



# CAE

## Product Specifications

### 6-1/3 and 7-1/2 Ton Split System Air Conditioner (3 Phase) 75 to 89 MBtuh R-22 Refrigerant

#### REFRIGERATION CIRCUIT

- Copeland scroll compressors on all models with single refrigeration circuit.
- CAE075 meets Ashrae 90.1 efficiency standards.
- CAE090 has two stage cooling that provides efficient operation during non-peak periods.
- Copper tube / aluminum fin coil
- High and Low pressure switches
- 0° F Low ambient fan control device
- Crankcase heater for compressor protection in low ambient conditions.

#### BUILT TO LAST

- Triple-coated steel, consisting of a polyester top coat, a urethane primer coat preceded by an oxide pretreatment.
- Enhanced aluminum fins mechanically bonded to copper tubes for improved heat transfer
- Pre-painted fins provide additional corrosion resistance.
- Enhanced inlet grille with 3/8" spacing for extra coil protection.

#### EASY TO INSTALL AND SERVICE

- Easy Access service valves on all models
- External high and low refrigerant service ports

#### WARRANTY

- 5 year compressor limited warranty
- 1 year parts limited warranty



#### UNIT PERFORMANCE DATA (3 Phase - 60 Hz)

| Model Number | COOLING               |       | Voltage - Phase - Hz | Unit Dimensions H x W x D | Shipping Weight |
|--------------|-----------------------|-------|----------------------|---------------------------|-----------------|
|              | Nominal Capacity BTUH | E.E.R |                      |                           |                 |
| CAE075GHC    | 75,000                | 10.3  | 208/230-3-60         | 38-1/2 X 33 X 35          | 337             |
| CAE075GLC    | 75,000                | 10.3  | 460-3-60             | 38-1/2 X 33 X 35          | 337             |
| CAE075GSC    | 75,000                | 10.3  | 575-3-60             | 38-1/2 X 33 X 35          | 337             |
| CAE090GHC    | 89,000                | 9.9   | 208/230-3-60         | 42-1/2 X 33 X 35          | 450             |
| CAE090GLC    | 89,000                | 9.9   | 460-3-60             | 42-1/2 X 33 X 35          | 450             |
| CAE090GSC    | 89,000                | 9.9   | 575-3-60             | 42-1/2 X 33 X 35          | 450             |

NOTE: CAE075 Models are matched with BAC090 / ABC090 Air Handlers.  
CAE090 Models are matched with BAC120 / ABC120 Air Handlers.

|                                                                        | UNIT SPECIFICATIONS - CAE075      |                     |                     |
|------------------------------------------------------------------------|-----------------------------------|---------------------|---------------------|
| Electrical                                                             | CAE075GHC                         | CAE075GLC           | CAE075GSC           |
| Volts / Phase / Hertz                                                  | 208-230/3/60                      | 460/3/60            | 575/3/60            |
| Voltage Min - Max                                                      | 187-253                           | 414-506             | 517-633             |
| Total Unit Amps                                                        | 24.0                              | 12.1                | 8.8                 |
| Min. Circuit Amp.                                                      | 28.7                              | 14.5                | 10.7                |
| Minimum Fuse Size                                                      | 35                                | 20                  | 15                  |
| Max. Fuse                                                              | 45                                | 20                  | 15                  |
| Compressor                                                             |                                   |                     |                     |
| RLA                                                                    | 18.9                              | 9.5                 | 7.6                 |
| LRA                                                                    | 146                               | 73                  | 58                  |
| Type                                                                   | Scroll - SRY752ACO1               | Scroll - SRH752ACO1 | Scroll - SRJ752ACO1 |
| Condenser Fan Data                                                     |                                   |                     |                     |
| Quantity                                                               | 1                                 | 1                   | 1                   |
| Volts/Phase/Hertz                                                      | 208-230/1/60                      | 460/1/60            | 575/1/60            |
| FLA                                                                    | 5.1                               | 2.6                 | 1.2                 |
| LRA                                                                    | 10.3                              | 5.33                | 3.9                 |
| Blades/Diameter/Pitch                                                  | 3/26/28                           | 3/26/28             | 3/26/28             |
| Hp - Rpm - Speeds                                                      | 3/4-1100-1                        | 3/4-1100-1          | 3/4-1140-1          |
| Bearing Type                                                           | Sleeve                            | Sleeve              | Sleeve              |
| Rotation (Shaft End)                                                   | CW                                | CW                  | CW                  |
| Max. CFM                                                               | 5300                              | 5300                | 5300                |
| Condenser Coil                                                         |                                   |                     |                     |
| Rows / Fins per Inch                                                   | 2 / 18                            | 2 / 18              | 2 / 18              |
| Total Face Area-Sq. ft.                                                | 23.58                             | 23.58               | 23.58               |
| Tube Diameter                                                          | 3/8                               | 3/8                 | 3/8                 |
| Refrigerant                                                            |                                   |                     |                     |
| Type                                                                   | R-22                              | R-22                | R-22                |
| Ounces                                                                 | Units Shipped with Holding Charge |                     |                     |
| Approximate Operating Charge - Ounces, Based On BAC Series Air Handler | 317                               |                     |                     |
| Line Size Liquid I.D. (in.)                                            | 1/2                               | 1/2                 | 1/2                 |
| Line Size Suction I.D. (in.)                                           | 1-1/8                             | 1-1/8               | 1-1/8               |
| Controls                                                               |                                   |                     |                     |
| Compressor IPR Valve (psi) Differential                                | 375-450                           | 375-450             | 375-450             |
| High Press. Switch Auto Reset - Open / Close psi                       | 420-300                           | 420-300             | 420-300             |
| Low Press. Switch Auto Reset - Open- Close psi                         | 5 - 20                            | 5 - 20              | 5 - 20              |
| Contactors Amps. (FLA)                                                 | 30                                | 30                  | 30                  |
| Low Ambient Control - Actuation / Release                              | 250 / 100                         | 250 / 100           | 250 / 100           |
| Crankcase Heater Type                                                  | Strap On                          | Strap On            | Strap On            |
| Misc.                                                                  |                                   |                     |                     |
| Shipping Weight                                                        | 337                               | 337                 | 337                 |

| PERFORMANCE DATA COOLING |                                  |     |      |          |                           |                          |
|--------------------------|----------------------------------|-----|------|----------|---------------------------|--------------------------|
| UNIT                     | Rated Capacity Btuh <sup>1</sup> | S/T | EER  | I.P.L.V. | Capacity Stages % Cooling | Evaporator Rated Airflow |
| CAE075                   | 75,000                           | .73 | 10.3 | N/A      | 100                       | 2700 CFM                 |

<sup>1</sup> Net Capacity Ratings based on ARI Test Standards, 95° F Amb. 80° F DB / 67° F WB.

