15 & 20 | 10, 15 & 20 | 1.700 |
| DCE060 | 59.0 | 10.00 | 9.10 | 82 | 5, 7, 10, 15, 20 & 30 | 7, 10, 15 20 & 30 | 10, 15, 20 & 30 | 2.100 |
| DCE072 | 72.0 | - | 9.00 | 84 | 5, 7, 10, 15, 20 & 30 | 7, 10, 15, 20 & 30 | 10, 15, 20 & 30 | 2.400 |

= Not ARI Listed.

## CAPACITY RATINGS - Cooling / Gas Heating

| MODEL | ARI RATINGS [1] | | | | GAS HEAT CAPACITY | | | | | | STANDARD CFM |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | COOLING CAPACITY 80 / 67-95°F | | | SOUND RATING[2] (dbels) | INPUT (MBH) | OUTPUT (MBH) | AFUE (%) | S.S.E. (%) | TEMP. RISE (°F) | GAS LINE SIZE (in. OD) | |
| | MBH | SEER | EER | | | | | | | | |
| DCG036N040 | 36.0 | 10.00 | 9.10 | 82 | 50 | 40 | 80.9 | 81.6 | 15-45 | ½ | 1.300 |
| DCG036N079 | 36.0 | 10.00 | 9.10 | 82 | 100 | 79 | 80.5 | 80.8 | 40-70 | ½ | |
| DCG048N060 | 47.4 | 10.00 | 9.00 | 82 | 75 | 59 | 80.9 | 81.6 | 25-55 | ½ | 1.700 |
| DCG048N099 | 47.4 | 10.00 | 9.00 | 82 | 125 | 99 | 80.3 | 80.6 | 45-75 | ½ | |
| DCG060N079 | 59.0 | 10.00 | 9.10 | 82 | 100 | 79 | 80.5 | 80.8 | 25-55 | ½ | 2.100 |
| DCG060N099 | 59.0 | 10.00 | 9.10 | 82 | 125 | 99 | 80.3 | 80.6 | 35-65 | ½ | |
| DCG072N079 | 72.0[4] | - | 9.00 | 84 | 100 | 79 | 80.5 | 80.8 | 25-55 | ½ | 2.400 |
| DCG072N099 | 72.0[4] | - | 9.00 | 84 | 125 | 99 | 80.3 | 80.6 | 35-65 | ½ | |

[1]Certified in accordance with the Unitary Small Equipment certification program, which is based on ARI Standard 210/240. [2]Rated in accordance with ARI Standard 270. [3]Heaters are available as accessories - all with single point power supply. [4] Certified in accordance with the Unitary Large Equipment certification program, which is based on ARI Standard 340/360.
SEER = Seasonal Energy Efficiency Ratio - the total cooling output in BTU's during a normal annual usage period for cooling divided by the total electric power input in watt-hours during the same period.
EER = Energy Efficiency Ratio - the cooling capacity in Btu's per hour (Btuh) divided by the power input in watts at any given set of rating conditions, expressed in BTUH per watt (BTUH/watt).
AFUE = Annual Fuel Utilization Efficiency - determined in accordance with DOE test procedure.
S.S.E. = Steady State Efficiency. (Percent Output).

# SOUND POWER RATINGS FOR SUPPLY AIR BLOWER

| MODEL | CFM | ESP | BLOWER | | SOUND POWER (dB $10^{-12}$ watts) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | OCTAVE BAND CENTERLINE FREQUENCY (Hz) | | | | | | | | SWL dB (A) | dB (A) @ 10 ft.* |
| | | IWG | SPEED | KW | 63 | 125 | 250 | 500 | 1,000 | 2,000 | 4,000 | 8,000 | | |
| 036 | 1,200 | 0.60 | LOW | 0.60 | 84 | 84 | 74 | 67 | 69 | 62 | 57 | 52 | 74 | 41 |
| 048 | 1,600 | 0.55 | HIGH | 0.80 | 85 | 85 | 75 | 68 | 70 | 63 | 58 | 53 | 75 | 42 |
| 060 | 2,000 | 0.45 | HIGH | 1.00 | 86 | 86 | 76 | 69 | 71 | 64 | 59 | 54 | 76 | 43 |
| 072 | 2,200 | 0.30 | HIGH | 1.35 | 87 | 87 | 77 | 70 | 72 | 65 | 60 | 55 | 77 | 44 |

* At a distance of 10 ft.from the blower.

NOTE: These values have been derived using a model of sound propagation, measuring the indoor ambient sound levels ten feet from the source. The dBA values provided are for reference only. Calculation of dBA values cover matters of system design and application. This constitutes an exception to any specification or guarantee requiring a dBA value or sound data in any other form than sound power level ratings.

# PHYSICAL DATA - BASIC UNITS

| MODEL | EVAPORATOR BLOWER | | | EVAPORATOR COIL | | | COMPRESSOR TYPE | CONDENSER FAN | | | CONDENSER COIL | | | AIR FILTERS (SEE NOTE) | | | CHARGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CENTRIFUGAL (Dia. x Wd. in.) | FAN MOTOR HP (DIRECT-DRIVE) | FAN MOTOR HP (BELT-DRIVE) | ROWS DEEP | FINS PER INCH | FACE AREA (Sq. Ft.) | HERMETICALLY SEALED | PROPELLER DIA. (in.) | FAN MOTOR HP | NOM. CFM TOTAL | ROWS DEEP | FINS PER INCH | FACE AREA (Sq. Ft.) | QUANTITY PER UNIT (15" X 20" X 1") | QUANTITY PER UNIT (14" X 25" X 1") | TOTAL FACE AREA (sq. ft.) | REFRIGERANT R-22 (lbs./oz.) |
| 036 | 12 x 10 | ½ | 1½ | 3 | 13 | 3.6 | SCROLL TYPE | 24 | ¼ | 3,400 | 1 | 16 | 17.1 | 2 | 1 | 6.3 | 5/8 |
| 048 | 12 x 10 | ¾ | 1½ | 3 | 13 | 4.3 | | 24 | ¼ | 3,400 | 1 | 16 | 17.1 | 2 | 1 | 6.3 | 6/8 |
| 060 | 12 x 10 | 1 | 1½ | 3 | 13 | 5.1 | | 24 | ¼ | 3,400 | 1 | 22 | 17.1 | 2 | 1 | 6.3 | 6/8 |
| 072 | 12 x 11 | 1 | 1½ | 4 | 13 | 5.1 | | 24 | ¼ | 3,300 | 2 | 16 | 16.7 | 2 | 1 | 6.3 | 10/0 |

NOTE: Filter racks are adapted for 1" or 2" thick filters.

# **COOLING CAPACITIES** - 3 TON (DCE / DCG036)

| Air On Evaporator Coil | | Temperature of Air on Condenser Coil | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 85°F | | | | | | | | | 95°F | | | | | | | | |
| CFM | WB °F | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | |
| | | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 |
| 1750 | 72 | 45 | 3.1 | 35 | 30 | 26 | 21 | 17 | - | - | 43 | 3.3 | 35 | 30 | 26 | 21 | 17 | - | - |
| | 67 | 43 | 3.0 | 43 | 38 | 34 | 29 | 25 | 20 | 16 | 41 | 3.3 | 41 | 38 | 34 | 29 | 25 | 21 | 16 |
| | 62 | 39 | 3.0 | 39 | 39 | 39 | 34 | 30 | 25 | 21 | 36 | 3.3 | 36 | 36 | 36 | 32 | 27 | 23 | 18 |
| | 57 | 40 | 2.9 | 40 | 40 | 40 | 35 | 31 | 26 | 22 | 38 | 3.2 | 38 | 38 | 38 | 33 | 29 | 24 | 20 |
| 1475 | 72 | 44 | 3.1 | 31 | 28 | 24 | 20 | 16 | - | - | 42 | 3.3 | 31 | 27 | 23 | 20 | 16 | - | - |
| | 67 | 41 | 3.0 | 39 | 35 | 31 | 27 | 23 | 19 | 16 | 39 | 3.3 | 37 | 35 | 31 | 27 | 23 | 19 | 15 |
| | 62 | 38 | 3.0 | 38 | 38 | 37 | 33 | 29 | 25 | 21 | 36 | 3.3 | 36 | 36 | 35 | 31 | 27 | 23 | 19 |
| | 57 | 39 | 2.9 | 39 | 39 | 39 | 35 | 31 | 27 | 23 | 37 | 3.2 | 37 | 37 | 36 | 32 | 28 | 25 | 21 |
| 1200 | 72 | 42 | 3.1 | 28 | 25 | 22 | 18 | 15 | - | - | 41 | 3.3 | 28 | 24 | 21 | 18 | 14 | - | - |
| | 67 | 40 | 3.0 | 35 | 32 | 28 | 25 | 22 | 18 | 15 | 38 | 3.2 | 34 | 31 | 28 | 25 | 21 | 18 | 15 |
| | 62 | 36 | 3.0 | 36 | 36 | 35 | 31 | 28 | 25 | 21 | 35 | 3.3 | 35 | 35 | 34 | 30 | 27 | 24 | 20 |
| | 57 | 37 | 2.9 | 37 | 37 | 37 | 34 | 31 | 27 | 24 | 36 | 3.2 | 36 | 36 | 35 | 32 | 28 | 25 | 22 |
| 1050 | 72 | 41 | 3.1 | 26 | 23 | 20 | 17 | 14 | - | - | 39 | 3.2 | 26 | 23 | 20 | 17 | 14 | - | - |
| | 67 | 38 | 3.0 | 32 | 30 | 27 | 24 | 21 | 18 | 15 | 37 | 3.2 | 32 | 29 | 26 | 23 | 20 | 17 | 14 |
| | 62 | 35 | 3.0 | 35 | 35 | 33 | 30 | 27 | 24 | 21 | 33 | 3.2 | 33 | 33 | 31 | 28 | 25 | 22 | 20 |
| | 57 | 36 | 2.9 | 36 | 36 | 35 | 32 | 29 | 26 | 23 | 34 | 3.2 | 34 | 34 | 32 | 30 | 27 | 24 | 21 |
| 900 | 72 | 39 | 3.1 | 24 | 21 | 19 | 16 | 14 | - | - | 38 | 3.2 | 23 | 21 | 18 | 16 | 13 | - | - |
| | 67 | 37 | 3.0 | 30 | 27 | 25 | 22 | 20 | 17 | 15 | 36 | 3.2 | 29 | 26 | 24 | 21 | 19 | 16 | 14 |
| | 62 | 34 | 3.0 | 34 | 33 | 30 | 28 | 25 | 23 | 20 | 32 | 3.2 | 32 | 31 | 29 | 26 | 24 | 21 | 19 |
| | 57 | 34 | 2.9 | 34 | 34 | 33 | 30 | 27 | 25 | 22 | 33 | 3.1 | 33 | 33 | 30 | 27 | 25 | 22 | 20 |

| Air On Evaporator Coil | | Temperature of Air on Condenser Coil | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 105°F | | | | | | | | | 115°F | | | | | | | | |
| CFM | WB °F | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | |
| | | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 |
| 1750 | 72 | 41 | 3.7 | 34 | 29 | 25 | 20 | 16 | - | - | 39 | 4.1 | 33 | 28 | 24 | 19 | 15 | - | - |
| | 67 | 38 | 3.7 | 38 | 37 | 33 | 28 | 24 | 19 | 15 | 36 | 4.0 | 36 | 36 | 32 | 27 | 23 | 18 | 14 |
| | 62 | 34 | 3.7 | 34 | 34 | 34 | 30 | 25 | 21 | 16 | 32 | 4.0 | 32 | 32 | 32 | 27 | 23 | 18 | 14 |
| | 57 | 35 | 3.6 | 35 | 35 | 35 | 31 | 26 | 22 | 17 | 33 | 4.0 | 33 | 33 | 33 | 28 | 24 | 19 | 15 |
| 1475 | 72 | 40 | 3.7 | 30 | 26 | 23 | 19 | 15 | - | - | 38 | 4.1 | 30 | 26 | 22 | 18 | 14 | - | - |
| | 67 | 37 | 3.6 | 36 | 34 | 30 | 26 | 22 | 18 | 14 | 35 | 4.0 | 34 | 33 | 29 | 25 | 21 | 17 | 13 |
| | 62 | 33 | 3.7 | 33 | 33 | 33 | 29 | 25 | 21 | 17 | 31 | 4.0 | 31 | 31 | 31 | 27 | 23 | 19 | 15 |
| | 57 | 34 | 3.6 | 34 | 34 | 34 | 30 | 26 | 22 | 18 | 32 | 4.0 | 32 | 32 | 32 | 28 | 24 | 20 | 16 |
| 1200 | 72 | 39 | 3.7 | 27 | 24 | 20 | 17 | 14 | - | - | 37 | 4.1 | 26 | 23 | 20 | 16 | 13 | - | - |
| | 67 | 36 | 3.6 | 34 | 30 | 27 | 24 | 20 | 17 | 14 | 34 | 4.0 | 33 | 30 | 26 | 23 | 20 | 16 | 13 |
| | 62 | 32 | 3.6 | 32 | 32 | 32 | 29 | 25 | 22 | 19 | 30 | 4.0 | 30 | 30 | 30 | 27 | 24 | 20 | 17 |
| | 57 | 33 | 3.6 | 33 | 33 | 33 | 29 | 26 | 23 | 19 | 31 | 3.9 | 31 | 31 | 31 | 27 | 24 | 21 | 17 |
| 1050 | 72 | 37 | 3.6 | 25 | 22 | 19 | 16 | 13 | - | - | 36 | 4.1 | 24 | 21 | 18 | 15 | 12 | - | - |
| | 67 | 35 | 3.6 | 31 | 28 | 25 | 22 | 19 | 16 | 13 | 32 | 4.0 | 30 | 27 | 24 | 21 | 18 | 15 | 12 |
| | 62 | 31 | 3.6 | 31 | 31 | 29 | 27 | 24 | 21 | 18 | 29 | 4.0 | 29 | 29 | 28 | 25 | 22 | 19 | 16 |
| | 57 | 32 | 3.5 | 32 | 32 | 30 | 27 | 24 | 21 | 18 | 30 | 3.9 | 30 | 29 | 28 | 25 | 22 | 19 | 16 |
| 900 | 72 | 36 | 3.6 | 22 | 20 | 17 | 15 | 12 | - | - | 34 | 4.0 | 21 | 19 | 16 | 14 | 11 | - | - |
| | 67 | 33 | 3.6 | 28 | 25 | 23 | 20 | 18 | 15 | 13 | 31 | 4.0 | 27 | 24 | 22 | 19 | 17 | 14 | 11 |
| | 62 | 30 | 3.6 | 30 | 29 | 27 | 24 | 22 | 19 | 17 | 28 | 4.0 | 28 | 28 | 25 | 22 | 20 | 17 | 15 |
| | 57 | 31 | 3.5 | 31 | 30 | 28 | 25 | 22 | 20 | 17 | 28 | 3.9 | 28 | 28 | 25 | 23 | 20 | 17 | 15 |

[1] These capacities are gross ratings. For net capacity, determine the KW of the supply air blower motor from the Blower Performance Table, multiply this value by 3.415 MBH / KW to determine the motor heat, and deduct this heat from the gross capacity of the unit.

[2] These ratings include the compressor and the condenser fan motors but not the supply air blower motor. The total condenser fan motor power input is 0.36 KW. Refer to the Blower Performance Table for the KW of the supply air blower motor.