NOTE: CAE075 Models are matched with BAC090 / ABC090 Air Handlers.

| Condensor Capacity Data- CAE075                     |                        |      |      |      |      |      |      |      |      |
|-----------------------------------------------------|------------------------|------|------|------|------|------|------|------|------|
| SATURATED<br>SUCTION<br>TEMP. - °F                  | OUTDOOR TEMPERATURE °F |      |      |      |      |      |      |      |      |
|                                                     | 75                     | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  |
| GROSS CONDENSER CAPACITY (MBTU/HR)                  |                        |      |      |      |      |      |      |      |      |
| 35                                                  | 71                     | 70   | 68   | 66   | 64   | 62   | 61   | 58   | 56   |
| 40                                                  | 79                     | 77   | 75   | 73   | 71   | 69   | 67   | 64   | 62   |
| 45                                                  | 86                     | 84   | 82   | 80   | 78   | 75   | 73   | 70   | 68   |
| 50                                                  | 94                     | 92   | 90   | 87   | 85   | 82   | 80   | 77   | 74   |
| COMPRESSOR & CONDENSER FAN POWER (KW)               |                        |      |      |      |      |      |      |      |      |
| 35                                                  | 4.1                    | 4.3  | 4.5  | 4.7  | 5.0  | 5.2  | 5.5  | 5.8  | 6.1  |
| 40                                                  | 4.7                    | 4.9  | 5.1  | 5.3  | 5.6  | 5.8  | 6.1  | 6.3  | 6.9  |
| 45                                                  | 4.8                    | 5.0  | 5.2  | 5.4  | 5.7  | 5.9  | 6.2  | 6.5  | 6.7  |
| 50                                                  | 4.9                    | 5.1  | 5.3  | 5.6  | 5.8  | 6.1  | 6.3  | 6.6  | 6.9  |
| GROSS EER (GROSS CAPACITY ÷ COMPRESSOR & FAN POWER) |                        |      |      |      |      |      |      |      |      |
| 35                                                  | 17.4                   | 16.2 | 15.1 | 14.0 | 12.9 | 11.9 | 11.0 | 10.1 | 9.3  |
| 40                                                  | 16.8                   | 15.7 | 14.7 | 13.7 | 12.7 | 11.8 | 11.0 | 10.1 | 9.0  |
| 45                                                  | 18.0                   | 16.8 | 15.7 | 14.7 | 13.7 | 12.7 | 11.8 | 10.9 | 10.1 |
| 50                                                  | 19.2                   | 18.0 | 16.8 | 15.7 | 14.6 | 13.6 | 12.6 | 11.7 | 10.8 |

|                                                                |  | UNIT SPECIFICATIONS - CAE090      |                            |                            |
|----------------------------------------------------------------|--|-----------------------------------|----------------------------|----------------------------|
| Electrical                                                     |  | CAE090GHC                         | CAE090GLC                  | CAE090GSC                  |
| Volts / Phase / Hertz                                          |  | 208-230/3/60                      | 460/3/60                   | 575/3/60                   |
| Voltage Min - Max                                              |  | 197-253                           | 414-506                    | 517-633                    |
| Total Unit Amps                                                |  | 32.0                              | 17.3                       | 12.7                       |
| Min. Circuit Amp.                                              |  | 35.4                              | 19.2                       | 14.2                       |
| Minimum Fuse Size                                              |  | 40                                | 25                         | 20                         |
| Max. Fuse                                                      |  | 45                                | 25                         | 20                         |
| Compressor - PER COMPRESSOR                                    |  |                                   |                            |                            |
| RLA                                                            |  | 13.4                              | 7.37                       | 5.77                       |
| LRA                                                            |  | 120.0                             | 49.5                       | 40.0                       |
| Type                                                           |  | Tandem Scroll - ZRT92K3TF5        | Tandem Scroll - ZRT92K3TFD | Tandem Scroll - ZRT92K3TFE |
| Condenser Fan Data                                             |  |                                   |                            |                            |
| Quantity                                                       |  | 1                                 | 1                          | 1                          |
| Volts/Phase/Hertz                                              |  | 208-230/1/60                      | 460/1/60                   | 575/1/60                   |
| FLA                                                            |  | 5.1                               | 2.57                       | 1.2                        |
| LRA                                                            |  | 10.3                              | 5.33                       | 3.9                        |
| Blades/Diameter/Pitch                                          |  | 3/26/28                           | 3/26/28                    | 3/26/28                    |
| Hp - Rpm - Speeds                                              |  | 3/4-1100-1                        | 3/4-1100-1                 | 3/4-1140-1                 |
| Bearing Type                                                   |  | Sleeve                            | Sleeve                     | Sleeve                     |
| Rotation (Shaft End)                                           |  | CW                                | CW                         | CW                         |
| Max. CFM                                                       |  | 5300                              | 5300                       | 5300                       |
| Condenser Coil                                                 |  |                                   |                            |                            |
| Rows / Fins per Inch                                           |  | 2/22                              | 2/22                       | 2/22                       |
| Total Face Area-Sq. ft.                                        |  | 26.19                             | 26.19                      | 26.19                      |
| Tube Diameter                                                  |  | 3/8                               | 3/8                        | 3/8                        |
| Refrigerant                                                    |  |                                   |                            |                            |
| Type                                                           |  | R-22                              | R-22                       | R-22                       |
| Ounces                                                         |  | Units Shipped with Holding Charge |                            |                            |
| Approximate Operating Charge - Ounces, With BAC120 Air Handler |  | 328                               |                            |                            |
| Line Size Liquid O.D. (in.)                                    |  | 5/8                               | 5/8                        | 5/8                        |
| Line Size Suction O.D. (in.)                                   |  | 1-1/8                             | 1-1/8                      | 1-1/8                      |
| Controls                                                       |  |                                   |                            |                            |
| Compressor IPR Valve (psi) Differential                        |  | 375-450                           | 375-450                    | 375-450                    |
| High Press. Switch Auto Reset - Open / Close psi               |  | 420-300                           | 420-300                    | 420-300                    |
| Low Press. Switch Auto Reset - Open- Close psi                 |  | 5 - 20                            | 5 - 20                     | 5 - 20                     |
| Contactor Amps. (Qty. 2)                                       |  | 30 x 2                            | 30 x 2                     | 30 x 2                     |
| Low Ambient Control - Actuation / Release                      |  | 250 / 100                         | 250 / 100                  | 250 / 100                  |
| Crankcase Heater Type                                          |  | Strap On                          | Strap On                   | Strap On                   |
| Misc.                                                          |  |                                   |                            |                            |
| Shipping Weight 9lbs)                                          |  | 450                               | 450                        | 450                        |