NOMINAL RATING

ALL SENSIBLE CAPACITY

# COOLING CAPACITIES - 4 TON (DCE / DCG048)

| Air On Evaporator Coil | | Temperature of Air on Condenser Coil | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 85°F | | | | | | | | | 95°F | | | | | | | | | |
| CFM | WB °F | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | |
| | | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 |
| 2000 | 72 | 60 | 4.1 | 44 | 39 | 33 | 28 | 23 | - | - | 60 | 4.5 | 44 | 39 | 33 | 28 | 23 | - | - |
| | 67 | 55 | 4.1 | 53 | 48 | 42 | 37 | 32 | 26 | 21 | 52 | 4.5 | 52 | 47 | 42 | 36 | 31 | 25 | 20 |
| | 62 | 51 | 4.0 | 51 | 51 | 51 | 45 | 40 | 34 | 29 | 48 | 4.4 | 48 | 48 | 48 | 42 | 37 | 32 | 26 |
| | 57 | 49 | 3.9 | 49 | 49 | 49 | 44 | 39 | 33 | 28 | 47 | 4.3 | 47 | 47 | 47 | 42 | 36 | 31 | 26 |
| 1800 | 72 | 58 | 4.1 | 41 | 36 | 31 | 26 | 21 | - | - | 57 | 4.5 | 41 | 36 | 31 | 26 | 21 | - | - |
| | 67 | 53 | 4.1 | 49 | 45 | 40 | 35 | 30 | 25 | 20 | 50 | 4.5 | 49 | 44 | 39 | 34 | 29 | 24 | 19 |
| | 62 | 49 | 4.0 | 49 | 49 | 48 | 43 | 38 | 33 | 28 | 46 | 4.4 | 46 | 46 | 46 | 41 | 36 | 31 | 26 |
| | 57 | 47 | 3.9 | 47 | 47 | 47 | 43 | 38 | 33 | 28 | 45 | 4.3 | 45 | 45 | 45 | 40 | 36 | 31 | 26 |
| 1600 | 72 | 56 | 4.1 | 38 | 34 | 29 | 25 | 20 | - | - | 55 | 4.6 | 38 | 33 | 29 | 24 | 20 | - | - |
| | 67 | 51 | 4.1 | 46 | 41 | 37 | 32 | 28 | 24 | 19 | 48 | 4.5 | 45 | 40 | 36 | 31 | 27 | 23 | 18 |
| | 62 | 47 | 4.0 | 47 | 47 | 45 | 41 | 36 | 32 | 27 | 44 | 4.4 | 44 | 44 | 44 | 40 | 35 | 31 | 26 |
| | 57 | 46 | 3.9 | 46 | 46 | 46 | 41 | 37 | 32 | 28 | 44 | 4.4 | 44 | 44 | 44 | 39 | 35 | 30 | 26 |
| 1400 | 72 | 54 | 4.1 | 35 | 31 | 27 | 23 | 19 | - | - | 53 | 4.5 | 35 | 31 | 27 | 23 | 19 | - | - |
| | 67 | 49 | 4.1 | 42 | 38 | 34 | 30 | 26 | 22 | 19 | 47 | 4.5 | 41 | 38 | 34 | 30 | 26 | 22 | 18 |
| | 62 | 45 | 4.0 | 45 | 45 | 42 | 38 | 34 | 30 | 26 | 43 | 4.4 | 43 | 43 | 41 | 37 | 33 | 29 | 25 |
| | 57 | 44 | 3.9 | 44 | 44 | 43 | 39 | 35 | 31 | 27 | 42 | 4.3 | 42 | 42 | 41 | 37 | 33 | 29 | 25 |
| 1200 | 72 | 52 | 4.1 | 32 | 29 | 25 | 22 | 18 | - | - | 51 | 4.5 | 32 | 28 | 25 | 21 | 18 | - | - |
| | 67 | 47 | 4.1 | 39 | 35 | 32 | 28 | 25 | 21 | 18 | 45 | 4.4 | 38 | 35 | 31 | 28 | 24 | 21 | 17 |
| | 62 | 43 | 4.0 | 43 | 43 | 39 | 36 | 32 | 29 | 25 | 41 | 4.3 | 41 | 41 | 38 | 35 | 31 | 28 | 24 |
| | 57 | 42 | 3.9 | 42 | 42 | 39 | 36 | 32 | 29 | 25 | 41 | 4.3 | 41 | 41 | 38 | 34 | 31 | 27 | 24 |

| Air On Evaporator Coil | | Temperature of Air on Condenser Coil | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 105°F | | | | | | | | | 115°F | | | | | | | | | |
| CFM | WB °F | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | |
| | | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 |
| 2000 | 72 | 56 | 5.1 | 42 | 37 | 31 | 26 | 21 | - | - | 53 | 5.6 | 40 | 35 | 29 | 24 | 19 | - | - |
| | 67 | 49 | 5.0 | 49 | 46 | 40 | 35 | 29 | 24 | 19 | 46 | 5.5 | 46 | 44 | 39 | 33 | 28 | 23 | 17 |
| | 62 | 45 | 4.9 | 45 | 45 | 45 | 39 | 34 | 28 | 23 | 41 | 5.4 | 41 | 41 | 41 | 36 | 30 | 25 | 20 |
| | 57 | 44 | 4.9 | 44 | 44 | 44 | 39 | 33 | 28 | 22 | 41 | 5.4 | 41 | 41 | 41 | 35 | 30 | 25 | 19 |
| 1800 | 72 | 55 | 5.0 | 39 | 34 | 29 | 24 | 20 | - | - | 52 | 5.5 | 38 | 33 | 28 | 23 | 18 | - | - |
| | 67 | 48 | 5.0 | 47 | 43 | 38 | 33 | 28 | 23 | 18 | 45 | 5.4 | 45 | 42 | 37 | 32 | 27 | 22 | 17 |
| | 62 | 43 | 4.9 | 43 | 43 | 43 | 38 | 33 | 28 | 23 | 40 | 5.4 | 40 | 40 | 40 | 35 | 30 | 26 | 21 |
| | 57 | 43 | 4.9 | 43 | 43 | 43 | 38 | 33 | 28 | 23 | 40 | 5.4 | 40 | 40 | 40 | 35 | 30 | 25 | 20 |
| 1600 | 72 | 53 | 5.0 | 36 | 32 | 28 | 23 | 19 | - | - | 51 | 5.5 | 35 | 31 | 26 | 22 | 17 | - | - |
| | 67 | 46 | 4.9 | 44 | 40 | 35 | 31 | 26 | 22 | 17 | 44 | 5.4 | 44 | 39 | 35 | 30 | 26 | 21 | 17 |
| | 62 | 42 | 4.9 | 42 | 42 | 42 | 37 | 33 | 28 | 24 | 39 | 5.3 | 39 | 39 | 39 | 35 | 30 | 26 | 21 |
| | 57 | 41 | 4.8 | 41 | 41 | 41 | 37 | 32 | 28 | 23 | 39 | 5.3 | 39 | 39 | 39 | 34 | 30 | 25 | 21 |
| 1400 | 72 | 51 | 5.0 | 33 | 29 | 26 | 22 | 18 | - | - | 48 | 5.5 | 32 | 28 | 24 | 20 | 16 | - | - |
| | 67 | 44 | 4.9 | 41 | 37 | 33 | 29 | 25 | 21 | 17 | 42 | 5.3 | 40 | 36 | 32 | 28 | 24 | 20 | 16 |
| | 62 | 40 | 4.8 | 40 | 40 | 39 | 35 | 31 | 27 | 23 | 37 | 5.3 | 37 | 37 | 36 | 32 | 28 | 24 | 20 |
| | 57 | 40 | 4.8 | 40 | 40 | 38 | 34 | 30 | 26 | 22 | 37 | 5.3 | 37 | 37 | 36 | 32 | 28 | 24 | 20 |
| 1200 | 72 | 49 | 4.9 | 30 | 27 | 23 | 20 | 16 | - | - | 46 | 5.4 | 29 | 26 | 22 | 19 | 15 | - | - |
| | 67 | 42 | 4.9 | 37 | 34 | 30 | 27 | 23 | 20 | 16 | 39 | 5.3 | 36 | 33 | 29 | 26 | 22 | 19 | 15 |
| | 62 | 38 | 4.8 | 38 | 38 | 36 | 32 | 29 | 25 | 22 | 35 | 5.3 | 35 | 35 | 33 | 29 | 26 | 22 | 19 |
| | 57 | 38 | 4.8 | 38 | 38 | 35 | 32 | 28 | 25 | 21 | 35 | 5.3 | 35 | 35 | 33 | 29 | 26 | 22 | 19 |

[1] These capacities are gross ratings. For net capacity, determine the KW of the supply air blower motor from the Blower Performance Table, multiply this value by 3.415 MBH / KW to determine the motor heat, and deduct this heat from the gross capacity of the unit.

[2] These ratings include the compressor and the condenser fan motors but not the supply air blower motor. The total condenser fan motor power input is 0.36 KW. Refer to the Blower Performance Table for the KW of the supply air blower motor.

NOMINAL RATING

ALL SENSIBLE CAPACITY

# **COOLING CAPACITIES** - 5 TON (DCE / DCG060)

| Air On Evaporator Coil | | Temperature of Air on Condenser Coil | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 85°F | | | | | | | | | 95°F | | | | | | | | |
| CFM | WB °F | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | |
| | | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 |
| 2500 | 72 | 68 | 4.9 | 50 | 44 | 38 | 32 | 25 | - | - | 65 | 5.6 | 50 | 43 | 37 | 31 | 24 | - | - |
| | 67 | 62 | 4.8 | 62 | 56 | 50 | 43 | 37 | 31 | 24 | 60 | 5.3 | 60 | 54 | 48 | 42 | 35 | 29 | 23 |
| | 62 | 57 | 4.7 | 57 | 57 | 57 | 51 | 44 | 38 | 32 | 53 | 5.3 | 53 | 53 | 53 | 47 | 41 | 34 | 28 |
| | 57 | 55 | 4.7 | 55 | 55 | 55 | 48 | 42 | 36 | 29 | 51 | 5.4 | 51 | 51 | 51 | 44 | 38 | 32 | 25 |
| 2250 | 72 | 67 | 4.9 | 48 | 42 | 36 | 30 | 24 | - | - | 65 | 5.4 | 47 | 41 | 35 | 29 | 23 | - | - |
| | 67 | 62 | 4.8 | 59 | 53 | 47 | 41 | 35 | 30 | 24 | 59 | 5.2 | 57 | 51 | 45 | 40 | 34 | 28 | 22 |
| | 62 | 56 | 4.7 | 56 | 56 | 56 | 50 | 45 | 39 | 33 | 53 | 5.2 | 53 | 53 | 53 | 47 | 41 | 35 | 29 |
| | 57 | 54 | 4.7 | 54 | 54 | 54 | 48 | 42 | 36 | 31 | 50 | 5.3 | 50 | 50 | 50 | 44 | 39 | 33 | 27 |
| 2000 | 72 | 66 | 4.9 | 45 | 39 | 34 | 29 | 23 | - | - | 64 | 5.3 | 44 | 39 | 33 | 28 | 22 | - | - |
| | 67 | 61 | 4.8 | 55 | 50 | 44 | 39 | 34 | 28 | 23 | 58 | 5.1 | 54 | 48 | 43 | 38 | 32 | 27 | 22 |
| | 62 | 55 | 4.7 | 55 | 55 | 55 | 50 | 45 | 39 | 34 | 52 | 5.1 | 52 | 52 | 52 | 47 | 42 | 36 | 31 |
| | 57 | 53 | 4.6 | 53 | 53 | 53 | 48 | 42 | 37 | 32 | 50 | 5.2 | 50 | 50 | 50 | 44 | 39 | 34 | 28 |
| 1750 | 72 | 63 | 4.8 | 41 | 36 | 31 | 27 | 22 | - | - | 61 | 5.4 | 40 | 35 | 31 | 26 | 21 | - | - |
| | 67 | 58 | 4.7 | 51 | 46 | 41 | 36 | 32 | 27 | 22 | 56 | 5.1 | 49 | 44 | 39 | 35 | 30 | 25 | 21 |
| | 62 | 53 | 4.6 | 53 | 53 | 51 | 47 | 42 | 37 | 32 | 50 | 5.2 | 50 | 50 | 48 | 43 | 39 | 34 | 29 |
| | 57 | 51 | 4.6 | 51 | 51 | 49 | 44 | 40 | 35 | 30 | 47 | 5.2 | 47 | 47 | 46 | 41 | 36 | 32 | 27 |
| 1500 | 72 | 60 | 4.8 | 37 | 33 | 29 | 25 | 21 | - | - | 58 | 5.4 | 36 | 32 | 28 | 24 | 20 | - | - |
| | 67 | 56 | 4.7 | 46 | 42 | 38 | 34 | 30 | 26 | 21 | 53 | 5.2 | 44 | 40 | 36 | 32 | 28 | 24 | 20 |
| | 62 | 51 | 4.6 | 51 | 51 | 47 | 43 | 39 | 35 | 31 | 47 | 5.2 | 47 | 47 | 44 | 40 | 36 | 32 | 27 |
| | 57 | 49 | 4.6 | 49 | 49 | 45 | 41 | 37 | 33 | 29 | 45 | 5.3 | 45 | 45 | 42 | 38 | 34 | 29 | 25 |

| Air On Evaporator Coil | | Temperature of Air on Condenser Coil | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 105°F | | | | | | | | | 115°F | | | | | | | | |
| CFM | WB °F | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | |
| | | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 |
| 2500 | 72 | 61 | 6.1 | 48 | 41 | 35 | 29 | 22 | - | - | 57 | 6.7 | 46 | 39 | 33 | 27 | 20 | - | - |
| | 67 | 55 | 5.9 | 55 | 52 | 46 | 39 | 33 | 27 | 20 | 50 | 6.6 | 50 | 50 | 43 | 37 | 31 | 24 | 18 |
| | 62 | 49 | 5.9 | 49 | 49 | 49 | 42 | 36 | 30 | 23 | 44 | 6.5 | 44 | 44 | 44 | 38 | 31 | 25 | 19 |
| | 57 | 47 | 5.9 | 47 | 47 | 47 | 40 | 34 | 28 | 21 | 42 | 6.5 | 42 | 42 | 42 | 36 | 30 | 23 | 17 |
| 2250 | 72 | 61 | 6.0 | 45 | 39 | 33 | 28 | 22 | - | - | 57 | 6.6 | 43 | 38 | 32 | 26 | 20 | - | - |
| | 67 | 54 | 5.9 | 53 | 49 | 44 | 38 | 32 | 26 | 20 | 50 | 6.5 | 50 | 47 | 42 | 36 | 30 | 24 | 18 |
| | 62 | 48 | 5.8 | 48 | 48 | 48 | 42 | 37 | 31 | 25 | 44 | 6.4 | 44 | 44 | 44 | 38 | 32 | 26 | 20 |
| | 57 | 46 | 5.8 | 46 | 46 | 46 | 40 | 35 | 29 | 23 | 42 | 6.4 | 42 | 42 | 42 | 36 | 31 | 25 | 19 |
| 2000 | 72 | 60 | 6.0 | 42 | 37 | 32 | 26 | 21 | - | - | 57 | 6.6 | 41 | 36 | 30 | 25 | 20 | - | - |
| | 67 | 54 | 5.8 | 52 | 47 | 41 | 36 | 31 | 25 | 20 | 50 | 6.5 | 50 | 45 | 40 | 34 | 29 | 24 | 18 |
| | 62 | 48 | 5.7 | 48 | 48 | 48 | 43 | 37 | 32 | 27 | 44 | 6.4 | 44 | 44 | 44 | 38 | 33 | 28 | 22 |
| | 57 | 46 | 5.8 | 46 | 46 | 46 | 41 | 35 | 30 | 25 | 42 | 6.3 | 42 | 42 | 42 | 37 | 32 | 26 | 21 |
| 1750 | 72 | 57 | 6.0 | 38 | 34 | 29 | 24 | 19 | - | - | 53 | 6.5 | 37 | 32 | 27 | 23 | 18 | - | - |
| | 67 | 51 | 5.8 | 47 | 42 | 38 | 33 | 28 | 24 | 19 | 46 | 6.4 | 45 | 41 | 36 | 31 | 26 | 22 | 17 |
| | 62 | 45 | 5.7 | 45 | 45 | 44 | 39 | 34 | 30 | 25 | 41 | 6.3 | 41 | 41 | 39 | 35 | 30 | 25 | 21 |
| | 57 | 43 | 5.8 | 43 | 43 | 42 | 37 | 32 | 28 | 23 | 39 | 6.3 | 39 | 39 | 38 | 33 | 29 | 24 | 19 |
| 1500 | 72 | 54 | 6.0 | 34 | 30 | 26 | 22 | 18 | - | - | 49 | 6.5 | 33 | 28 | 24 | 20 | 16 | - | - |
| | 67 | 48 | 5.8 | 42 | 38 | 34 | 30 | 26 | 22 | 18 | 43 | 6.4 | 40 | 36 | 32 | 28 | 24 | 20 | 16 |
| | 62 | 43 | 5.7 | 43 | 43 | 39 | 35 | 31 | 27 | 23 | 38 | 6.3 | 38 | 38 | 35 | 31 | 27 | 23 | 19 |
| | 57 | 41 | 5.8 | 41 | 41 | 38 | 34 | 30 | 26 | 21 | 37 | 6.2 | 37 | 37 | 34 | 30 | 26 | 22 | 18 |

[1] These capacities are gross ratings. For net capacity, determine the KW of the supply air blower motor from the Blower Performance Table, multiply this value by 3.415 MBH / KW to determine the motor heat, and deduct this heat from the gross capacity of the unit.

[2] These ratings include the compressor and the condenser fan motors but not the supply air blower motor. The total condenser fan motor power input is 0.36 KW. Refer to the Blower Performance Table for the KW of the supply air blower motor.