| PERFORMANCE DATA COOLING |                                  |     |     |          |                           |                          |
|--------------------------|----------------------------------|-----|-----|----------|---------------------------|--------------------------|
| UNIT                     | Rated Capacity Btuh <sup>1</sup> | S/T | EER | I.P.L.V. | Capacity Stages % Cooling | Evaporator Rated Airflow |
| CAE090                   | 89,000                           | .70 | 9.9 | 12.8     | 50 / 100                  | 3000 SCFM                |

<sup>1</sup> Net Capacity Ratings based on ARI Test Standards, 95° F Amb. 80° F DB / 67° F WB.

NOTE: CAE090 Models are matched with BAC120 / ABC120 Air Handlers.

| Condensor Capacity Data- CAE090                     |                                    |      |      |      |      |      |      |      |     |
|-----------------------------------------------------|------------------------------------|------|------|------|------|------|------|------|-----|
| SATURATED<br>SUCTION<br>TEMP. - °F                  | OUTDOOR TEMPERATURE °F             |      |      |      |      |      |      |      |     |
|                                                     | 75                                 | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115 |
|                                                     | GROSS CONDENSER CAPACITY (MBTU/HR) |      |      |      |      |      |      |      |     |
| 35                                                  | 85                                 | 83   | 80   | 78   | 76   | 74   | 72   | 69   | 67  |
| 40                                                  | 93                                 | 91   | 89   | 86   | 84   | 81   | 79   | 76   | 73  |
| 45                                                  | 102                                | 99   | 97   | 94   | 92   | 89   | 86   | 83   | 80  |
| 50                                                  | 112                                | 109  | 106  | 103  | 100  | 97   | 94   | 91   | 88  |
| COMPRESSOR & CONDENSER FAN POWER (KW)               |                                    |      |      |      |      |      |      |      |     |
| 35                                                  | 5.3                                | 5.6  | 5.8  | 6.1  | 6.4  | 6.8  | 7.1  | 7.5  | 7.8 |
| 40                                                  | 6.1                                | 6.3  | 6.6  | 6.9  | 7.2  | 7.5  | 7.9  | 8.2  | 8.9 |
| 45                                                  | 6.2                                | 6.5  | 6.7  | 7.0  | 7.4  | 7.7  | 8.0  | 8.4  | 8.7 |
| 50                                                  | 6.3                                | 6.6  | 6.9  | 7.2  | 7.5  | 7.9  | 8.2  | 8.5  | 8.9 |
| GROSS EER (GROSS CAPACITY ÷ COMPRESSOR & FAN POWER) |                                    |      |      |      |      |      |      |      |     |
| 35                                                  | 15.9                               | 14.8 | 13.8 | 12.8 | 11.8 | 10.9 | 10.1 | 9.3  | 8.5 |
| 40                                                  | 15.3                               | 14.4 | 13.4 | 12.5 | 11.6 | 10.8 | 10.0 | 9.3  | 8.2 |
| 45                                                  | 16.4                               | 15.4 | 14.4 | 13.4 | 12.5 | 11.6 | 10.8 | 10.0 | 9.2 |
| 50                                                  | 17.6                               | 16.4 | 15.4 | 14.3 | 13.3 | 12.4 | 11.5 | 10.7 | 9.9 |

EXPANDED PERFORMANCE DATA (COOLING)- CAE075 WITH BAC090 - (GROSS CAPACITY, See Notes on bottom page 5)