NOMINAL RATING

ALL SENSIBLE CAPACITY

# **COOLING CAPACITIES** - 6 TON (DCE / DCG072)

| Air On Evaporator Coil | | Temperature of Air on Condenser Coil | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 85°F | | | | | | | | 95°F | | | | | | | | | |
| CFM | WB °F | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | |
| | | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 |
| 2700 | 72 | 80 | 5.7 | 63 | 55 | 47 | 40 | 32 | - | - | 77 | 6.3 | 63 | 55 | 47 | 40 | 32 | - | - |
| | 67 | 80 | 5.7 | 76 | 68 | 60 | 53 | 45 | 37 | 30 | 77 | 6.3 | 75 | 68 | 60 | 53 | 45 | 37 | 30 |
| | 62 | 70 | 5.5 | 70 | 70 | 70 | 62 | 55 | 47 | 39 | 71 | 6.3 | 71 | 71 | 71 | 63 | 56 | 48 | 40 |
| | 57 | 68 | 5.6 | 68 | 68 | 68 | 60 | 52 | 45 | 37 | 71 | 6.3 | 71 | 71 | 71 | 63 | 56 | 48 | 40 |
| 2550 | 72 | 82 | 5.7 | 60 | 53 | 46 | 38 | 31 | - | - | 76 | 6.3 | 60 | 53 | 46 | 39 | 31 | - | - |
| | 67 | 82 | 5.7 | 73 | 65 | 58 | 51 | 43 | 36 | 29 | 76 | 6.3 | 73 | 66 | 58 | 51 | 44 | 36 | 29 |
| | 62 | 71 | 5.5 | 71 | 71 | 70 | 62 | 55 | 48 | 41 | 70 | 6.3 | 70 | 70 | 69 | 62 | 55 | 48 | 40 |
| | 57 | 69 | 5.6 | 69 | 69 | 69 | 62 | 55 | 47 | 40 | 70 | 6.3 | 70 | 70 | 70 | 62 | 55 | 48 | 40 |
| 2400 | 72 | 83 | 5.7 | 58 | 51 | 44 | 37 | 30 | - | - | 75 | 6.3 | 58 | 51 | 44 | 37 | 30 | - | - |
| | 67 | 83 | 5.7 | 70 | 63 | 56 | 49 | 42 | 35 | 28 | 75 | 6.3 | 70 | 64 | 57 | 50 | 43 | 36 | 29 |
| | 62 | 73 | 5.5 | 73 | 73 | 70 | 63 | 56 | 49 | 42 | 69 | 6.3 | 69 | 69 | 68 | 61 | 54 | 47 | 40 |
| | 57 | 71 | 5.6 | 71 | 71 | 71 | 64 | 57 | 50 | 43 | 69 | 6.3 | 69 | 69 | 68 | 61 | 54 | 47 | 40 |
| 2100 | 72 | 79 | 5.7 | 54 | 48 | 41 | 35 | 29 | - | - | 73 | 6.3 | 53 | 47 | 41 | 35 | 29 | - | - |
| | 67 | 79 | 5.7 | 65 | 59 | 53 | 47 | 40 | 34 | 28 | 73 | 6.3 | 65 | 59 | 52 | 46 | 40 | 34 | 28 |
| | 62 | 69 | 5.5 | 69 | 69 | 66 | 60 | 54 | 47 | 41 | 67 | 6.3 | 67 | 66 | 63 | 57 | 51 | 45 | 38 |
| | 57 | 67 | 5.6 | 67 | 67 | 67 | 61 | 54 | 48 | 42 | 67 | 6.3 | 67 | 66 | 63 | 57 | 51 | 45 | 39 |
| 1800 | 72 | 74 | 5.6 | 50 | 44 | 39 | 34 | 28 | - | - | 71 | 6.3 | 49 | 43 | 38 | 33 | 27 | - | - |
| | 67 | 74 | 5.6 | 60 | 55 | 50 | 44 | 39 | 34 | 28 | 71 | 6.3 | 59 | 54 | 48 | 43 | 38 | 32 | 27 |
| | 62 | 65 | 5.4 | 65 | 65 | 62 | 57 | 51 | 46 | 41 | 65 | 6.2 | 65 | 63 | 58 | 53 | 47 | 42 | 37 |
| | 57 | 63 | 5.5 | 63 | 63 | 63 | 58 | 52 | 47 | 42 | 65 | 6.3 | 65 | 63 | 58 | 53 | 47 | 42 | 37 |

| Air On Evaporator Coil | | Temperature of Air on Condenser Coil | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 105°F | | | | | | | | 115°F | | | | | | | | | |
| CFM | WB °F | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | | Total Cap.[1] MBH | Power Input[2] KW | Sensible Capacity[1], MBH Entering Dry Bulb, °F | | | | | | |
| | | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 | | | 86 | 83 | 80 | 77 | 74 | 71 | 68 |
| 2700 | 72 | 76 | 7.1 | 61 | 53 | 45 | 38 | 30 | - | - | 75 | 7.9 | 59 | 51 | 43 | 36 | 28 | - | - |
| | 67 | 71 | 7.1 | 70 | 66 | 58 | 50 | 43 | 35 | 27 | 65 | 7.8 | 65 | 64 | 56 | 48 | 41 | 33 | 25 |
| | 62 | 64 | 7.0 | 64 | 64 | 64 | 56 | 49 | 41 | 34 | 57 | 7.8 | 57 | 57 | 57 | 50 | 42 | 34 | 27 |
| | 57 | 64 | 7.0 | 64 | 64 | 64 | 56 | 49 | 41 | 34 | 57 | 7.7 | 57 | 57 | 57 | 50 | 42 | 34 | 27 |
| 2550 | 72 | 76 | 7.1 | 59 | 51 | 44 | 37 | 29 | - | - | 76 | 7.9 | 57 | 49 | 42 | 35 | 27 | - | - |
| | 67 | 71 | 7.1 | 69 | 64 | 56 | 49 | 42 | 34 | 27 | 66 | 7.9 | 66 | 61 | 54 | 47 | 40 | 32 | 25 |
| | 62 | 64 | 7.0 | 64 | 64 | 64 | 56 | 49 | 42 | 35 | 58 | 7.8 | 58 | 58 | 58 | 51 | 43 | 36 | 29 |
| | 57 | 64 | 7.0 | 64 | 64 | 64 | 56 | 49 | 42 | 34 | 58 | 7.7 | 58 | 58 | 58 | 50 | 43 | 36 | 29 |
| 2400 | 72 | 75 | 7.1 | 56 | 49 | 43 | 36 | 29 | - | - | 76 | 8.0 | 55 | 48 | 41 | 34 | 27 | - | - |
| | 67 | 70 | 7.1 | 68 | 61 | 54 | 48 | 41 | 34 | 27 | 66 | 7.9 | 66 | 59 | 52 | 45 | 38 | 32 | 25 |
| | 62 | 64 | 7.0 | 64 | 64 | 63 | 56 | 49 | 42 | 35 | 59 | 7.8 | 59 | 59 | 59 | 52 | 45 | 38 | 31 |
| | 57 | 64 | 7.0 | 64 | 64 | 63 | 56 | 49 | 42 | 35 | 59 | 7.7 | 59 | 59 | 58 | 51 | 44 | 37 | 30 |
| 2100 | 72 | 73 | 7.1 | 52 | 45 | 39 | 33 | 27 | - | - | 73 | 7.9 | 50 | 44 | 37 | 31 | 25 | - | - |
| | 67 | 68 | 7.1 | 63 | 56 | 50 | 44 | 38 | 32 | 26 | 63 | 7.8 | 61 | 54 | 48 | 42 | 36 | 30 | 24 |
| | 62 | 61 | 7.0 | 61 | 61 | 58 | 52 | 46 | 40 | 34 | 56 | 7.7 | 56 | 56 | 54 | 48 | 42 | 35 | 29 |
| | 57 | 61 | 7.0 | 61 | 61 | 58 | 52 | 46 | 40 | 34 | 56 | 7.7 | 56 | 56 | 53 | 47 | 41 | 35 | 29 |
| 1800 | 72 | 70 | 7.1 | 47 | 41 | 36 | 31 | 25 | - | - | 69 | 7.8 | 45 | 40 | 34 | 29 | 23 | - | - |
| | 67 | 65 | 7.0 | 57 | 51 | 46 | 41 | 35 | 30 | 25 | 60 | 7.8 | 55 | 49 | 44 | 39 | 33 | 28 | 23 |
| | 62 | 59 | 7.0 | 59 | 58 | 54 | 48 | 43 | 38 | 32 | 53 | 7.7 | 53 | 53 | 49 | 44 | 39 | 33 | 28 |
| | 57 | 59 | 6.9 | 59 | 58 | 53 | 48 | 43 | 37 | 32 | 53 | 7.6 | 53 | 53 | 49 | 44 | 38 | 33 | 27 |

[1] These capacities are gross ratings. For net capacity, determine the KW of the supply air blower motor from the Blower Performance Table, multiply this value by 3.415 MBH / KW to determine the motor heat, and deduct this heat from the gross capacity of the unit.

[2] These ratings include the compressor and the condenser fan motors but not the supply air blower motor. The total condenser fan motor power input is 0.36 KW. Refer to the Blower Performance Table for the KW of the supply air blower motor.

NOMINAL RATING

ALL SENSIBLE CAPACITY

# **SUPPLY AIR BLOWER PERFORMANCE** - DCG036 & 048 with Belt-Drive

## DCG036 - SIDE DUCT APPLICATIONS (230/460/575 VOLTS)

| MODEL DCG | AIR FLOW CFM | Available External Static Pressure - IWG* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.20 | | 0.30 | | 0.40 | | 0.50 | | 0.60 | | 0.70 | | 0.80 | |
| | | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts |
| 036 | 1700 | 835 | 705 | 880 | 745 | 923 | 795 | 969 | 860 | 1013 | 970 | - | - | - | - |
| | 1600 | 811 | 655 | 854 | 695 | 898 | 740 | 942 | 790 | 986 | 840 | 1029 | 900 | - | - |
| | 1500 | 782 | 610 | 827 | 650 | 871 | 685 | 917 | 730 | 960 | 775 | 1003 | 825 | 1046 | 905 |
| | 1400 | - | - | 798 | 595 | 844 | 640 | 889 | 680 | 932 | 720 | 975 | 765 | 1018 | 790 |
| | 1300 | - | - | - | - | 816 | 590 | 862 | 635 | 907 | 675 | 951 | 715 | 995 | 750 |
| | 1200 | - | - | - | - | - | - | 834 | 585 | 881 | 630 | 927 | 665 | 970 | 705 |
| | 1100 | - | - | - | - | - | - | 809 | 550 | 855 | 590 | 900 | 625 | 942 | 665 |
| | 1000 | - | - | - | - | - | - | 782 | 510 | 829 | 545 | 872 | 858 | 919 | 625 |
| | 900 | - | - | - | - | - | - | - | - | 797 | 500 | 843 | 540 | 890 | 580 |

| MODEL DCG | AIR FLOW CFM | Available External Static Pressure - IWG* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.90 | | 1.00 | | 1.10 | | 1.20 | | 1.30 | | 1.40 | | 1.50 | |
| | | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts |
| 036 | 1700 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 1600 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 1500 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 1400 | 1055 | 875 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 1300 | 1036 | 780 | 1066 | 850 | - | - | - | - | - | - | - | - | - | - |
| | 1200 | 1011 | 735 | 1047 | 765 | 1075 | 800 | - | - | - | - | - | - | - | - |
| | 1100 | 987 | 690 | 1028 | 720 | 1060 | 750 | 1084 | 775 | - | - | - | - | - | - |
| | 1000 | 963 | 655 | 1005 | 680 | 1040 | 695 | 1068 | 715 | 1089 | 735 | - | - | - | - |
| | 900 | 936 | 615 | 980 | 645 | 1020 | 660 | 1050 | 670 | 1053 | 680 | 1090 | 690 | - | - |

NOTE: FOR 208 VOLTS, MULTIPLY VALUES BY 0.95.

*INCLUDES ALLOWANCES FOR A WET EVAPORATOR COIL, 1" FILTERS, AND THE HEAT EXCHANGERS. REFER TO THE STATIC RESISTANCES TABLE FOR RESISTANCE VALUES ON APPLICATIONS OTHER THAN GAS / ELECTRIC UNITS WITH SIDE DUCT AIRFLOWS.

## DCG048 - SIDE DUCT APPLICATIONS (230/460/575 VOLTS)

| MODEL DCG | AIR FLOW CFM | Available External Static Pressure - IWG* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.20 | | 0.30 | | 0.40 | | 0.50 | | 0.60 | | 0.70 | | 0.80 | |
| | | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts |
| 048 | 2000 | 843 | 860 | 880 | 925 | 919 | 1005 | 956 | 1065 | 993 | 1145 | 1030 | 1195 | 1067 | 1235 |
| | 1900 | 817 | 775 | 854 | 850 | 893 | 920 | 930 | 995 | 970 | 1065 | 1008 | 1125 | 1046 | 1170 |
| | 1800 | 790 | 700 | 828 | 760 | 867 | 840 | 906 | 905 | 944 | 980 | 985 | 1040 | 1025 | 1100 |
| | 1700 | - | - | 802 | 670 | 840 | 745 | 881 | 815 | 920 | 900 | 961 | 970 | 1001 | 1030 |
| | 1600 | - | - | - | - | 818 | 665 | 858 | 740 | 898 | 820 | 940 | 890 | 980 | 950 |
| | 1500 | - | - | - | - | - | - | 842 | 695 | 882 | 755 | 922 | 835 | 962 | 895 |
| | 1400 | - | - | - | - | - | - | 833 | 650 | 867 | 705 | 904 | 765 | 942 | 820 |
| | 1300 | - | - | - | - | - | - | - | - | 858 | 665 | 893 | 725 | 932 | 785 |
| | 1200 | - | - | - | - | - | - | - | - | 847 | 640 | 880 | 680 | 916 | 730 |

| MODEL DCG | AIR FLOW CFM | Available External Static Pressure - IWG* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.90 | | 1.00 | | 1.10 | | 1.20 | | 1.30 | | 1.40 | | 1.50 | |
| | | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts |
| 048 | 2000 | 1103 | 1270 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 1900 | 1085 | 1210 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 1800 | 1064 | 1145 | 1102 | 1180 | - | - | - | - | - | - | - | - | - | - |
| | 1700 | 1040 | 1075 | 1081 | 1115 | 1121 | 1140 | - | - | - | - | - | - | - | - |
| | 1600 | 1020 | 1005 | 1060 | 1050 | 1100 | 1085 | - | - | - | - | - | - | - | - |
| | 1500 | 1003 | 945 | 1044 | 995 | 1086 | 1035 | - | - | - | - | - | - | - | - |
| | 1400 | 982 | 880 | 1024 | 920 | 1067 | 965 | 1107 | 1000 | - | - | - | - | - | - |
| | 1300 | 970 | 835 | 1010 | 870 | 1053 | 920 | 1099 | 960 | - | - | - | - | - | - |
| | 1200 | 953 | 780 | 992 | 815 | 1034 | 855 | 1080 | 905 | - | - | - | - | - | - |

NOTE: FOR 208 VOLTS, MULTIPLY VALUES BY 0.95.

*INCLUDES ALLOWANCES FOR A WET EVAPORATOR COIL, 1" FILTERS, AND THE HEAT EXCHANGERS. REFER TO THE STATIC RESISTANCES TABLE FOR RESISTANCE VALUES ON APPLICATIONS OTHER THAN GAS / ELECTRIC UNITS WITH SIDE DUCT AIRFLOWS.

# **SUPPLY AIR BLOWER PERFORMANCE** - DCG060 & 072 with Belt-Drive

## DCG060 - SIDE DUCT APPLICATIONS (230/460/575 VOLTS)

| MODEL DCG | AIR FLOW CFM | Available External Static Pressure - IWG* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.20 | | 0.30 | | 0.40 | | 0.50 | | 0.60 | | 0.70 | | 0.80 | |
| | | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts |
| 060 | 2500 | 1059 | 1560 | 1077 | 1590 | 1095 | 1630 | 1114 | 1650 | 1134 | 1660 | 1158 | 1685 | 1181 | 1720 |
| | 2400 | 1032 | 1405 | 1054 | 1470 | 1074 | 1525 | 1094 | 1560 | 1116 | 1595 | 1140 | 1620 | 1167 | 1640 |
| | 2300 | 1005 | 1260 | 1024 | 1275 | 1049 | 1370 | 1069 | 1440 | 1090 | 1475 | 1116 | 1505 | 1142 | 1535 |
| | 2200 | 980 | 1160 | 1002 | 1170 | 1022 | 1190 | 1044 | 1250 | 1066 | 1350 | 1090 | 1410 | 1117 | 1440 |
| | 2100 | 930 | 1060 | 957 | 1070 | 983 | 1080 | 1010 | 1100 | 1039 | 1160 | 1064 | 1260 | 1092 | 1340 |
| | 2000 | 877 | 950 | 908 | 975 | 941 | 1000 | 976 | 1020 | 1009 | 1050 | 1040 | 1100 | 1070 | 1225 |
| | 1900 | - | - | - | - | 894 | 885 | 940 | 940 | 980 | 980 | 1014 | 1020 | 1047 | 1095 |
| | 1800 | - | - | - | - | 855 | 815 | 903 | 860 | 950 | 905 | 988 | 940 | 1022 | 970 |
| | 1700 | - | - | - | - | - | - | 884 | 815 | 925 | 850 | 964 | 880 | 1001 | 910 |
| | 1600 | - | - | - | - | - | - | 864 | 770 | 908 | 805 | 948 | 835 | 987 | 870 |
| | 1500 | - | - | - | - | - | - | - | - | 882 | 740 | 926 | 780 | 965 | 830 |

| MODEL DCG | AIR FLOW CFM | Available External Static Pressure - IWG* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.90 | | 1.00 | | 1.10 | | 1.20 | | 1.30 | | 1.40 | | 1.50 | |
| | | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts |
| 060 | 2500 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2400 | 1193 | 1665 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2300 | 1170 | 1580 | 1202 | 1620 | - | - | - | - | - | - | - | - | - | - |
| | 2200 | 1148 | 1480 | 1180 | 1530 | - | - | - | - | - | - | - | - | - | - |
| | 2100 | 1121 | 1385 | 1155 | 1425 | 1190 | 1475 | - | - | - | - | - | - | - | - |
| | 2000 | 1100 | 1285 | 1133 | 1340 | 1169 | 1385 | 1205 | 1445 | - | - | - | - | - | - |
| | 1900 | 1079 | 1180 | 1110 | 1240 | 1143 | 1280 | 1178 | 1330 | 1222 | 1375 | - | - | - | - |
| | 1800 | 1058 | 1060 | 1090 | 1135 | 1122 | 1190 | 1158 | 1240 | 1196 | 1295 | - | - | - | - |
| | 1700 | 1035 | 960 | 1071 | 1030 | 1103 | 1100 | 1134 | 1140 | 1164 | 1175 | 1197 | 1205 | - | - |
| | 1600 | 1020 | 900 | 1056 | 965 | 1088 | 1035 | 1118 | 1065 | 1145 | 1105 | 1170 | 1130 | 1198 | 1150 |
| | 1500 | 1004 | 860 | 1038 | 880 | 1070 | 925 | 1101 | 980 | 1130 | 1045 | 1158 | 1075 | 1184 | 1110 |

NOTE: FOR 208 VOLTS, MULTIPLY VALUES BY 0.95.

*INCLUDES ALLOWANCES FOR A WET EVAPORATOR COIL, 1" FILTERS, AND THE HEAT EXCHANGERS. REFER TO THE STATIC RESISTANCES TABLE FOR RESISTANCE VALUES ON APPLICATIONS OTHER THAN GAS / ELECTRIC UNITS WITH SIDE DUCT AIRFLOWS.