| IDB* Airflow |      | Outdoor Ambient Temperature - Degrees F. Dry Bulb |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|---------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|              |      | 65                                                |      |      |      | 75   |      |      |      | 85   |      |      |      | 95   |      |      |      | 105  |      |      |      | 115  |      |      |      |      |
|              |      | Entering Indoor Temperature - Degrees F. Wet Bulb |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|              |      | 59                                                | 63   | 67   | 71   | 59   | 63   | 67   | 71   | 59   | 63   | 67   | 71   | 59   | 63   | 67   | 71   | 59   | 63   | 67   | 71   | 59   | 63   | 67   | 71   |      |
| 70           | 3002 | MBh                                               | 76.1 | 78.9 | 86.5 | -    | 74.4 | 77.1 | 84.5 | -    | 72.6 | 75.2 | 82.4 | -    | 70.8 | 73.4 | 80.4 | -    | 67.3 | 69.7 | 76.4 | -    | 62.3 | 64.6 | 70.8 | -    |
|              |      | S/T                                               | 0.73 | 0.61 | 0.42 | -    | 0.76 | 0.63 | 0.44 | -    | 0.78 | 0.65 | 0.45 | -    | 0.80 | 0.67 | 0.47 | -    | 0.83 | 0.70 | 0.48 | -    | 0.84 | 0.70 | 0.49 | -    |
|              |      | KW                                                | 5.0  | 5.1  | 5.2  | -    | 5.4  | 5.5  | 5.7  | -    | 5.7  | 5.9  | 6.1  | -    | 6.1  | 6.2  | 6.4  | -    | 6.4  | 6.5  | 6.7  | -    | 6.6  | 6.8  | 7.0  | -    |
|              | 2680 | MBh                                               | 73.9 | 76.6 | 83.9 | -    | 72.2 | 74.8 | 82.0 | -    | 70.5 | 73.1 | 80.0 | -    | 68.8 | 71.3 | 78.1 | -    | 65.3 | 67.7 | 74.2 | -    | 60.5 | 62.7 | 68.7 | -    |
|              |      | S/T                                               | 0.70 | 0.58 | 0.40 | -    | 0.72 | 0.61 | 0.42 | -    | 0.74 | 0.62 | 0.43 | -    | 0.77 | 0.64 | 0.44 | -    | 0.80 | 0.66 | 0.46 | -    | 0.80 | 0.67 | 0.46 | -    |
|              |      | KW                                                | 4.9  | 5.0  | 5.2  | -    | 5.3  | 5.5  | 5.6  | -    | 5.7  | 5.8  | 6.0  | -    | 6.0  | 6.2  | 6.4  | -    | 6.3  | 6.4  | 6.7  | -    | 6.5  | 6.7  | 6.9  | -    |
|              | 2358 | MBh                                               | 70.2 | 72.8 | 79.7 | -    | 68.6 | 71.1 | 77.9 | -    | 67.0 | 69.4 | 76.0 | -    | 65.3 | 67.7 | 74.2 | -    | 62.1 | 64.3 | 70.5 | -    | 57.5 | 59.6 | 65.3 | -    |
|              |      | S/T                                               | 0.67 | 0.56 | 0.39 | -    | 0.69 | 0.58 | 0.40 | -    | 0.71 | 0.59 | 0.41 | -    | 0.73 | 0.61 | 0.43 | -    | 0.76 | 0.64 | 0.44 | -    | 0.77 | 0.64 | 0.44 | -    |
|              |      | KW                                                | 4.8  | 4.9  | 5.1  | -    | 5.2  | 5.4  | 5.5  | -    | 5.6  | 5.7  | 5.9  | -    | 5.9  | 6.1  | 6.3  | -    | 6.2  | 6.3  | 6.6  | -    | 6.4  | 6.6  | 6.8  | -    |
| 75           | 3002 | MBh                                               | 77.4 | 79.7 | 86.3 | 92.6 | 75.6 | 77.9 | 84.3 | 90.5 | 73.8 | 76.0 | 82.3 | 88.3 | 72.0 | 74.2 | 80.3 | 86.2 | 68.4 | 70.5 | 76.3 | 81.8 | 63.4 | 65.3 | 70.6 | 75.8 |
|              |      | S/T                                               | 0.83 | 0.75 | 0.56 | 0.36 | 0.86 | 0.77 | 0.58 | 0.38 | 0.89 | 0.79 | 0.60 | 0.39 | 0.91 | 0.82 | 0.62 | 0.40 | 0.95 | 0.85 | 0.64 | 0.41 | 0.96 | 0.86 | 0.65 | 0.42 |
|              |      | KW                                                | 5.0  | 5.1  | 5.3  | 5.5  | 5.4  | 5.5  | 5.7  | 6.0  | 5.8  | 5.9  | 6.1  | 6.4  | 6.1  | 6.3  | 6.5  | 6.7  | 6.4  | 6.6  | 6.8  | 7.0  | 6.7  | 6.8  | 7.1  | 7.3  |
|              | 2680 | MBh                                               | 75.2 | 77.4 | 83.8 | 89.9 | 73.4 | 75.6 | 81.8 | 87.8 | 71.7 | 73.8 | 79.9 | 85.7 | 69.9 | 72.0 | 77.9 | 83.6 | 66.4 | 68.4 | 74.0 | 79.5 | 61.5 | 63.4 | 68.6 | 73.6 |
|              |      | S/T                                               | 0.79 | 0.71 | 0.54 | 0.35 | 0.82 | 0.74 | 0.56 | 0.36 | 0.84 | 0.76 | 0.57 | 0.37 | 0.87 | 0.78 | 0.59 | 0.38 | 0.90 | 0.81 | 0.61 | 0.39 | 0.91 | 0.82 | 0.62 | 0.40 |
|              |      | KW                                                | 5.0  | 5.1  | 5.2  | 5.4  | 5.4  | 5.5  | 5.7  | 5.9  | 5.7  | 5.9  | 6.1  | 6.3  | 6.1  | 6.2  | 6.4  | 6.7  | 6.4  | 6.5  | 6.7  | 7.0  | 6.6  | 6.8  | 7.0  | 7.3  |
|              | 2358 | MBh                                               | 71.4 | 73.5 | 79.6 | 85.4 | 69.8 | 71.8 | 77.7 | 83.4 | 68.1 | 70.1 | 75.9 | 81.4 | 66.4 | 68.4 | 74.0 | 79.5 | 63.1 | 65.0 | 70.3 | 75.5 | 58.5 | 60.2 | 65.2 | 69.9 |