## DCG072 - SIDE DUCT APPLICATIONS (230/460/575 VOLTS)

| MODEL DCG | AIR FLOW CFM | Available External Static Pressure - IWG* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.20 | | 0.30 | | 0.40 | | 0.50 | | 0.60 | | 0.70 | | 0.80 | |
| | | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts |
| 072 | 3200 | 1150 | 2325 | 1182 | 2425 | 1212 | 2525 | - | - | - | - | - | - | - | - |
| | 3000 | 1100 | 2010 | 1129 | 2090 | 1157 | 2150 | 1185 | 2225 | 1215 | 2290 | 1242 | 2360 | - | - |
| | 2800 | 1045 | 1700 | 1074 | 1780 | 1102 | 1850 | 1131 | 1940 | 1160 | 2025 | 1190 | 2075 | 1217 | 2130 |
| | 2600 | 985 | 1425 | 1015 | 1475 | 1045 | 1540 | 1075 | 1630 | 1103 | 1715 | 1135 | 1760 | 1163 | 1825 |
| | 2400 | 930 | 1240 | 958 | 1300 | 990 | 1350 | 1020 | 1400 | 1051 | 1430 | 1081 | 1490 | 1111 | 1600 |
| | 2200 | - | - | 905 | 1070 | 933 | 1160 | 965 | 1210 | 997 | 1250 | 1028 | 1285 | 1060 | 1325 |
| | 2000 | - | - | - | - | - | - | 919 | 1025 | 950 | 1100 | 982 | 1130 | 1014 | 1160 |
| | 1800 | - | - | - | - | - | - | - | - | 909 | 925 | 939 | 1005 | 968 | 1030 |

| MODEL DCG | AIR FLOW CFM | Available External Static Pressure - IWG* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.90 | | 1.00 | | 1.10 | | 1.20 | | 1.30 | | 1.40 | | 1.50 | |
| | | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts | RPM | Watts |
| 072 | 3200 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3000 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2800 | 1245 | 2190 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2600 | 1193 | 1920 | 1222 | 1990 | 1250 | 2060 | - | - | - | - | - | - | - | - |
| | 2400 | 1142 | 1675 | 1173 | 1730 | 1205 | 1800 | 1234 | 1885 | - | - | - | - | - | - |
| | 2200 | 1090 | 1380 | 1124 | 1450 | 1155 | 1550 | 1186 | 1640 | 1217 | 1710 | 1249 | 1775 | - | - |
| | 2000 | 1045 | 1175 | 1077 | 1200 | 1109 | 1275 | 1140 | 1360 | 1170 | 1460 | 1205 | 1545 | 1235 | 1600 |
| | 1800 | 998 | 1050 | 1028 | 1060 | 1058 | 1060 | 1087 | 1075 | 1118 | 1150 | 1148 | 1250 | 1176 | 1360 |

NOTE: FOR 208 VOLTS, MULTIPLY VALUES BY 0.95.

*INCLUDES ALLOWANCES FOR A WET EVAPORATOR COIL, 1" FILTERS, AND THE HEAT EXCHANGERS. REFER TO THE STATIC RESISTANCES TABLE FOR RESISTANCE VALUES ON APPLICATIONS OTHER THAN GAS / ELECTRIC UNITS WITH SIDE DUCT AIRFLOWS.

## SUPPLY AIR BLOWER PERFORMANCE - DCG036, 048, 060, 072 with Direct-Drive

GAS HEAT @ 230/460/575 VOLTS - Side Duct Applications

| MODEL DCG | MOTOR SPEED | Available External Static Pressure - IWG* | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.20 | | 0.30 | | 0.40 | | 0.50 | | 0.60 | | 0.70 | | 0.80 | | 0.90 | | 1.00 | |
| | | CFM | Watts | CFM | Watts | CFM | Watts | CFM | Watts | CFM | Watts | CFM | Watts | CFM | Watts | CFM | Watts | CFM | Watts |
| 036 | HI | - | - | - | - | 1699 | 825 | 1650 | 785 | 1570 | 755 | 1430 | 725 | 1360 | 700 | 1280 | 680 | 1180 | 655 |
| | MED | 1684 | 800 | 1631 | 780 | 1582 | 750 | 1524 | 720 | 1410 | 690 | 1324 | 650 | 1260 | 630 | 1185 | 610 | 1100 | 590 |
| | LOW | 1487 | 710 | 1464 | 690 | 1421 | 670 | 1367 | 650 | 1315 | 620 | 1246 | 605 | 1185 | 590 | 1110 | 570 | 1020 | 545 |
| 048 | HI | 1996 | 960 | 1933 | 936 | 1868 | 910 | 1795 | 880 | 1722 | 845 | 1635 | 820 | 1544 | 790 | 1419 | 765 | 1300 | 740 |
| | MED | 1804 | 838 | 1765 | 810 | 1714 | 785 | 1650 | 765 | 1589 | 735 | 1508 | 705 | 1407 | 675 | 1306 | 645 | 1195 | 625 |
| | LOW | 1681 | 760 | 1640 | 738 | 1604 | 715 | 1541 | 695 | 1490 | 670 | 1416 | 645 | 1337 | 620 | 1230 | 595 | 1120 | 575 |
| 060 | HI | 2400 | 1155 | 2338 | 1125 | 2274 | 1095 | 2167 | 1045 | 2096 | 1010 | 1990 | 980 | 1887 | 945 | 1771 | 905 | 1629 | 855 |
| | MED | 2290 | 1105 | 2214 | 1065 | 2145 | 1030 | 2071 | 990 | 1990 | 950 | 1911 | 920 | 1828 | 885 | 1724 | 835 | 1604 | 798 |
| | LOW | 2150 | 1020 | 2100 | 990 | 2029 | 950 | 1965 | 910 | 1905 | 880 | 1816 | 838 | 1724 | 800 | 1644 | 770 | 1531 | 710 |
| 072 | HI | 2461 | 1480 | 2402 | 1440 | 2361 | 1395 | 2260 | 1350 | 2178 | 1305 | 2101 | 1260 | 2000 | 1205 | 1914 | 1155 | 1830 | 1110 |

*INCLUDES ALLOWANCES FOR A WET EVAPORATOR COIL, 1" FILTERS, AND THE HEAT EXCHANGERS. REFER TO THE STATIC RESISTANCES TABLE FOR RESISTANCE VALUES ON APPLICATIONS OTHER THAN GAS / ELECTRIC UNITS WITH SIDE DUCT AIRFLOWS.

NOTE: FOR 208 VOLTS, MULTIPLY VALUES BY 0.95.

# FACTORY-INSTALLED OPTIONS

**ECONOMIZERS:** Units equipped with a factory-installed economizer option have dampers that are positioned by a spring return, fully modulating damper actuator and are capable of introducing up to 100% outdoor air. As the outdoor air intake dampers open, the return air dampers close. The changeover from mechanical refrigeration to economizer operation is determined by a single input electronic enthalpy control or by a dual input electronic enthalpy control. Simultaneous scroll compressor and economizer operation is also possible.

The single enthalpy system contains a sensor that monitors the outdoor air which automatically operates the damper actuator allowing the dampers to open or close.

The dual enthalpy system contains a second sensor that monitors both the temperature and the humidity of the return air in addition to the outdoor air sensor described for a single enthalpy system. The logic module compares the inputs from both sensors and switches to economizer operation whenever the outdoor air is cooler than the return air for maximum efficiency of the economizer system.

The economizer is completely wired and installed at the factory. Only the outdoor air hood, including its filters, need be assembled and installed in the field.

**BELT DRIVE BLOWERS:** Adjustable belt-drive blowers providing maximum flexibility to handle many airflow requirements, are available on all models.

# FIELD-INSTALLED ACCESSORIES

**SINGLE INPUT ELECTRONIC ENTHALPY ECONOMIZER -** Includes a slide-in / plug-in damper assembly with fully modulating spring return motor actuator capable of introducing up to 100% outdoor air, one outdoor air electronic enthalpy sensor and a rain hood with filters. The rain hood is painted to match the basic unit and must be field-assembled before installation. Economizer dampers are 2% low leakage type.

**DUAL INPUT ELECTRONIC ENTHALPY ECONOMIZER -** Includes the same damper system and rain hood with filters as described for a single enthalpy economizer except this accessory contains two enthalpy sensors. It uses a differential enthalpy control that compares the outdoor air versus the return air. The logic module then optimizes the economizer operation for additional savings over the single input economizer.

**MOTORIZED AIR DAMPER** - Includes a slid-in/plug-in damper assembly with a rainhood and filters. The outdoor air dampers open when the indoor fan motor is energized. The damper is capable of providing 0% through 100% of outdoor return air opening.

**MANUAL OUTDOOR DAMPER** - Provides 0% through 35% or 0% through 100% of return air opening (field adjustable). Designed for duct mounted side or bottom supply/return applications. Includes rain hood assembly and filter.

**ELECTRIC HEATERS -** Include nickel chromium elements, a terminal block, fuses (where required by UL), all the necessary connectors and hardware. All heaters utilize single point power supply hookup. Capacities from 5 KW thru 30 KW heating are available.

**FUSE BLOCK KITS -** These kits have a fuse box with a fuse block and fuses. They're available for all 460-3-60 volt heaters and 208/230-3-60 volt heaters 7 KW and smaller.

**OUTDOOR THERMOSTAT -** A 24-volt thermostat providing two stages of control for units equipped with electric heat accessories.

**ROOF CURB -** This 14" high full perimeter roof curb is shipped knocked down for field assembly and contains duct supports that can easily be shifted for the desired unit duct arrangement. No insulated deck is required because the unit underside is insulated.

**START ASSIST KIT -** Provides increased starting torque for single phase units in areas with low voltage conditions. It contains a 12.5 OHM PTCR temperature resistor with a support clip and hardware for mounting.

**LOW AMBIENT KIT -** A low ambient controller maintains stable system operation by reducing the speed of the condenser fan motor when the outdoor temperature is between 45 and 0°F.

**ANTI-RECYCLE TIMER -** A timer to prevent the units scroll compressor from short cycling. It assures a 5-minute off-time between compressor cycles.

**PROPANE CONVERSION KIT -** Converts a gas-fired heater from natural gas to propane. It contains main burner orifices, a pilot orifice and a regulator spring.

**LOW NOx KIT (natural gas furnaces only) -** Contains five stainless steel expanded metal sheets for mounting into the heat exchanger tubes to meet the California low nitrous oxide emission requirements.

**HIGH ALTITUDE CONVERSION (NATURAL AND PROPANE)** - Provides orifices for proper furnace operation at altitudes up to 6000 feet. For propane applications, the propane conversion kit will also be required.

**GAS PIPING** - This kit contains 1/2" pipe nipples, fittings and gas cock (including panel access gaskets) required for bottom gas supply connection with external shut-off.

**OUTDOOR COIL GUARD -** Consists of grille-type sections for installation over the outdoor coil to protect it from damage.

**WALL THERMOSTAT -** The units are designed to operate with 24-volt electronic and electro-mechanical thermostats. All units can operate with single stage heat / single stage cool thermostats - with or without the economizer.

# STATIC RESISTANCES

EXTERNAL STATIC PRESSURE DROP

| DESCRIPTION | | RESISTANCE, IWG CFM | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 |
| Economizer[1, 3] | | 0.07 | 0.08 | 0.09 | 0.11 | 0.13 | 0.15 | 0.17 | 0.20 | 0.23 | 0.26 | 0.30 |
| Electric Heaters[1] | 5 - 15 KW | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.10 | 0.12 | 0.14 | 0.16 | 0.19 | 0.22 |
| | 20 - 30 KW | 0.06 | 0.07 | 0.08 | 0.09 | 0.11 | 0.13 | 0.15 | 0.17 | 0.20 | 0.23 | 0.26 |
| Bottom Duct Connections[1] | | 0.06 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.14 | 0.16 | 0.19 | 0.22 |
| Cooling Only[2] | | 0.08 | 0.10 | 0.12 | 0.14 | 0.16 | 0.18 | 0.20 | 0.23 | 0.26 | 0.29 | 0.32 |

[1]Deduct these resistance values from the available external static pressure shown in the respective Blower Performance Table.
[2]Add these resistance values to the available static resistance in the respective Blower Performance Table.
[3]The pressure thru the economizer is greater for 100% outdoor air than for 100% return air. If the resistance of the return air duct system is less than 0.25 IWG, the unit will deliver less CFM during full economizer operation.

# MOTOR AND DRIVE DATA - Belt-Drive Blower

| MODEL | BLOWER RANGE (RPM) | MOTOR* | | | | ADJUSTABLE MOTOR PULLEY | | FIXED BLOWER PULLEY | | BELT | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | HP | RPM | FRAME SIZE | SERVICE FACTOR | PITCH DIA. (in.) | BORE (in.) | PITCH DIA. (in.) | BORE (in.) | PITCH LENGTH (in.) | DESIG-NATION |
| DCE / DCG 036 | 790 - 1120 | 1½ | 1725 | 56 | 1.15 | 2.4 - 3.4 | ⅞ | 5.7 | 1 | 37.3 | A36 |
| DCE / DCG 048 | 790 - 1120 | 1½ | 1725 | 56 | 1.15 | 2.4 - 3.4 | ⅞ | 5.7 | 1 | 37.3 | A36 |
| DCE / DCG 060 | 850 - 1220 | 1½ | 1725 | 56 | 1.15 | 2.4 - 3.4 | ⅞ | 5.2 | 1 | 37.3 | A36 |
| DCE / DCG 072 | 900 - 1250 | 1½ | 1725 | 56 | 1.15 | 2.8 - 3.8 | ⅞ | 5.2 | 1 | 37.3 | A36 |

*All motors have solid bases and are inherently protected. These motors can be selected to operate into their service factor because they are located in the moving air, upstream of any heating device.

# ELECTRICAL DATA - Basic Units with Direct-Drive

| MODEL DCE DCG | POWER SUPPLY | VOLTAGE LIMITATIONS (SEE NOTE 1) | | SCROLL COMPRESSOR | | COND. FAN MOTOR, FLA | SUPPLY AIR BLOWER MOTOR, FLA | MINIMUM CIRCUIT AMPACITY | MAX. FUSE SIZE, (SEE NOTE 2) AMPS | MAX. HACR BREAKER SIZE, AMPS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | MIN. | MAX. | RLA | LRA | | | | | |
| 036 | 208/230-1-60 | 187 | 253 | 18.0 | 105.0 | 1.3 | 4.4 | 28.2 | 45 | 45 |
| | 208/230-3-60 | 187 | 253 | 11.4 | 90.0 | 1.3 | 4.4 | 20.0 | 30 | 30 |
| | 460-3-60 | 414 | 504 | 6.2 | 45.0 | 0.8 | 2.2 | 10.8 | 15 | 15 |
| | 575-3-60 | 518 | 630 | 5.0 | 36.0 | 0.8 | 2.2 | 9.3 | 15 | - |
| 048 | 208/230-1-60 | 187 | 253 | 24.4 | 140.0 | 1.3 | 5.0 | 36.8 | 60 | 60 |
| | 208/230-3-60 | 187 | 253 | 14.1 | 105.0 | 1.3 | 5.0 | 23.9 | 35 | 35 |
| | 460-3-60 | 414 | 504 | 7.1 | 55.0 | 0.8 | 2.2 | 11.9 | 15 | 15 |
| | 575-3-60 | 518 | 630 | 5.6 | 44.0 | 0.8 | 2.2 | 10.1 | 15 | - |
| 060 | 208/230-1-60 | 187 | 253 | 28.9 | 165.0 | 1.3 | 6.6 | 44.0 | 70 | 70 |
| | 208/230-3-60 | 187 | 253 | 16.0 | 125.0 | 1.3 | 6.6 | 27.9 | 40 | 40 |
| | 460-3-60 | 414 | 504 | 8.0 | 67.0 | 0.8 | 3.3 | 14.1 | 20 | 20 |
| | 575-3-60 | 518 | 630 | 6.4 | 50.0 | 0.8 | 3.3 | 12.1 | 15 | - |
| 072 | 208/230-3-60 | 187 | 253 | 20.3 | 146.0 | 1.3 | 6.8 | 33.5 | 50 | 50 |
| | 460-3-60 | 414 | 504 | 10.2 | 73.0 | 0.8 | 3.6 | 17.2 | 25 | 25 |
| | 575-3-60 | 518 | 630 | 8.2 | 58.4 | 0.8 | 3.6 | 14.7 | 20 | - |

NOTES: 1. Utilization Range "A" in accordance with ARI Standard 110. 2. Dual element, time delay type.

# ELECTRICAL DATA - Basic Units with Belt-Drive

| MODEL DCE DCG | POWER SUPPLY | VOLTAGE LIMITATIONS (SEE NOTE 1) | | SCROLL COMPRESSOR | | COND. FAN MOTOR, FLA | SUPPLY AIR BLOWER MOTOR, FLA | MINIMUM CIRCUIT AMPACITY | MAX. FUSE SIZE, (SEE NOTE 2) AMPS | MAX. HACR BREAKER SIZE, AMPS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | MIN. | MAX. | RLA | LRA | | | | | |
| 036 | 208/230-1-60 | 187 | 253 | 18.0 | 105.0 | 1.3 | 5.3 | 29.1 | 45 | 45 |
| | 208/230-3-60 | 187 | 253 | 11.4 | 90.0 | 1.3 | 5.3 | 20.9 | 30 | 30 |
| | 460-3-60 | 414 | 504 | 6.2 | 45.0 | 0.8 | 3.1 | 11.7 | 15 | 15 |
| | 575-3-60 | 518 | 630 | 5.0 | 36.0 | 0.8 | 3.1 | 10.2 | 15 | - |
| 048 | 208/230-1-60 | 187 | 253 | 24.4 | 140.0 | 1.3 | 8.6 | 40.4 | 60 | 60 |
| | 208/230-3-60 | 187 | 253 | 14.1 | 105.0 | 1.3 | 5.2 | 24.1 | 35 | 35 |
| | 460-3-60 | 414 | 504 | 7.1 | 55.0 | 0.8 | 2.6 | 12.3 | 15 | 15 |
| | 575-3-60 | 518 | 630 | 5.6 | 44.0 | 0.8 | 2.0 | 9.9 | 15 | - |
| 060 | 208/230-1-60 | 187 | 253 | 28.9 | 165.0 | 1.3 | 8.6 | 46.0 | 70 | 70 |
| | 208/230-3-60 | 187 | 253 | 16.0 | 125.0 | 1.3 | 6.0 | 27.3 | 40 | 40 |
| | 460-3-60 | 414 | 504 | 8.0 | 67.0 | 0.8 | 3.0 | 13.8 | 20 | 20 |
| | 575-3-60 | 518 | 630 | 6.4 | 50.0 | 0.8 | 2.4 | 11.2 | 15 | - |
| 072 | 208/230-3-60 | 187 | 253 | 20.3 | 146.0 | 1.3 | 7.3 | 34.0 | 50 | 50 |
| | 460-3-60 | 414 | 504 | 10.2 | 73.0 | 0.8 | 3.7 | 17.3 | 25 | 25 |
| | 575-3-60 | 518 | 630 | 8.2 | 58.4 | 0.8 | 2.8 | 13.9 | 20 | - |

NOTES: 1. Rated in accordance with ARI Standard 110, utilization range "A". 2. Dual element, time delay type.

# **ELECTRICAL DATA** - Cooling / Electric Heating (DCE036 & 048) with Direct-Drive

| MODEL DCE | POWER SUPPLY | HEATER ACCESSORY MODEL NUMBER | SUPPLY AIR BLOWER MOTOR FLA | ELECTRIC HEATERS | | | MINIMUM CIRCUIT AMPACITY | MAX. FUSE SIZE[1] AMPS | MAX. SIZE HACR[2] BREAKER AMPS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | KW | STAGES | TOTAL AMPS | | | |
| 036 | 208-1-60 | 2CE04500506 | 4.4 | 4.0 | 1 | 19.1 | 29.4 | 45 | 45 |
| | | 2CE04500706 | | 5.6 | 1 | 27.1 | 39.4 | 45 | 45 |
| | | 2CE04501006 | | 8.0 | 1 | 38.3 | 53.3 | 60 | 60 |
| | | 2CE04501506 | | 11.9 | 2 | 57.4 | 77.3 | 80 | 80 |
| | | 2CE04502006 | | 15.9 | 2 | 76.6 | 101.2 | 110 | 110 |
| | 230-1-60 | 2CE04500506 | 4.4 | 5.3 | 1 | 22.1 | 33.1 | 45 | 45 |
| | | 2CE04500706 | | 7.5 | 1 | 31.3 | 44.6 | 45 | 45 |
| | | 2CE04501006 | | 10.6 | 1 | 44.2 | 60.7 | 70 | 70 |
| | | 2CE04501506 | | 15.9 | 2 | 66.3 | 88.3 | 90 | 90 |
| | | 2CE04502006 | | 21.2 | 2 | 88.3 | 115.9 | 125 | 125 |
| | 208-3-60 | 2CE04500525* | 4.4 | 4.0 | 1 | 11.0 | 20.0 | 30 | 30 |
| | | 2CE04500725* | | 5.6 | 1 | 15.6 | 25.0 | 30 | 30 |
| | | 2CE04501025 | | 8.0 | 1 | 22.1 | 33.1 | 35 | 35 |
| | | 2CE04501525 | | 11.9 | 2 | 33.1 | 46.9 | 50 | 50 |
| | | 2CE04502025 | | 15.9 | 2 | 44.2 | 60.7 | 70 | 70 |
| | 230-3-60 | 2CE04500525* | 4.4 | 5.3 | 1 | 12.7 | 21.4 | 30 | 30 |
| | | 2CE04500725* | | 7.5 | 1 | 18.0 | 28.1 | 30 | 30 |
| | | 2CE04501025 | | 10.6 | 1 | 25.5 | 37.4 | 40 | 40 |
| | | 2CE04501525 | | 15.9 | 2 | 38.2 | 53.3 | 60 | 60 |
| | | 2CE04502025 | | 21.2 | 2 | 51.0 | 69.2 | 70 | 70 |
| | 460-3-60 | 2CE04500746* | 2.2 | 6.8 | 1 | 8.2 | 13.0 | 15 | 15 |
| | | 2CE04501046* | | 10.1 | 1 | 12.1 | 17.9 | 20 | 20 |
| | | 2CE04501546* | | 13.6 | 1 | 16.4 | 23.2 | 25 | 25 |
| | | 2CE04502046* | | 19.5 | 2 | 23.5 | 32.1 | 35 | 35 |
| | 575-3-60 | 2CE04501058 | 2.2 | 10.6 | 1 | 10.2 | 15.5 | 20 | – |
| | | 2CE04501558 | | 15.9 | 1 | 15.3 | 21.9 | 25 | – |
| | | 2CE04502058 | | 21.2 | 2 | 20.4 | 28.2 | 30 | – |
| 048 | 208-1-60 | 2CE04500506 | 5.0 | 4.0 | 1 | 19.1 | 36.8 | 60 | 60 |
| | | 2CE04500706 | | 5.6 | 1 | 27.1 | 40.1 | 60 | 60 |
| | | 2CE04501006 | | 8.0 | 1 | 38.3 | 54.1 | 60 | 60 |
| | | 2CE04501506 | | 11.9 | 2 | 57.4 | 78.0 | 80 | 80 |
| | | 2CE04502006 | | 15.9 | 2 | 76.6 | 101.9 | 110 | 110 |
| | 230-1-60 | 2CE04500506 | 5.0 | 5.3 | 1 | 22.1 | 36.8 | 60 | 60 |
| | | 2CE04500706 | | 7.5 | 1 | 31.3 | 45.3 | 60 | 60 |
| | | 2CE04501006 | | 10.6 | 1 | 44.2 | 61.5 | 70 | 70 |
| | | 2CE04501506 | | 15.9 | 2 | 66.3 | 89.1 | 90 | 90 |
| | | 2CE04502006 | | 21.2 | 2 | 88.3 | 116.7 | 125 | 125 |
| | 208-3-60 | 2CE04500525* | 5.0 | 4.0 | 1 | 11.0 | 23.9 | 35 | 35 |
| | | 2CE04500725* | | 5.6 | 1 | 15.6 | 25.8 | 35 | 35 |
| | | 2CE04501025 | | 8.0 | 1 | 22.1 | 33.9 | 35 | 35 |
| | | 2CE04501525 | | 11.9 | 2 | 33.1 | 47.7 | 50 | 50 |
| | | 2CE04502025 | | 15.9 | 2 | 44.2 | 61.5 | 70 | 70 |
| | 230-3-60 | 2CE04500525* | 5.0 | 5.3 | 1 | 12.7 | 23.9 | 35 | 35 |
| | | 2CE04500725* | | 7.5 | 1 | 18.0 | 28.8 | 35 | 35 |
| | | 2CE04501025 | | 10.6 | 1 | 25.5 | 38.1 | 40 | 40 |
| | | 2CE04501525 | | 15.9 | 2 | 38.2 | 54.1 | 60 | 60 |
| | | 2CE04502025 | | 21.2 | 2 | 51.0 | 70.0 | 70 | 70 |
| | 460-3-60 | 2CE04500746* | 2.2 | 6.8 | 1 | 8.2 | 13.0 | 15 | 15 |
| | | 2CE04501046* | | 10.1 | 1 | 12.1 | 17.9 | 20 | 20 |
| | | 2CE04501546* | | 13.6 | 1 | 16.4 | 23.2 | 25 | 25 |
| | | 2CE04502046* | | 19.5 | 2 | 23.5 | 32.1 | 35 | 35 |
| | 575-3-60 | 2CE04501058 | 2.2 | 10.6 | 1 | 10.2 | 15.5 | 20 | – |
| | | 2CE04501558 | | 15.9 | 1 | 15.3 | 21.9 | 25 | – |
| | | 2CE04502058 | | 21.2 | 2 | 20.4 | 28.2 | 30 | – |

[1] Dual element, time delay type

[2] Standard circuit breakers may be used in Canada and on applications over 60 amps where the heaters are separately fused.

* These electric heaters DO NOT include a fuse box. If a fuse box is required to meet a local code ((eg., Chicago), the following fuse block accessories are available for field installation.

| | Nominal Voltage | Voltage | KW Cap Multipier |
|---|---|---|---|
| Electric Heat Correction Factors | 208 | 208 | 1.00 |
| | 240 | 230 | 0.92 |
| | 480 | 460 | 0.92 |
| | 600 | 575 | 0.92 |

| | | |
|---|---|---|
| Fuse Block | 2FB04700425 | 208/240 Volts |
| | 2FB04700546 | 460 Volts |

# **ELECTRICAL DATA** - Cooling / Electric Heating (DCE060 & 072) with Direct-Drive

| MODEL DCE | POWER SUPPLY | HEATER ACCESSORY MODEL NUMBER | SUPPLY AIR BLOWER MOTOR FLA | ELECTRIC HEATERS | | | MINIMUM CIRCUIT AMPACITY | MAX. FUSE SIZE[1] AMPS | MAX. SIZE HACR[2] BREAKER AMPS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | KW | STAGES | TOTAL AMPS | | | |
| 060 | 208-1-60 | 2CE04500506 | 6.6 | 4.0 | 1 | 19.1 | 44.0 | 70 | 70 |
| | | 2CE04500706 | | 5.6 | 1 | 27.1 | 44.0 | 70 | 70 |
| | | 2CE04501006 | | 8.0 | 1 | 38.3 | 56.1 | 70 | 70 |
| | | 2CE04501506 | | 11.9 | 2 | 57.4 | 80.0 | 90 | 90 |
| | | 2CE04502006 | | 15.9 | 2 | 76.6 | 103.9 | 110 | 110 |
| | | 2CE04503006 | | 22.2 | 2 | 106.9 | 141.9 | 150 | 150 |
| | 230-1-60 | 2CE04500506 | 6.6 | 5.3 | 1 | 22.1 | 44.0 | 70 | 70 |
| | | 2CE04500706 | | 7.5 | 1 | 31.3 | 47.3 | 70 | 70 |
| | | 2CE04501006 | | 10.6 | 1 | 44.2 | 63.5 | 70 | 70 |
| | | 2CE04501506 | | 15.9 | 2 | 66.3 | 91.1 | 100 | 100 |
| | | 2CE04502006 | | 21.2 | 2 | 88.3 | 118.7 | 125 | 125 |
| | | 2CE04503006 | | 29.6 | 2 | 123.3 | 162.4 | 175 | 175 |
| | 208-3-60 | 2CE04500525* | 6.6 | 4.0 | 1 | 11.0 | 27.9 | 40 | 40 |
| | | 2CE04500725* | | 5.6 | 1 | 15.6 | 27.9 | 40 | 40 |
| | | 2CE04501025 | | 8.0 | 1 | 22.1 | 35.9 | 40 | 40 |
| | | 2CE04501525 | | 11.9 | 2 | 33.1 | 49.7 | 50 | 50 |
| | | 2CE04502025 | | 15.9 | 2 | 44.2 | 63.5 | 70 | 70 |
| | | 2CE04503025 | | 22.2 | 2 | 61.7 | 85.4 | 90 | 90 |
| | 230-3-60 | 2CE04500525* | 6.6 | 5.3 | 1 | 12.7 | 27.9 | 40 | 40 |
| | | 2CE04500725* | | 7.5 | 1 | 18.0 | 30.8 | 40 | 40 |
| | | 2CE04501025 | | 10.6 | 1 | 25.5 | 40.1 | 45 | 45 |
| | | 2CE04501525 | | 15.9 | 2 | 38.2 | 56.1 | 60 | 60 |
| | | 2CE04502025 | | 21.2 | 2 | 51.0 | 72.0 | 80 | 80 |
| | | 2CE04503025 | | 29.6 | 2 | 71.2 | 97.3 | 100 | 100 |
| | 460-3-60 | 2CE04500746* | 3.3 | 6.8 | 1 | 8.2 | 14.3 | 20 | 20 |
| | | 2CE04501046* | | 10.1 | 1 | 12.1 | 19.3 | 20 | 20 |
| | | 2CE04501546* | | 13.6 | 1 | 16.4 | 24.6 | 25 | 25 |
| | | 2CE04502046* | | 19.5 | 2 | 23.5 | 33.4 | 35 | 35 |
| | | 2CE04503046* | | 28.8 | 2 | 34.6 | 47.4 | 50 | 50 |
| | 575-3-60 | 2CE04501058 | 3.3 | 10.6 | 1 | 10.2 | 16.9 | 20 | – |
| | | 2CE04501558 | | 15.9 | 1 | 15.3 | 23.2 | 25 | – |
| | | 2CE04502058 | | 21.2 | 2 | 20.4 | 29.6 | 30 | – |
| | | 2CE04503058 | | 30.4 | 2 | 29.3 | 40.7 | 45 | – |
| 072 | 208-3-60 | 2CE04500525* | 6.8 | 4.0 | 1 | 11.0 | 33.5 | 50 | 50 |
| | | 2CE04500725* | | 5.6 | 1 | 15.6 | 33.5 | 50 | 50 |
| | | 2CE04501025 | | 8.0 | 1 | 22.1 | 36.1 | 50 | 50 |
| | | 2CE04501525 | | 11.9 | 2 | 33.1 | 49.9 | 50 | 50 |
| | | 2CE04502025 | | 15.9 | 2 | 44.2 | 63.7 | 70 | 70 |
| | | 2CE04503025 | | 22.2 | 2 | 61.7 | 85.6 | 90 | 90 |
| | 230-3-60 | 2CE04500525* | 6.8 | 5.3 | 1 | 12.7 | 33.5 | 50 | 50 |
| | | 2CE04500725* | | 7.5 | 1 | 18.0 | 33.5 | 50 | 50 |
| | | 2CE04501025 | | 10.6 | 1 | 25.5 | 40.4 | 50 | 50 |
| | | 2CE04501525 | | 15.9 | 2 | 38.2 | 56.3 | 60 | 60 |
| | | 2CE04502025 | | 21.2 | 2 | 51.0 | 72.2 | 80 | 80 |
| | | 2CE04503025 | | 29.6 | 2 | 71.2 | 97.5 | 100 | 100 |
| | 460-3-60 | 2CE04500746* | 3.6 | 6.8 | 1 | 8.2 | 17.2 | 25 | 25 |
| | | 2CE04501046* | | 10.1 | 1 | 12.1 | 19.7 | 25 | 25 |
| | | 2CE04501546* | | 13.6 | 1 | 16.4 | 24.9 | 25 | 25 |
| | | 2CE04502046* | | 19.5 | 2 | 23.5 | 33.8 | 35 | 35 |
| | | 2CE04503046* | | 28.8 | 2 | 34.6 | 47.8 | 50 | 50 |
| | 575-3-60 | 2CE04501058 | 3.6 | 10.6 | 1 | 10.2 | 17.2 | 20 | – |
| | | 2CE04501558 | | 15.9 | 1 | 15.3 | 23.6 | 25 | – |
| | | 2CE04502058 | | 21.2 | 2 | 20.4 | 30.0 | 30 | – |
| | | 2CE04503058 | | 30.4 | 2 | 29.3 | 41.1 | 45 | – |

[1] Dual element, time delay type

[2] Standard circuit breakers may be used in Canada and on applications over 60 amps where the heaters are separately fused.

* These electric heaters DO NOT include a fuse box. If a fuse box is required to meet a local code ((eg., Chicago), the following fuse block accessories are available for field installation.

| | Nominal Voltage | Voltage | KW Cap Multipier |
|---|---|---|---|
| Electric Heat Correction Factors | 208 | 208 | 1.00 |
| | 240 | 230 | 0.92 |
| | 480 | 460 | 0.92 |
| | 600 | 575 | 0.92 |

| | | |
|---|---|---|
| Fuse Block | 2FB04700425 | 208/240 Volts |
| | 2FB04700546 | 460 Volts |