|              |      | S/T                                               | 0.76 | 0.68 | 0.52 | 0.33 | 0.79 | 0.71 | 0.53 | 0.34 | 0.81 | 0.72 | 0.55 | 0.35 | 0.84 | 0.75 | 0.57 | 0.36 | 0.87 | 0.78 | 0.59 | 0.38 | 0.87 | 0.78 | 0.59 | 0.38 |
|              |      | KW                                                | 4.9  | 5.0  | 5.2  | 5.3  | 5.3  | 5.4  | 5.6  | 5.8  | 5.6  | 5.8  | 6.0  | 6.2  | 6.0  | 6.1  | 6.3  | 6.6  | 6.2  | 6.4  | 6.6  | 6.9  | 6.5  | 6.6  | 6.9  | 7.1  |
| 80           | 3002 | MBh                                               | 78.8 | 80.5 | 86.0 | 92.0 | 77.0 | 78.7 | 84.0 | 89.8 | 75.1 | 76.8 | 82.0 | 87.7 | 73.3 | 74.9 | 80.0 | 85.6 | 69.6 | 71.2 | 76.0 | 81.3 | 64.5 | 65.9 | 70.4 | 75.3 |
|              |      | S/T                                               | 0.91 | 0.86 | 0.70 | 0.52 | 0.95 | 0.89 | 0.72 | 0.54 | 1.00 | 0.91 | 0.74 | 0.55 | 1.00 | 0.94 | 0.77 | 0.57 | 1.00 | 1.00 | 0.79 | 0.59 | 1.00 | 1.00 | 0.80 | 0.60 |
|              |      | KW                                                | 5.0  | 5.2  | 5.3  | 5.5  | 5.5  | 5.6  | 5.8  | 6.0  | 5.8  | 6.0  | 6.2  | 6.4  | 6.2  | 6.3  | 6.6  | 6.8  | 6.5  | 6.6  | 6.9  | 7.1  | 6.7  | 6.9  | 7.1  | 7.4  |
|              | 2680 | MBh                                               | 76.5 | 78.2 | 83.5 | 89.3 | 74.7 | 76.4 | 81.6 | 87.2 | 73.0 | 74.5 | 79.6 | 85.1 | 71.2 | 72.7 | 77.7 | 83.1 | 67.6 | 69.1 | 73.8 | 78.9 | 62.6 | 64.0 | 68.4 | 73.1 |
|              |      | S/T                                               | 0.87 | 0.82 | 0.67 | 0.50 | 0.90 | 0.85 | 0.69 | 0.52 | 0.93 | 0.87 | 0.71 | 0.53 | 0.96 | 0.90 | 0.73 | 0.55 | 0.99 | 0.93 | 0.76 | 0.57 | 1.00 | 0.94 | 0.76 | 0.57 |
|              |      | KW                                                | 5.0  | 5.1  | 5.3  | 5.5  | 5.4  | 5.5  | 5.7  | 6.0  | 5.8  | 5.9  | 6.1  | 6.4  | 6.1  | 6.3  | 6.5  | 6.7  | 6.4  | 6.6  | 6.8  | 7.0  | 6.7  | 6.8  | 7.1  | 7.3  |
|              | 2358 | MBh                                               | 72.7 | 74.3 | 79.4 | 84.8 | 71.0 | 72.5 | 77.5 | 82.9 | 69.3 | 70.8 | 75.7 | 80.9 | 67.6 | 69.1 | 73.8 | 78.9 | 64.2 | 65.6 | 70.1 | 75.0 | 59.5 | 60.8 | 65.0 | 69.4 |
|              |      | S/T                                               | 0.84 | 0.78 | 0.64 | 0.48 | 0.87 | 0.81 | 0.66 | 0.49 | 0.89 | 0.83 | 0.68 | 0.51 | 0.92 | 0.86 | 0.70 | 0.52 | 0.95 | 0.89 | 0.73 | 0.54 | 0.96 | 0.90 | 0.73 | 0.55 |
|              |      | KW                                                | 4.9  | 5.0  | 5.2  | 5.4  | 5.3  | 5.5  | 5.6  | 5.8  | 5.7  | 5.8  | 6.0  | 6.3  | 6.0  | 6.2  | 6.4  | 6.6  | 6.3  | 6.4  | 6.7  | 6.9  | 6.5  | 6.7  | 6.9  | 7.2  |
| 85           | 3002 | MBh                                               | 80.2 | 81.7 | 85.6 | 91.3 | 78.3 | 79.8 | 83.6 | 89.2 | 76.5 | 77.9 | 81.6 | 87.1 | 74.6 | 76.0 | 79.6 | 85.0 | 70.9 | 72.2 | 75.6 | 80.7 | 65.6 | 66.9 | 70.1 | 74.8 |
|              |      | S/T                                               | 0.96 | 0.92 | 0.83 | 0.68 | 0.99 | 0.96 | 0.86 | 0.70 | 1.00 | 0.98 | 0.89 | 0.72 | 1.00 | 1.00 | 0.92 | 0.74 | 1.00 | 1.00 | 0.95 | 0.77 | 1.00 | 1.00 | 0.96 | 0.78 |
|              |      | KW                                                | 5.1  | 5.2  | 5.4  | 5.6  | 5.5  | 5.6  | 5.8  | 6.1  | 5.9  | 6.0  | 6.3  | 6.5  | 6.2  | 6.4  | 6.6  | 6.9  | 6.5  | 6.7  | 6.9  | 7.2  | 6.8  | 6.9  | 7.2  | 7.5  |
|              | 2680 | MBh                                               | 77.8 | 79.4 | 83.1 | 88.7 | 76.0 | 77.5 | 81.2 | 86.6 | 74.2 | 75.7 | 79.2 | 84.5 | 72.4 | 73.8 | 77.3 | 82.5 | 68.8 | 70.1 | 73.4 | 78.4 | 63.7 | 65.0 | 68.0 | 72.6 |
|              |      | S/T                                               | 0.91 | 0.88 | 0.80 | 0.65 | 0.95 | 0.91 | 0.82 | 0.67 | 0.97 | 0.94 | 0.85 | 0.69 | 1.00 | 0.97 | 0.87 | 0.71 | 1.00 | 1.00 | 0.91 | 0.74 | 1.00 | 1.00 | 0.91 | 0.74 |
|              |      | KW                                                | 5.0  | 5.2  | 5.3  | 5.5  | 5.5  | 5.6  | 5.8  | 6.0  | 5.8  | 6.0  | 6.2  | 6.4  | 6.2  | 6.3  | 6.6  | 6.8  | 6.5  | 6.6  | 6.9  | 7.1  | 6.7  | 6.9  | 7.1  | 7.4  |
|              | 2358 | MBh                                               | 74.0 | 75.4 | 79.0 | 84.2 | 72.2 | 73.6 | 77.1 | 82.3 | 70.5 | 71.9 | 75.3 | 80.3 | 68.8 | 70.1 | 73.4 | 78.4 | 65.4 | 66.6 | 69.8 | 74.4 | 60.5 | 61.7 | 64.6 | 69.0 |
|              |      | S/T                                               | 0.88 | 0.84 | 0.76 | 0.62 | 0.91 | 0.88 | 0.79 | 0.64 | 0.93 | 0.90 | 0.81 | 0.66 | 0.96 | 0.93 | 0.84 | 0.68 | 1.00 | 0.96 | 0.87 | 0.70 | 1.00 | 0.97 | 0.88 | 0.71 |
|              |      | KW                                                | 5.0  | 5.1  | 5.2  | 5.4  | 5.4  | 5.5  | 5.7  | 5.9  | 5.7  | 5.9  | 6.1  | 6.3  | 6.1  | 6.2  | 6.4  | 6.7  | 6.4  | 6.5  | 6.7  | 7.0  | 6.6  | 6.8  | 7.0  | 7.3  |