# **ELECTRICAL DATA** - Cooling / Electric Heating (DCE036 & 048) with Belt-Drive

| MODEL DCE | POWER SUPPLY | HEATER ACCESSORY MODEL NUMBER | SUPPLY AIR BLOWER MOTOR FLA | ELECTRIC HEATERS | | | MINIMUM CIRCUIT AMPACITY | MAX. FUSE SIZE[1] AMPS | MAX. SIZE HACR[2] BREAKER AMPS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | KW | STAGES | TOTAL AMPS | | | |
| 036 | 208-1-60 | 2CE04500506 | 5.3 | 4.0 | 1 | 19.1 | 30.5 | 45 | 45 |
| | | 2CE04500706 | | 5.6 | 1 | 27.1 | 40.5 | 45 | 45 |
| | | 2CE04501006 | | 8.0 | 1 | 38.3 | 54.5 | 60 | 60 |
| | | 2CE04501506 | | 11.9 | 2 | 57.4 | 78.4 | 80 | 80 |
| | | 2CE04502006 | | 15.9 | 2 | 76.6 | 102.3 | 110 | 110 |
| | 230-1-60 | 2CE04500506 | 5.3 | 5.3 | 1 | 22.1 | 34.2 | 45 | 45 |
| | | 2CE04500706 | | 7.5 | 1 | 31.2 | 45.7 | 50 | 50 |
| | | 2CE04501006 | | 10.6 | 1 | 44.2 | 61.8 | 70 | 70 |
| | | 2CE04501506 | | 15.9 | 2 | 66.3 | 89.4 | 90 | 90 |
| | | 2CE04502006 | | 21.2 | 2 | 88.3 | 117.0 | 125 | 125 |
| | 208-3-60 | 2CE04500525* | 5.3 | 4.0 | 1 | 11.0 | 20.9 | 30 | 30 |
| | | 2CE04500725* | | 5.6 | 1 | 15.6 | 26.2 | 30 | 30 |
| | | 2CE04501025 | | 8.0 | 1 | 22.1 | 34.2 | 35 | 35 |
| | | 2CE04501525 | | 11.9 | 2 | 33.1 | 48.1 | 50 | 50 |
| | | 2CE04502025 | | 15.9 | 2 | 44.2 | 61.9 | 70 | 70 |
| | 230-3-60 | 2CE04500525* | 5.3 | 5.3 | 1 | 12.7 | 22.6 | 30 | 30 |
| | | 2CE04500725* | | 7.5 | 1 | 18.0 | 29.2 | 30 | 30 |
| | | 2CE04501025 | | 10.6 | 1 | 25.5 | 38.5 | 40 | 40 |
| | | 2CE04501525 | | 15.9 | 2 | 38.2 | 54.4 | 60 | 60 |
| | | 2CE04502025 | | 21.2 | 2 | 51.0 | 70.4 | 80 | 80 |
| | 460-3-60 | 2CE04500746* | 3.1 | 6.8 | 1 | 8.2 | 14.1 | 15 | 15 |
| | | 2CE04501046* | | 10.1 | 1 | 12.1 | 19.1 | 20 | 20 |
| | | 2CE04501546* | | 13.6 | 1 | 16.4 | 24.3 | 25 | 25 |
| | | 2CE04502046* | | 19.5 | 2 | 23.5 | 33.2 | 35 | 35 |
| | 575-3-60 | 2CE04501058 | 3.1 | 10.6 | 1 | 10.2 | 16.6 | 20 | – |
| | | 2CE04501558 | | 15.9 | 1 | 15.3 | 23.0 | 25 | – |
| | | 2CE04502058 | | 21.2 | 2 | 20.4 | 29.4 | 30 | – |
| 048 | 208-1-60 | 2CE04500506 | 8.6 | 4.0 | 1 | 19.1 | 40.4 | 60 | 60 |
| | | 2CE04500706 | | 5.6 | 1 | 27.1 | 44.6 | 60 | 60 |
| | | 2CE04501006 | | 8.0 | 1 | 38.3 | 58.6 | 60 | 60 |
| | | 2CE04501506 | | 11.9 | 2 | 57.4 | 82.5 | 90 | 90 |
| | | 2CE04502006 | | 15.9 | 2 | 76.6 | 106.4 | 110 | 110 |
| | 230-1-60 | 2CE04500506 | 8.6 | 5.3 | 1 | 22.1 | 40.4 | 60 | 60 |
| | | 2CE04500706 | | 7.5 | 1 | 31.3 | 49.8 | 60 | 60 |
| | | 2CE04501006 | | 10.6 | 1 | 44.2 | 66.0 | 70 | 70 |
| | | 2CE04501506 | | 15.9 | 2 | 66.3 | 93.6 | 100 | 100 |
| | | 2CE04502006 | | 21.2 | 2 | 88.3 | 121.2 | 125 | 125 |
| | 208-3-60 | 2CE04500525* | 5.2 | 4.0 | 1 | 11.0 | 24.1 | 35 | 35 |
| | | 2CE04500725* | | 5.6 | 1 | 15.6 | 26.0 | 35 | 35 |
| | | 2CE04501025 | | 8.0 | 1 | 22.1 | 34.1 | 35 | 35 |
| | | 2CE04501525 | | 11.9 | 2 | 33.1 | 47.9 | 50 | 50 |
| | | 2CE04502025 | | 15.9 | 2 | 44.2 | 61.7 | 70 | 70 |
| | 230-3-60 | 2CE04500525* | 5.2 | 5.3 | 1 | 12.7 | 24.1 | 35 | 35 |
| | | 2CE04500725* | | 7.5 | 1 | 18.0 | 29.1 | 35 | 35 |
| | | 2CE04501025 | | 10.6 | 1 | 25.5 | 38.4 | 40 | 40 |
| | | 2CE04501525 | | 15.9 | 2 | 38.2 | 54.3 | 60 | 60 |
| | | 2CE04502025 | | 21.2 | 2 | 51.0 | 70.2 | 80 | 80 |
| | 460-3-60 | 2CE04500746* | 2.6 | 6.8 | 1 | 8.2 | 13.5 | 15 | 15 |
| | | 2CE04501046* | | 10.1 | 1 | 12.1 | 18.4 | 20 | 20 |
| | | 2CE04501546* | | 13.6 | 1 | 16.4 | 23.7 | 25 | 25 |
| | | 2CE04502046* | | 19.5 | 2 | 23.5 | 32.6 | 35 | 35 |
| | 575-3-60 | 2CE04501058 | 2.0 | 10.6 | 1 | 10.2 | 15.2 | 20 | – |
| | | 2CE04501558 | | 15.9 | 1 | 15.3 | 21.6 | 25 | – |
| | | 2CE04502058 | | 21.2 | 2 | 20.4 | 28.0 | 30 | – |

[1] Dual element, time delay type

[2] Standard circuit breakers may be used in Canada and on applications over 60 amps where the heaters are separately fused.

* These electric heaters DO NOT include a fuse box. If a fuse box is required to meet a local code ((eg., Chicago), the following fuse block accessories are available for field installation.

| | Nominal Voltage | Voltage | KW Cap Multipier |
|---|---|---|---|
| Electric Heat Correction Factors | 208 | 208 | 1.00 |
| | 240 | 230 | 0.92 |
| | 480 | 460 | 0.92 |
| | 600 | 575 | 0.92 |

| | | |
|---|---|---|
| Fuse Block | 2FB04700425 | 208/240 Volts |
| | 2FB04700546 | 460 Volts |

# **ELECTRICAL DATA** - Cooling / Electric Heating (DCE060 & 072) with Belt-Drive

| MODEL DCE | POWER SUPPLY | HEATER ACCESSORY MODEL NUMBER | SUPPLY AIR BLOWER MOTOR FLA | ELECTRIC HEATERS | | | MINIMUM CIRCUIT AMPACITY | MAX. FUSE SIZE[1] AMPS | MAX. SIZE HACR[2] BREAKER AMPS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | KW | STAGES | TOTAL AMPS | | | |
| 060 | 208-1-60 | 2CE04500506 | 8.6 | 4.0 | 1 | 19.1 | 46.0 | 70 | 70 |
| | | 2CE04500706 | | 5.6 | 1 | 27.1 | 46.0 | 70 | 70 |
| | | 2CE04501006 | | 8.0 | 1 | 38.3 | 58.6 | 70 | 70 |
| | | 2CE04501506 | | 11.9 | 2 | 57.4 | 82.5 | 90 | 90 |
| | | 2CE04502006 | | 15.9 | 2 | 76.6 | 106.4 | 110 | 110 |
| | | 2CE04503006 | | 22.2 | 2 | 106.9 | 144.4 | 150 | 150 |
| | 230-1-60 | 2CE04500506 | 8.6 | 5.3 | 1 | 22.1 | 46.0 | 70 | 70 |
| | | 2CE04500706 | | 7.5 | 1 | 31.3 | 49.8 | 70 | 70 |
| | | 2CE04501006 | | 10.6 | 1 | 44.2 | 66.0 | 70 | 70 |
| | | 2CE04501506 | | 15.9 | 2 | 66.3 | 93.6 | 100 | 100 |
| | | 2CE04502006 | | 21.2 | 2 | 88.3 | 121.2 | 125 | 125 |
| | | 2CE04503006 | | 29.6 | 2 | 123.3 | 164.9 | 175 | 175 |
| | 208-3-60 | 2CE04500525* | 6.0 | 4.0 | 1 | 11.0 | 27.3 | 40 | 40 |
| | | 2CE04500725* | | 5.6 | 1 | 15.6 | 27.3 | 40 | 40 |
| | | 2CE04501025 | | 8.0 | 1 | 22.1 | 35.1 | 40 | 40 |
| | | 2CE04501525 | | 11.9 | 2 | 33.1 | 48.9 | 50 | 50 |
| | | 2CE04502025 | | 15.9 | 2 | 44.2 | 62.7 | 70 | 70 |
| | | 2CE04503025 | | 22.2 | 2 | 61.7 | 84.6 | 90 | 90 |
| | 230-3-60 | 2CE04500525* | 6.0 | 5.3 | 1 | 12.7 | 27.3 | 40 | 40 |
| | | 2CE04500725* | | 7.5 | 1 | 18.0 | 30.1 | 40 | 40 |
| | | 2CE04501025 | | 10.6 | 1 | 25.5 | 39.4 | 40 | 40 |
| | | 2CE04501525 | | 15.9 | 2 | 38.2 | 55.3 | 60 | 60 |
| | | 2CE04502025 | | 21.2 | 2 | 51.0 | 71.2 | 80 | 80 |
| | | 2CE04503025 | | 29.6 | 2 | 71.2 | 96.5 | 100 | 100 |
| | 460-3-60 | 2CE04500746* | 3.0 | 6.8 | 1 | 8.2 | 14.0 | 20 | 20 |
| | | 2CE04501046* | | 10.1 | 1 | 12.1 | 18.9 | 20 | 20 |
| | | 2CE04501546* | | 13.6 | 1 | 16.4 | 24.2 | 25 | 25 |
| | | 2CE04502046* | | 19.5 | 2 | 23.5 | 33.1 | 35 | 35 |
| | | 2CE04503046* | | 28.8 | 2 | 34.6 | 47.1 | 50 | 50 |
| | 575-3-60 | 2CE04501058 | 2.4 | 10.6 | 1 | 10.2 | 15.7 | 20 | – |
| | | 2CE04501558 | | 15.9 | 1 | 15.3 | 22.1 | 25 | – |
| | | 2CE04502058 | | 21.2 | 2 | 20.4 | 28.5 | 30 | – |
| | | 2CE04503058 | | 30.4 | 2 | 29.3 | 39.6 | 40 | – |
| 072 | 208-3-60 | 2CE04500525* | 7.3 | 4.0 | 1 | 11.0 | 34.0 | 50 | 50 |
| | | 2CE04500725* | | 5.6 | 1 | 15.6 | 34.0 | 50 | 50 |
| | | 2CE04501025 | | 8.0 | 1 | 22.1 | 36.7 | 50 | 50 |
| | | 2CE04501525 | | 11.9 | 2 | 33.1 | 50.6 | 60 | 60 |
| | | 2CE04502025 | | 15.9 | 2 | 44.2 | 64.4 | 70 | 70 |
| | | 2CE04503025 | | 22.2 | 2 | 61.7 | 86.3 | 90 | 90 |
| | 230-3-60 | 2CE04500525* | 7.3 | 5.3 | 1 | 12.7 | 34.0 | 50 | 50 |
| | | 2CE04500725* | | 7.5 | 1 | 18.0 | 34.0 | 50 | 50 |
| | | 2CE04501025 | | 10.6 | 1 | 25.5 | 41.0 | 50 | 50 |
| | | 2CE04501525 | | 15.9 | 2 | 38.2 | 56.9 | 60 | 60 |
| | | 2CE04502025 | | 21.2 | 2 | 51.0 | 72.9 | 80 | 80 |
| | | 2CE04503025 | | 29.6 | 2 | 71.2 | 98.1 | 100 | 100 |
| | 460-3-60 | 2CE04500746* | 3.7 | 6.8 | 1 | 8.2 | 17.3 | 25 | 25 |
| | | 2CE04501046* | | 10.1 | 1 | 12.1 | 19.8 | 25 | 25 |
| | | 2CE04501546* | | 13.6 | 1 | 16.4 | 25.1 | 30 | 30 |
| | | 2CE04502046* | | 19.5 | 2 | 23.5 | 33.9 | 35 | 35 |
| | | 2CE04503046* | | 28.8 | 2 | 34.6 | 47.9 | 50 | 50 |
| | 575-3-60 | 2CE04501058 | 2.8 | 10.6 | 1 | 10.2 | 16.2 | 20 | – |
| | | 2CE04501558 | | 15.9 | 1 | 15.3 | 22.6 | 25 | – |
| | | 2CE04502058 | | 21.2 | 2 | 20.4 | 29.0 | 30 | – |
| | | 2CE04503058 | | 30.4 | 2 | 29.3 | 40.1 | 45 | – |

[1] Dual element, time delay type

[2] Standard circuit breakers may be used in Canada and on applications over 60 amps where the heaters are separately fused.

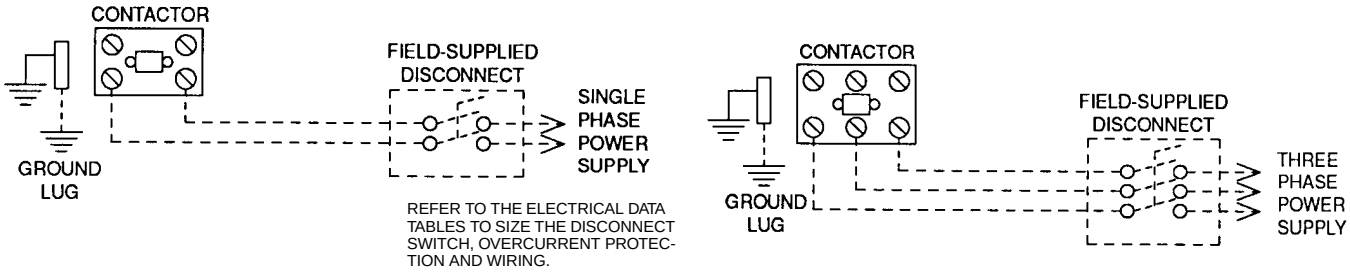
* These electric heaters DO NOT include a fuse box. If a fuse box is required to meet a local code ((eg., Chicago), the following fuse block accessories are available for field installation.

| | Nominal Voltage | Voltage | KW Cap Multipier |
|---|---|---|---|
| Electric Heat Correction Factors | 208 | 208 | 1.00 |
| | 240 | 230 | 0.92 |
| | 480 | 460 | 0.92 |
| | 600 | 575 | 0.92 |

| | | |
|---|---|---|
| Fuse Block | 2FB04700425 | 208/240 Volts |
| | 2FB04700546 | 460 Volts |

# FIELD WIRING

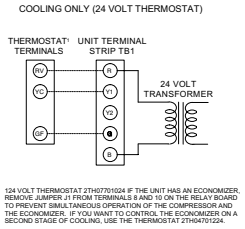
## TYPICAL POWER WIRING




REFER TO THE ELECTRICAL DATA TABLES TO SIZE THE DISCONNECT SWITCH, OVERCURRENT PROTECTION AND WIRING.

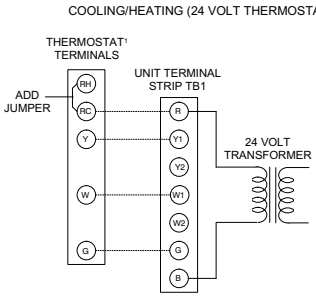
## TYPICAL CONTROL WIRING

### COOLING ONLY (24 VOLT THERMOSTAT)



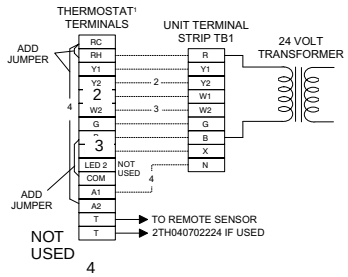

¹24 VOLT THERMOSTAT 2TH07701024 IF THE UNIT HAS AN ECONOMIZER, REMOVE JUMPER J1 FROM TERMINALS 8 AND 10 ON THE RELAY BOARD TO PREVENT SIMULTANEOUS OPERATION OF THE COMPRESSOR AND THE ECONOMIZER. IF YOU WANT TO CONTROL THE ECONOMIZER ON A SECOND STAGE OF COOLING, USE THE THERMOSTAT 2TH0470122 4.

### COOLING / HEATING (24 VOLT THERMOSTAT)




¹24 VOLT THERMOSTAT 2TH07701024. IF THE UNIT HAS AN ECONOMIZER, REMOVE JUMPER J1 FROM TERMINALS 8 AND 10 ON THE RELAY BOARD TO PREVENT SIMULTANEOUS OPERATION OF THE COMPRESSOR AND THE ECONOMIZER. IF YOU WANT TO CONTROL THER ECONOMIZER ON A SECOND STAGE OF COOLING OR HAVE AND ELECTRIC HEAT ACCESSORY WITH TWO STAGES OF HEAT, USE THERMOSTAT 2TH0471024

### COOLING / HEATING (ELECTRONIC THERMOSTAT) MULTI-STAGE



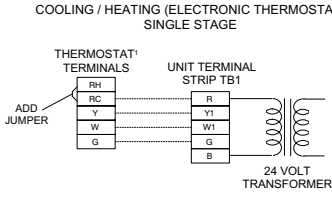

¹ ELECTRONIC PROGRAMMABLE THERMOSTAT 2ET04700224 (INCLUDES SUBBASE)

² SECOND STAGE COOLING IS NOT REQUIRED ON UNITS LESS ECONOMIZER.

³ SECOND STAGE HEATING IS ONLY REQUIRED ON UNITS WITH A TWO STAGE ELECTRIC HEATER.

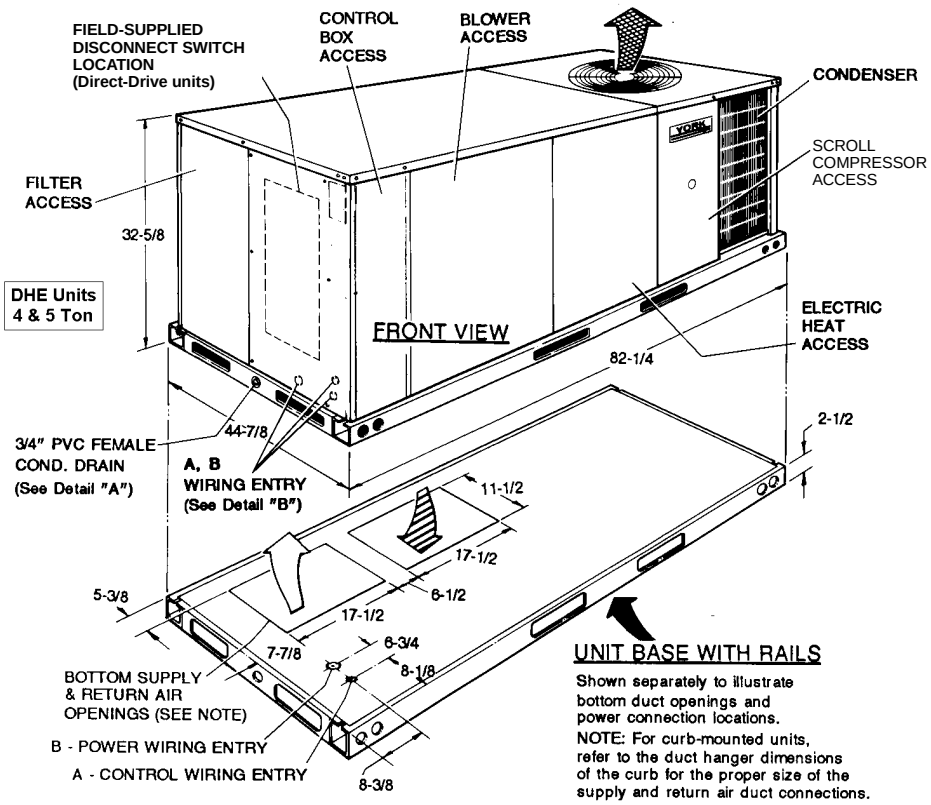
⁴ REMOVE JUMBER J2 FROM TERMINALS 4 AND 9 ON JUMPER PLUG CONNECTOR P6 ON UNITS WITH ECONMIZER. TERMINALS A1 AND A2 PROVIDE A RELAY OUT-PUT TO CLOSE THE OUTDOOR ECONOMIZER DAMPERS WHEN THE THERMOSTAT SWITCHES TO THE SET-BACK POSITION.

### COOLING / HEATING (ELECTRONIC THERMOSTAT) SINGLE STAGE

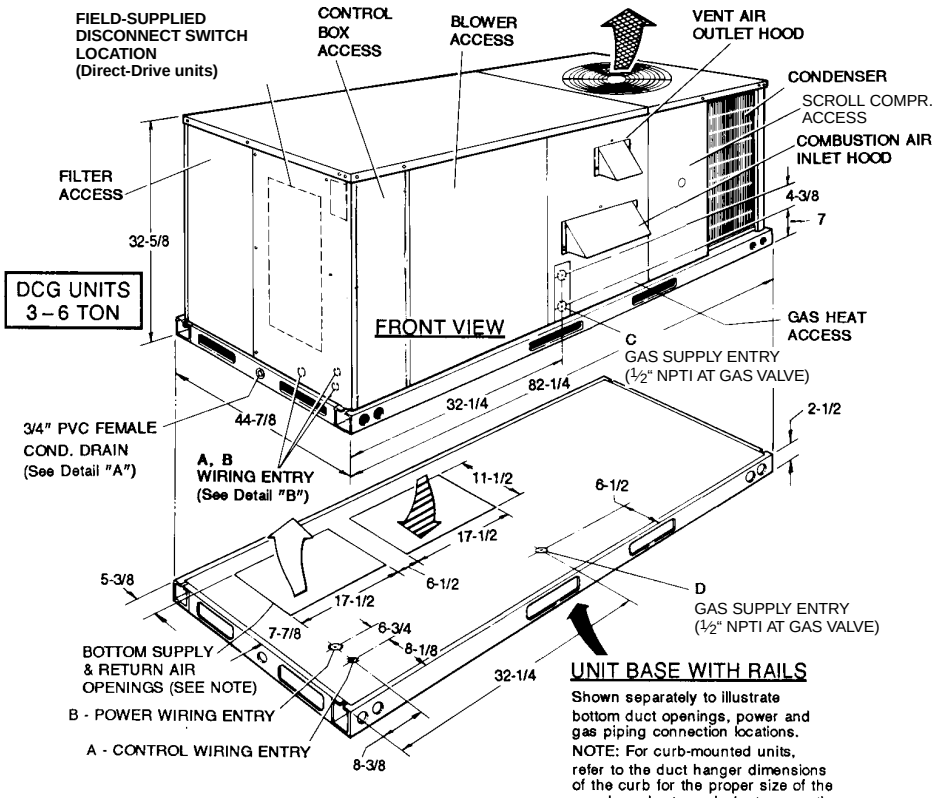


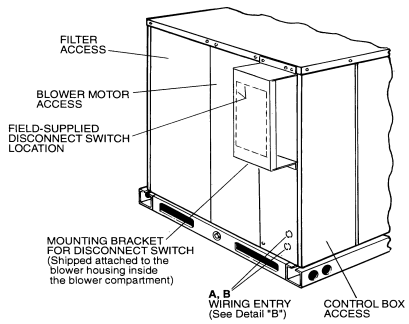

¹ELECTRONIC PROGRAMMABLE THERMOSTAT 2ET07701024 (INCLUDES SUBBASE). IF THIS UNIT HAS AND ECONOMIZER, REMOVE JUMPER J1 FROM TERMINALS 8 AND 10 ON THE RELAY BOARD TO PREVENT SIMULTANEOUS OPERATION OF THE COMPRESSOR AND THE ECONOMIZER. IF YOU WANT TO CONTROL THE ECONOMIZER ON A SECOND STAGE OF COOLING, USE THERMOSTAT 2ET04700224.

# **UNIT DIMENSIONS** (DCE AND DCG - 3, 4, 5 & 6 TON)




All dimensions are in inches. They are subject to change without notice. Certified dimensions will be provided upon request.




DISCONNECT SWITCH LOCATION AND MOTOR ACCESS PANEL FOR UNIT WITH "BELT-DRIVE" OPTION

## UTILITIES ENTRY DATA

| HOLE | KNOCKOUT SIZE (DIA.) | USED FOR |
|---|---|---|
| A | 7/8" * | Control Wiring (Side or Bottom)** |
| B | 2" * | Power Wiring (Side or Bottom) |
| C | 1-5/8" | Gas Piping (Front) |
| D | 1-1/2" | Gas Piping (Bottom) |

*Knockouts in the bottom of the unit can be located by the slice in the insulation.

**Do not remove the 2" knockout ring.

## CLEARANCES

| | | |
|---|---|---|
| Front | DCE Units | 24" |
| | DCG Units | 32" |
| Back | | 12" (Less Economizer) 36" (With Economizer or Fixed Air/Motorized Damper) |
| Left Side (Filter Access) | | 24"(Less Economizer) 36" (With Economizer) |
| Right Side (Cond. Coil) | | 24" |
| Below Unit[1] | | 0" |
| Above Unit[2] | | 72" (For Condenser Air Discharge) |

1 Units may be installed on combustible floors made from wood or class A, B or C roof covering material.

[2] Units must be installed oudoors. Overhanging structures or shrubs should not obstruct condenser air discharge outlet.

NOTES:

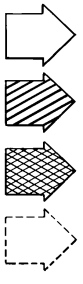
DCE Models: Units and ductwork are approved for zero clearance to combustible materials when equipped with electric heaters.

DCG Models: A 1" clearance must be provided between any combustible material and the supply air ductwork for a distance of 3 feet from the unit.

The products of combustion must not be allowed to accumulate within a confined space and recirculate.

Locate unit so that the vent air outlet hood is at least:

- Three (3) feet above any forced air inlet located within 10 horizontal feet (excluding those integral to the unit).
- Four (4) feet below, 4 horizontal feet from, or 1 foot above any door or gravity air inlet into the building.
- Four (4) feet from electric meters, gas meters, regualtors and relief equipment.



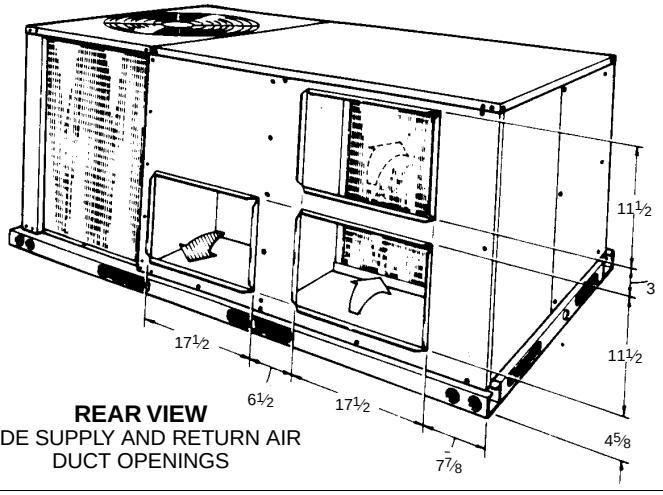
RETURN AIR

SUPPLY AIR

CONDENSER AIR

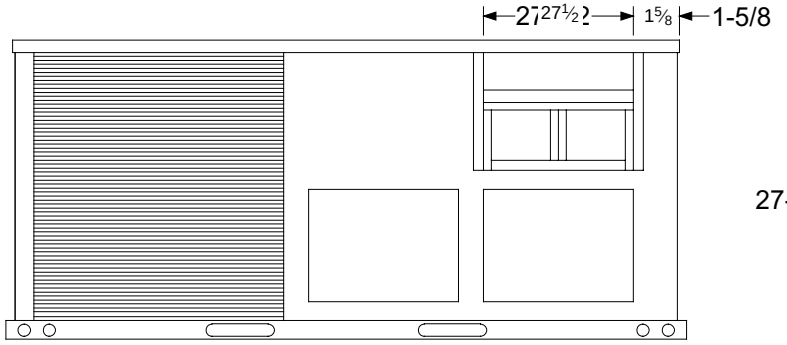
OUTDOOR AIR (Economizer)

# UNIT DIMENSIONS - CONT'D. (DCE and DCG - 3, 4, 5 & 6 TON)

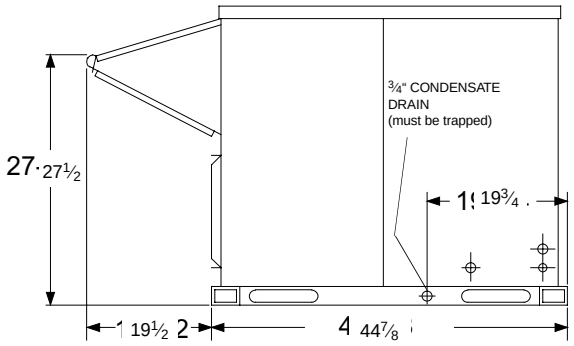



**REAR VIEW**
SIDE SUPPLY AND RETURN AIR
DUCT OPENINGS

DUCT COVERS - Units are shipped with all air duct openings covered.
For side duct applications;
1.Remove and discard the supply and return air duct covers.
2.Connect ductwork to duct flanges on the rear of the unit.
For bottom duct applications;
1. Remove the side supply air duct cover to gain access to the bottom supply air knockout panel.
2. Remove and discard the bottom knockout panel.
3. Replace the side duct cover.
4. With filter section access panel removed from the unit, remove and discard the bottom return air knockout panel.
5. Replace the filter access panel.

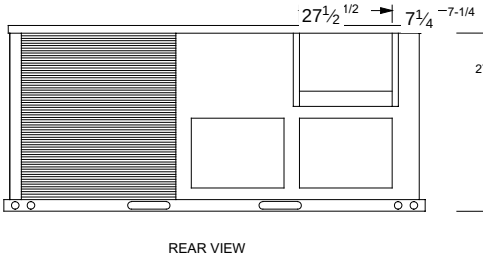



REAR VIEW




L.H. END VIEW

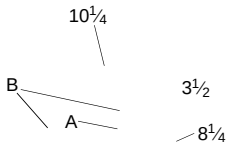
**DETAIL "A"**
**UNIT WITH ECONOMIZER RAINHOOD**




REAR VIEW

L.H. END VIEW

| DIMENSION "A" | |
|---|---|
| FIXED OUTDOOR AIR DAMPER | 12 |
| MOTORIZED DAMPER | 16-1/2 |




REAR VIEW

"A"

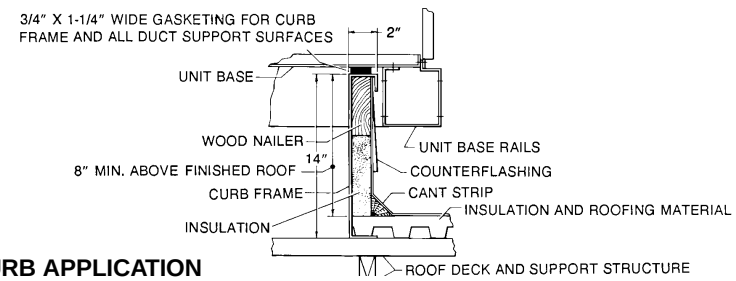
44⅞

4⅜

L.H. END VIEW

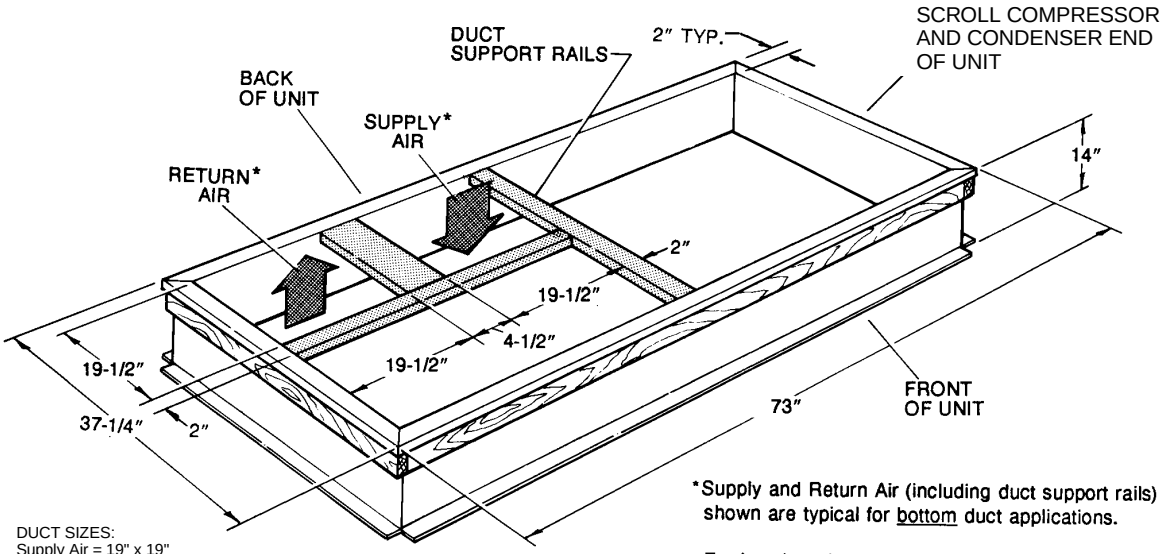
**DETAIL "B"**
**UNIT WITH FIXED OUTDOOR AIR/MOTORIZED DAMPER RAINHOOD**

| DIMENSION "A" | |
|---|---|
| FIXED OUTDOOR AIR DAMPER | 12 |
| MOTORIZED DAMPER | 16½ |




**UNIT AND CURB APPLICATION**

## ROOF CURB DIMENSIONS - (DCE and DCG - 3, 4, 5 & 6 TON)




DUCT SIZES:
Supply Air = 19" x 19"
Return Air = 19" x 19"

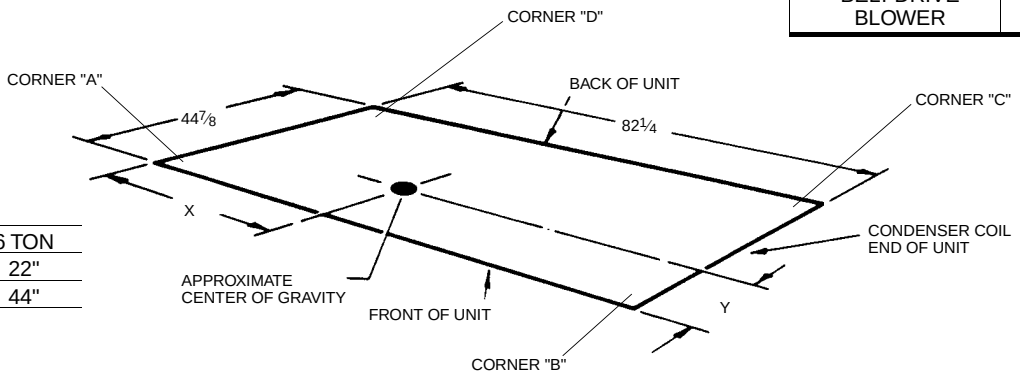
*Supply and Return Air (including duct support rails) shown are typical for bottom duct applications.

For location of horizontal duct applications (on back of unit), refer to Unit Dimension details.