\*EnteringIndoorTemperature-DegreesF.DryBulb



StandardRating

EXPANDED PERFORMANCE DATA (COOLING) CAE090 WITH BAC120 - (GROSS CAPACITY, See Notes on bottom page 5)

| Airflow<br>IDB*CFM |      |      | Outdoor Ambient Temperature - Degrees F. Dry Bulb |      |       |       |      |      |       |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |      |  |  |  |  |
|--------------------|------|------|---------------------------------------------------|------|-------|-------|------|------|-------|-------|------|------|------|-------|------|------|------|-------|------|------|------|------|------|------|------|------|--|--|--|--|
|                    |      |      | 65                                                |      |       |       | 75   |      |       |       | 85   |      |      |       | 95   |      |      |       | 105  |      |      |      | 115  |      |      |      |  |  |  |  |
|                    |      |      | Entering Indoor Temperature - Degrees F. Wet Bulb |      |       |       |      |      |       |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |      |  |  |  |  |
|                    |      |      | 59                                                | 63   | 67    | 71    | 59   | 63   | 67    | 71    | 59   | 63   | 67   | 71    | 59   | 63   | 67   | 71    | 59   | 63   | 67   | 71   | 59   | 63   | 67   | 71   |  |  |  |  |
| 70                 | 3360 | MBh  | 90.1                                              | 93.4 | 102.4 | -     | 88.0 | 91.3 | 100.0 | -     | 85.9 | 89.1 | 97.6 | -     | 83.9 | 86.9 | 95.2 | -     | 79.7 | 82.6 | 90.5 | -    | 73.8 | 76.5 | 83.8 | -    |  |  |  |  |
|                    |      | S/T  | 0.70                                              | 0.59 | 0.41  | -     | 0.73 | 0.61 | 0.42  | -     | 0.75 | 0.62 | 0.43 | -     | 0.77 | 0.64 | 0.45 | -     | 0.80 | 0.67 | 0.46 | -    | 0.81 | 0.67 | 0.47 | -    |  |  |  |  |
|                    |      | KW   | 6.22                                              | 6.37 | 6.60  | -     | 6.77 | 6.93 | 7.19  | -     | 7.25 | 7.43 | 7.70 | -     | 7.68 | 7.87 | 8.16 | -     | 8.04 | 8.24 | 8.54 | -    | 8.35 | 8.56 | 8.88 | -    |  |  |  |  |
|                    | 3000 | MBh  | 87.5                                              | 90.7 | 99.4  | -     | 85.5 | 88.6 | 97.1  | -     | 83.4 | 86.5 | 94.8 | -     | 81.4 | 84.4 | 92.4 | -     | 77.3 | 80.2 | 87.8 | -    | 71.6 | 74.3 | 81.4 | -    |  |  |  |  |
|                    |      | S/T  | 0.67                                              | 0.56 | 0.39  | -     | 0.69 | 0.58 | 0.40  | -     | 0.71 | 0.60 | 0.41 | -     | 0.74 | 0.61 | 0.43 | -     | 0.76 | 0.64 | 0.44 | -    | 0.77 | 0.64 | 0.45 | -    |  |  |  |  |
|                    |      | KW   | 6.17                                              | 6.32 | 6.54  | -     | 6.71 | 6.87 | 7.12  | -     | 7.19 | 7.36 | 7.63 | -     | 7.61 | 7.80 | 8.08 | -     | 7.97 | 8.16 | 8.46 | -    | 8.28 | 8.48 | 8.80 | -    |  |  |  |  |
| 2640               | MBh  | 83.1 | 86.2                                              | 94.4 | -     | 81.2  | 84.2 | 92.2 | -     | 79.3  | 82.2 | 90.0 | -    | 77.3  | 80.2 | 87.8 | -    | 73.5  | 76.2 | 83.4 | -    | 68.1 | 70.5 | 77.3 | -    |      |  |  |  |  |
|                    | S/T  | 0.64 | 0.54                                              | 0.37 | -     | 0.67  | 0.56 | 0.39 | -     | 0.68  | 0.57 | 0.39 | -    | 0.70  | 0.59 | 0.41 | -    | 0.73  | 0.61 | 0.42 | -    | 0.74 | 0.62 | 0.43 | -    |      |  |  |  |  |
|                    | KW   | 6.05 | 6.20                                              | 6.42 | -     | 6.59  | 6.75 | 6.99 | -     | 7.05  | 7.23 | 7.49 | -    | 7.47  | 7.65 | 7.93 | -    | 7.82  | 8.01 | 8.31 | -    | 8.12 | 8.32 | 8.63 | -    |      |  |  |  |  |
| 75                 | 3360 | MBh  | 91.7                                              | 94.4 | 102.2 | 109.6 | 89.5 | 92.2 | 99.8  | 107.1 | 87.4 | 90.0 | 97.4 | 104.5 | 85.3 | 87.8 | 95.0 | 102.0 | 81.0 | 83.4 | 90.3 | 96.9 | 75.0 | 77.3 | 83.6 | 89.8 |  |  |  |  |
|                    |      | S/T  | 0.80                                              | 0.71 | 0.54  | 0.35  | 0.83 | 0.74 | 0.56  | 0.36  | 0.85 | 0.76 | 0.57 | 0.37  | 0.88 | 0.78 | 0.59 | 0.38  | 0.91 | 0.81 | 0.62 | 0.40 | 0.92 | 0.82 | 0.62 | 0.40 |  |  |  |  |
|                    |      | KW   | 6.28                                              | 6.43 | 6.66  | 6.91  | 6.83 | 7.00 | 7.25  | 7.52  | 7.32 | 7.50 | 7.77 | 8.06  | 7.75 | 7.94 | 8.23 | 8.54  | 8.12 | 8.32 | 8.62 | 8.95 | 8.43 | 8.64 | 8.96 | 9.30 |  |  |  |  |
|                    | 3000 | MBh  | 89.0                                              | 91.6 | 99.2  | 106.5 | 86.9 | 89.5 | 96.9  | 104.0 | 84.9 | 87.4 | 94.6 | 101.5 | 82.8 | 85.2 | 92.3 | 99.0  | 78.6 | 81.0 | 87.7 | 94.1 | 72.9 | 75.0 | 81.2 | 87.1 |  |  |  |  |
|                    |      | S/T  | 0.76                                              | 0.68 | 0.52  | 0.33  | 0.79 | 0.71 | 0.53  | 0.34  | 0.81 | 0.72 | 0.55 | 0.35  | 0.84 | 0.75 | 0.57 | 0.36  | 0.87 | 0.78 | 0.59 | 0.38 | 0.88 | 0.78 | 0.59 | 0.38 |  |  |  |  |
|                    |      | KW   | 6.22                                              | 6.37 | 6.60  | 6.84  | 6.77 | 6.94 | 7.19  | 7.45  | 7.25 | 7.43 | 7.70 | 7.99  | 7.68 | 7.87 | 8.16 | 8.46  | 8.04 | 8.24 | 8.55 | 8.86 | 8.36 | 8.56 | 8.88 | 9.21 |  |  |  |  |