## COMPONENT WEIGHTS AND CENTER OF GRAVITY

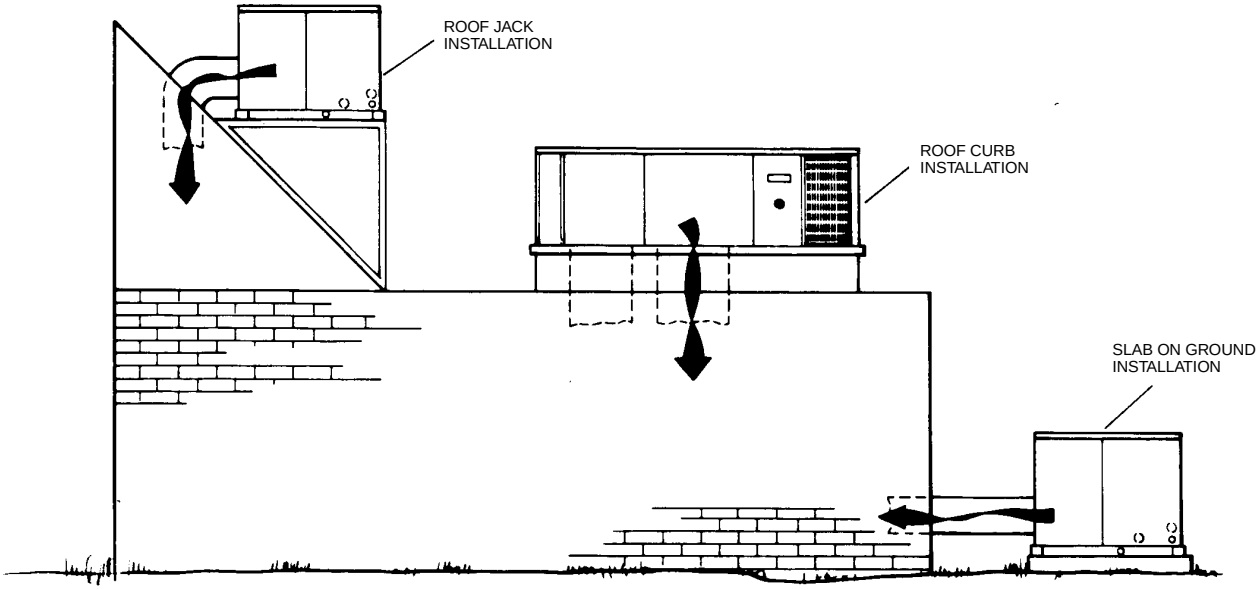
| BASIC UNIT | | | | | | | | | | | | OPTIONS/ACCESSORIES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DCG SIZE (heat) | UNIT WEIGHT* (lbs.) | CORNER WEIGHTS* (location, lbs.) | | | | DCE | UNIT WEIGHT* (lbs.) | CORNER WEIGHTS* (location, lbs.) | | | | DESCRIPTION | WEIGHT (lbs.) |
| | | "A" | "B" | "C" | "D" | | | "A" | "B" | "C" | "D" | | |
| 036 (40 Mbh) | 625 | 180 | 172 | 133 | 140 | 036 | 565 | 160 | 157 | 123 | 125 | ECONIMIZER | 50 |
| 036 (79 Mbh) | 635 | 180 | 177 | 138 | 140 | 048 | 615 | 173 | 170 | 135 | 137 | MOTORIZED OUTDOOR AIR DAMPER | 26 |
| 048 (60 Mbh) | 675 | 193 | 185 | 145 | 152 | 060 | 640 | 180 | 177 | 140 | 143 | | |
| 048 (99 Mbh) | 685 | 193 | 190 | 150 | 152 | 072 | 720 | 171 | 196 | 189 | 164 | ELECTRIC HEAT (nom. KW) DCE only — 5 - 7 KW | 18 |
| 060 (79 Mbh) | 700 | 200 | 192 | 150 | 158 | | | | | | | ELECTRIC HEAT (nom. KW) DCE only — 10 - 15 KW | 23 |
| 060 (99 Mbh) | 710 | 200 | 197 | 155 | 158 | | | | | | | ELECTRIC HEAT (nom. KW) DCE only — 20 - 30 KW | 28 |
| 072 (79 Mbh) | 775 | 186 | 209 | 201 | 179 | | | | | | | ROOF MOUNTING CURB | 92 |
| 072 (99 Mbh) | 785 | 186 | 214 | 206 | 179 | | | | | | | RELIEF/FIXED AIR DAMPER | 10 |
| | | | | | | | | | | | | BELT-DRIVE BLOWER | 5 |

* Weight = Unit + Economizer.

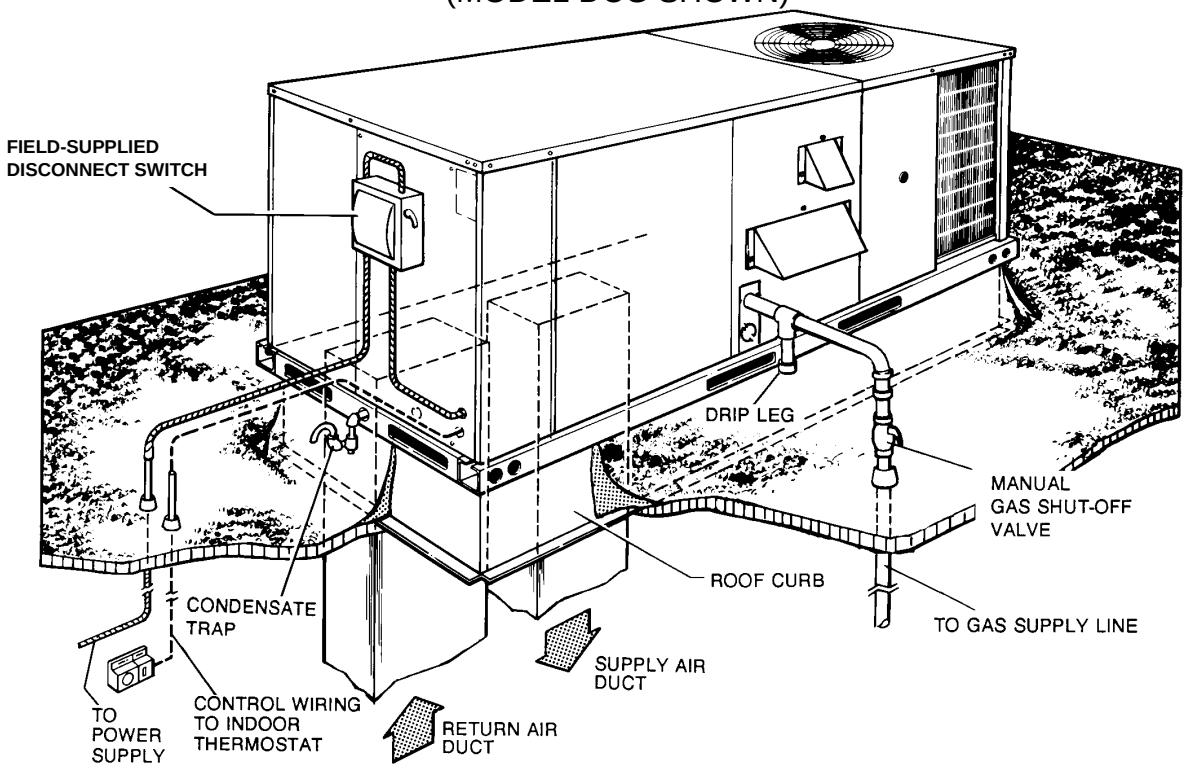



| DIM. | 3 - 5 TON | 6 TON |
|---|---|---|
| Y | 19-3/4" | 22" |
| X | 40-3/4" | 44" |

# TYPICAL APPLICATIONS




TYPICAL ROOF-TOP INSTALLATION
(MODEL DCG SHOWN)



# MECHANICAL SPECIFICATIONS

## GENERAL DESCRIPTION

Units shall be factory-assembled, single packaged, (DCG Electric Cooling/Gas Heat, DCE Electric Cooling/Optional Electric Heat), designed for outdoor mounted installation. Units shall have minimum SEER ratings (036 thru 060) of 10.0 and minimum EER ratings (072) of 9.0. They shall have built in field convertible duct connections for down discharge supply/return or horizontal discharge supply/return, and be available with factory installed options or field installed accessories.

The units shall be factory wired, piped, charged with R-22 refrigerant and factory tested prior to shipment. All unit wiring shall be both numbered and color coded. Enclosed in each unit shall be a factory test log sheet consisting of the unit tested pressures, temperatures and amps, as tested prior to shipment.

All units shall be manufactured in a facility certified to ISO 9001 standards, and the cooling performance shall be rated in accordance with DOE and ARI test procedures. Units shall be UL listed and classified to ANSIZ21.47 standards and UL 1995/CAN/CSA No. 236-M90 conditions.

## UNIT CABINET

1. Unit cabinet shall be constructed of G90 galvanized steel, with exterior surfaces coated with a non-chalking, powered paint finish, certified at 750 hours salt spray test per ASTM-B117 standards.

2. Indoor blower section shall be insulated with up to 1" thick insulation, coated on the air side. Aluminum foil faced insulation shall be used in the furnace compartment and be fastened with ridged fasteners to prevent insulation from entering the air stream.

3. Cabinet panels shall be "large" size, easily removable for servicing and maintenance.

4. Full perimeter base rails shall be provided to assure reliable transit of equipment, overhead rigging, fork truck access and proper sealing on roof curb applications.

5. Disposable 1" filters shall be furnished and be accessible through a removable access door, sealed air tight. Units filter track shall be designed to accommodate either 1" or 2" filters.

6. Fan performance measuring ports shall be provided on the outside of the cabinet to allow accurate air measurements of evaporator fan performance without removing panels or creating air by-pass of the coils.

7. Units vertical discharge and return duct configuration shall be designed to fit between standard 24" O.C. beams without modification to building structure, duct work and base unit.

8. Condensate pan shall be internally sloped and conform to ASHARE 62-89 self-draining standards. Condensate connection shall be a minimum of 3/4" I.D. female and be a ridged mount connection.

## INDOOR (EVAPORATOR) FAN ASSEMBLY

1. Fan shall be direct drive, multi-speed, or a factory installed belt drive, adjustable-pitch motor pulley option. Job site selected (B.H.P.) brake horse power shall not exceed the motors nameplate horse power rating, plus the service factor. Units shall be designed not to operate above service factor.

2. Fan wheel shall be double-inlet type with forward-curved blades, dynamically balanced to operate smoothly throughout the entire range of operation. Airflow design shall be constant air volume.

3. Bearings shall be sealed and permanently lubricated for longer life and no maintenance.

## OUTDOOR (CONDENSER) FAN ASSEMBLY

1. The outdoor fan shall be of the direct-driven propeller type, discharge air vertically, have aluminum blades riveted to corrosion resistant steel spider bracket and shall be dynamically balanced for smooth operation.

2. The outdoor fan motor shall be totally enclosed with permanently lubricated bearings and internally protected against overload conditions.

## REFRIGERANT COMPONENTS

1. Compressors:

   A. Shall be fully hermetic type, advanced scroll design, with patented check valve to eliminate backspin noise at shutdown, internally protected with internal high-pressure relief and over temperature protection. The hermetic motor shall be suction gas cooled and have a voltage range of + or - 10% of the unit nameplate voltage.
   B. Shall have sound muffling to minimize vibration and noise, and be externally isolated on a dedicated, independent mounting.

2. Coils:

   A. Evaporator and condenser coils shall have aluminum plate fins mechanically bonded to seamless internally-enhanced copper tubes with all joints brazed. Special Phenolic coating shall be available as a factory option.
   B. Evaporator and Condenser coils shall be of the direct expansion, draw-thru design.

3. Refrigerant Circuit and Refrigerant Safety Components shall include:

   A. Independent fixed-orifice expansion devices.
   B. Filter drier/strainer to eliminate any moisture or foreign matter.
   C. Accessible service gage connections on both suction and discharge lines to charge, evacuate, and measure refrigerant pressure during any necessary servicing or troubleshooting, without losing charge.
   D. The refrigeration system shall provide at least 15° F of liquid sub-cooling at design conditions.

4. Unit Controls:

   A. Unit shall be complete with self contained low-voltage control circuit protected by a resetable circuit breaker fuse on the 24 volt transformer side.
   B. Unit shall incorporate a lock-out circuit which provides reset capability at the space thermostat or base unit, should any of the following standard safety devices trip and shut off compressor:
      (1) - Loss-of-charge/Low-pressure switch.
      (2) - High-pressure switch.
      (3)- Freeze-protection thermostat, evaporator coil.

If any of the above safety devices trip, an LED (light-emitting diode) indicator shall illuminate.

   C. Unit shall incorporate "AUTO RESET" compressor over temperature, over current protection.
   D. Unit shall operate with conventional thermostat designs and have a low voltage terminal strip for easy hook-up.

**GAS HEATING SECTION** (DCG Models)

1. Shall be designed with induced draft combustion with post purge logic, energy saving direct spark ignition and redundant main gas valve. Ventor wheel shall be constructed of stainless steel for corrosion resistance.

2. The heat exchanger shall be of the tubular type, constructed of T1-40 aluminized steel for corrosion resistance and allowing minimum mixed air entering temperature of 25° F.

3. Burners shall be of the in-shot type, constructed of aluminum coated steel and contain air mixture adjustments.

4. All gas piping shall enter the unit cabinet at a single location, through either the side or bottom, without any field modifications.

5. An integrated control board shall provide timed control of evaporator fan functioning and burner ignition.

6. Heating section shall be provided with the following minimum protection:

   A. Primary and auxiliary high-temperature limit switches.
   B. Induced draft motor speed sensor.
   C. Flame roll out switch (automatic reset).
   D. Flame proving controls.

**ELECTRIC HEATING SECTION** (DCE Models)

1. An electric heating section, with nickel chromium elements, shall be provided in a range of 5 thru 30 KW, offering two stages of capacity - 16 KW and above on 208/230 volt heaters and 20 KW and above on 460 and 575 volt heaters.

2. The heating section shall have a primary limit control(s) and automatic reset, to prevent the heating element system from operating at an excessive temperature.

3. The Heating Section assembly shall slide out of the unit for easy maintenance and service.

4. Units with Electric Heating Sections shall be wired for a single point power supply with branch circuit fusing (where required).

**UNIT OPERATING CHARACTERISTIC**S

1. Unit shall be capable of starting and running at 125° F outdoor temperature, exceeding maximum load criteria of ARI Standard 210/240.

2. The compressor, with standard controls, shall be capable of operation down to 45° F outdoor temperature. Accessory low ambient kit shall be available for operation to 0° F.

3. Unit shall be provided with fan time delay to prevent cold air delivery before heat exchanger warms up. (Gas heat only)

**ELECTRICAL REQUIREMENTS**

All unit power wiring shall enter unit cabinet at a single factory provided location and be capable of side or bottom entry, to minimize roof penetrations and avoid unit field modifications. Separate side and bottom openings shall be provided for the control wiring.

**STANDARD LIMITED WARRANTIES**

Compressor- 5 Years
Heat Exchanger- 10 Years
Elect. Heat. Elem.- 5 Years
Parts - 1 Year

**OPTIONAL OUTDOOR AIR**
(Shall be made available by either/or):

1. ELECTRONIC ENTHALPY AUTOMATIC ECONOMIZER - Outdoor and return air dampers that are interlocked and positioned by a fully-modulating, spring-return damper actuator. The maximum leakage rate for the outdoor air intake dampers shall not exceed 2% when dampers are fully closed and operating against a pressure differential of 0.5 IWG. A unit-mounted potentiometer shall be provided to adjust the outdoor and return air damper assembly to take in CFM of outdoor air to meet the minimum ventilation requirement of the conditioned space during normal operation. During economizer operation, a mixed-air temperature control shall modulate the outdoor and return air damper assembly to prevent the supply air temperature from dropping below 55°F. Changeover from compressor to economizer operation shall be provided by an integral electronic enthalpy control that feeds input into the basic module. The outdoor intake opening shall be covered with a rain hood that matches the exterior of the unit. Water eliminator/filters shall be provided. Simultaneous economizer/compressor operation is also possible. Dampers shall fully close on power loss.

2. DUAL INPUT DIFFERENTIAL ELECTRONIC ENTHALPY AUTOMATIC ECONOMIZER - Outdoor and return air dampers that are interlocked and positioned by a fully-modulating, spring-return damper actuator. The maximum leakage rate for the outdoor air intake dampers shall not exceed 2% when dampers are fully closed and operating against a pressure differential of 0.5 IWG. A unit mounted potentiometer shall be provided to adjust the outdoor and return air damper assembly to take in the design CFM of outdoor air to meet the minimum ventilation requirement of the conditioned space during normal operation. During economizer operation, a mixed-air temperature control shall modulate the outdoor and return air damper assembly to prevent the supply air temperature from dropping below 55°F. Changeover from compressor to economizer operation shall be provided by two integral electronic enthalpy controls - one that senses outdoor air and one that senses indoor air. Both enthalpy sensors supply input to the logic module which modulates both sets of dampers for maximum economizer savings. The outdoor intake opening shall be covered with a rain hood that matches the exterior of the unit. Water eliminator/filters shall be provided. Simultaneous economizer/compressor operation is also possible. Dampers shall fully close on power loss.

**OTHER PRE-ENGINEERED ACCESSORIES AVAILABLE**

1. ROOF CURB - 14” AND 8” high, full perimeter knockdown curb with hinged design for quick assembly.

2. MANUAL OUTDOOR DAMPER - provides 0% through 35% or 0% through 100% outdoor air capability (field adjustable). Designed for duct mounted side supply/return applications. Includes a hood and a screen assembly.

3. OUTDOOR COIL GUARD - Prevents coil damage.

4. BAROMETRIC RELIEF DAMPER - Contains a rain hood, air inlet screen, exhaust damper and mounting hardware. Used to relieve internal air pressure through the unit during economizer operation.

5. PROPANE CONVERSION KIT - Contains new orifices and gas valve regulator to convert from natural to L.P. gas.

6. LOW NOX - Required to reduce the emission of nitrogen oxides below 40 nano grams per joule.

7. HIGH ALTITUDE - NATURAL GAS - Required for applications between 2000 and 6000 feet altitude.
8. HIGH ALTITUDE - PROPANE GAS - Required for applications between 2000 and 6000 feet altitude. Must be used with propane conversion kit.
9. GAS PIPING - Contains 1/2” pipe nipples, fittings and gas cock (including panel assess gaskets) required for bottom gas supply connection with external shut-off.
10. BURGLAR BARS - Designed to work with above roofcurbs. Fits duct openings of curb supply and return air openings.
11. THERMOSTATS - Multiple models available from A.C.O., M.C.O., Electronic or Electrical Mechanical versions.
12. ANTI-RECYCLE TIMER - Assures 5-minute off-time between compressor cycles.
13. LOW AMBIENT KIT - Provides unit cooling operation down to 0°F.
14. ELECTRIC HEAT - Slide-in design, provides single point power and ranges from 5 to 30 KW.

**OTHER FACTORY INSTALLED OPTIONS**

1. HIGH PERFORMANCE BELT DRIVE MOTOR
2. TECHNICOAT PHENOLIC COATED COND. COIL
3. ELECTRONIC ENTHALPY ECONOMIZER
4. DUAL INPUT ELECTRONIC ENTHALPY ECONOMIZER

208/230-1-60 VOLT
MODELS ONLY

208/230, 460 VOLT
MODELS ONLY

208/230, 575 VOLT
MODELS ONLY

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