|                    | 2640 | MBh  | 84.5                                              | 87.1 | 94.2  | 101.1 | 82.6 | 85.0 | 92.0  | 98.8  | 80.6 | 83.0 | 89.8 | 96.4  | 78.6 | 81.0 | 87.7 | 94.1  | 74.7 | 76.9 | 83.3 | 89.4 | 69.2 | 71.3 | 77.1 | 82.8 |  |  |  |  |
|                    |      | S/T  | 0.73                                              | 0.65 | 0.49  | 0.32  | 0.76 | 0.68 | 0.51  | 0.33  | 0.78 | 0.69 | 0.53 | 0.34  | 0.80 | 0.72 | 0.54 | 0.35  | 0.83 | 0.74 | 0.56 | 0.36 | 0.84 | 0.75 | 0.57 | 0.37 |  |  |  |  |
|                    |      | KW   | 6.11                                              | 6.26 | 6.48  | 6.72  | 6.65 | 6.81 | 7.06  | 7.31  | 7.12 | 7.30 | 7.56 | 7.84  | 7.54 | 7.72 | 8.01 | 8.30  | 7.89 | 8.09 | 8.39 | 8.70 | 8.20 | 8.40 | 8.71 | 9.04 |  |  |  |  |
| 80                 | 3360 | MBh  | 93.3                                              | 95.3 | 101.9 | 108.9 | 91.1 | 93.1 | 99.5  | 106.3 | 89.0 | 90.9 | 97.1 | 103.8 | 86.8 | 88.7 | 94.7 | 101.3 | 82.4 | 84.2 | 90.0 | 96.2 | 76.4 | 78.0 | 83.4 | 89.1 |  |  |  |  |
|                    |      | S/T  | 0.88                                              | 0.82 | 0.67  | 0.50  | 0.91 | 0.85 | 0.69  | 0.52  | 0.93 | 0.87 | 0.71 | 0.53  | 0.96 | 0.90 | 0.73 | 0.55  | 1.00 | 0.94 | 0.76 | 0.57 | 1.00 | 0.94 | 0.77 | 0.57 |  |  |  |  |
|                    |      | KW   | 6.34                                              | 6.49 | 6.73  | 6.97  | 6.90 | 7.06 | 7.32  | 7.59  | 7.39 | 7.57 | 7.85 | 8.14  | 7.82 | 8.02 | 8.31 | 8.62  | 8.19 | 8.40 | 8.71 | 9.03 | 8.51 | 8.72 | 9.05 | 9.39 |  |  |  |  |
|                    | 3000 | MBh  | 90.6                                              | 92.6 | 98.9  | 105.7 | 88.5 | 90.4 | 96.6  | 103.3 | 86.4 | 88.3 | 94.3 | 100.8 | 84.3 | 86.1 | 92.0 | 98.3  | 80.0 | 81.8 | 87.4 | 93.4 | 74.1 | 75.8 | 80.9 | 86.5 |  |  |  |  |
|                    |      | S/T  | 0.84                                              | 0.78 | 0.64  | 0.48  | 0.87 | 0.81 | 0.66  | 0.49  | 0.89 | 0.83 | 0.68 | 0.51  | 0.92 | 0.86 | 0.70 | 0.52  | 0.95 | 0.89 | 0.73 | 0.54 | 0.96 | 0.90 | 0.73 | 0.55 |  |  |  |  |
|                    |      | KW   | 6.28                                              | 6.43 | 6.66  | 6.91  | 6.83 | 7.00 | 7.25  | 7.52  | 7.32 | 7.50 | 7.78 | 8.06  | 7.75 | 7.94 | 8.24 | 8.54  | 8.12 | 8.32 | 8.63 | 8.95 | 8.43 | 8.64 | 8.96 | 9.30 |  |  |  |  |
|                    | 2640 | MBh  | 86.1                                              | 87.9 | 93.9  | 100.4 | 84.1 | 85.9 | 91.8  | 98.1  | 82.0 | 83.8 | 89.6 | 95.8  | 80.0 | 81.8 | 87.4 | 93.4  | 76.0 | 77.7 | 83.0 | 88.7 | 70.4 | 72.0 | 76.9 | 82.2 |  |  |  |  |
|                    |      | S/T  | 0.80                                              | 0.75 | 0.61  | 0.46  | 0.83 | 0.78 | 0.63  | 0.47  | 0.85 | 0.80 | 0.65 | 0.49  | 0.88 | 0.82 | 0.67 | 0.50  | 0.91 | 0.86 | 0.70 | 0.52 | 0.92 | 0.86 | 0.70 | 0.52 |  |  |  |  |
|                    |      | KW   | 6.17                                              | 6.32 | 6.54  | 6.78  | 6.71 | 6.87 | 7.12  | 7.38  | 7.19 | 7.36 | 7.63 | 7.91  | 7.61 | 7.80 | 8.08 | 8.38  | 7.97 | 8.16 | 8.46 | 8.78 | 8.28 | 8.48 | 8.80 | 9.12 |  |  |  |  |
| 85                 | 3360 | MBh  | 94.9                                              | 96.8 | 101.3 | 108.1 | 92.7 | 94.5 | 99.0  | 105.6 | 90.5 | 92.3 | 96.6 | 103.1 | 88.3 | 90.0 | 94.3 | 100.6 | 83.9 | 85.5 | 89.6 | 95.5 | 77.7 | 79.2 | 83.0 | 88.5 |  |  |  |  |
|                    |      | S/T  | 0.92                                              | 0.89 | 0.80  | 0.65  | 0.95 | 0.92 | 0.83  | 0.67  | 0.98 | 0.94 | 0.85 | 0.69  | 1.00 | 0.97 | 0.88 | 0.71  | 1.00 | 1.00 | 0.91 | 0.74 | 1.00 | 1.00 | 0.92 | 0.75 |  |  |  |  |
|                    |      | KW   | 6.40                                              | 6.55 | 6.79  | 7.04  | 6.96 | 7.13 | 7.39  | 7.66  | 7.46 | 7.64 | 7.92 | 8.21  | 7.90 | 8.09 | 8.39 | 8.70  | 8.27 | 8.48 | 8.79 | 9.12 | 8.59 | 8.81 | 9.13 | 9.47 |  |  |  |  |
|                    | 3000 | MBh  | 92.2                                              | 93.9 | 98.4  | 105.0 | 90.0 | 91.8 | 96.1  | 102.5 | 87.9 | 89.6 | 93.8 | 100.1 | 85.7 | 87.4 | 91.5 | 97.6  | 81.4 | 83.0 | 87.0 | 92.8 | 75.4 | 76.9 | 80.5 | 85.9 |  |  |  |  |
|                    |      | S/T  | 0.88                                              | 0.85 | 0.76  | 0.62  | 0.91 | 0.88 | 0.79  | 0.64  | 0.93 | 0.90 | 0.81 | 0.66  | 0.96 | 0.93 | 0.84 | 0.68  | 1.00 | 0.96 | 0.87 | 0.70 | 1.00 | 0.97 | 0.88 | 0.71 |  |  |  |  |
|                    |      | KW   | 6.34                                              | 6.49 | 6.73  | 6.97  | 6.90 | 7.06 | 7.32  | 7.59  | 7.39 | 7.57 | 7.85 | 8.14  | 7.82 | 8.02 | 8.31 | 8.62  | 8.19 | 8.40 | 8.71 | 9.03 | 8.51 | 8.72 | 9.05 | 9.39 |  |  |  |  |
|                    | 2640 | MBh  | 87.6                                              | 89.2 | 93.5  | 99.7  | 85.5 | 87.2 | 91.3  | 97.4  | 83.5 | 85.1 | 89.1 | 95.1  | 81.4 | 83.0 | 87.0 | 92.8  | 77.4 | 78.9 | 82.6 | 88.1 | 71.7 | 73.1 | 76.5 | 81.6 |  |  |  |  |
|                    |      | S/T  | 0.84                                              | 0.81 | 0.73  | 0.59  | 0.87 | 0.84 | 0.76  | 0.61  | 0.89 | 0.86 | 0.78 | 0.63  | 0.92 | 0.89 | 0.80 | 0.65  | 0.96 | 0.92 | 0.83 | 0.68 | 0.96 | 0.93 | 0.84 | 0.68 |  |  |  |  |
|                    |      | KW   | 6.22                                              | 6.37 | 6.60  | 6.84  | 6.77 | 6.93 | 7.19  | 7.45  | 7.25 | 7.43 | 7.70 | 7.99  | 7.68 | 7.87 | 8.16 | 8.46  | 8.04 | 8.24 | 8.54 | 8.86 | 8.35 | 8.56 | 8.88 | 9.21 |  |  |  |  |

\*EnteringIndoorTemperature-DegreesF.DryBulb ☐ StandardRating

NOTES AND FORMULAS FOR USING EXPANDED PERFORMANCE DATA

To find leaving wet bulb and dry bulb from the expanded performance charts on the next two pages, use the following formulas. Direct interpolation is permissible. Do not extrapolate.

$$t_{db} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

$t_{wb}$  = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil ( $h_{wb}$ ).

$$h_{wb} = h_{ewb} - \frac{\text{sensible capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where:  $h_{ewb}$  = Enthalpy of air entering evaporator coil.

LEGEND

MBh = Total Capacity (Gross)      S/T = Sensible to Total Ratio  
 KW = Unit Operating Watts      IDB = Indoor Dry Bulb  
 $t_{db}$  = Leaving Dry Bulb       $t_{wb}$  = Leaving Wet Bulb  
 $t_{edb}$  = Entering Dry Bulb       $t_{ewb}$  = Entering Wet Bulb  
 $h_{wb}$  = Enthalpy of leaving wet bulb

| MODEL NUMBER IDENTIFICATION GUIDE |  |   |   |   |     |   |   |   |                                         |
|-----------------------------------|--|---|---|---|-----|---|---|---|-----------------------------------------|
| MODEL NUMBER                      |  | C | A | E | 090 | G | H | C |                                         |
| PRODUCT FAMILY                    |  |   |   |   |     |   |   |   | SALES CODE                              |
| C = Condensor                     |  |   |   |   |     |   |   |   |                                         |
| PRODUCT TYPE                      |  |   |   |   |     |   |   |   | ELECTRICAL                              |
| A = Air Conditioner               |  |   |   |   |     |   |   |   | CODE VOLTS PHASE CYCLE                  |
|                                   |  |   |   |   |     |   |   |   | H 208/230 3 60                          |
|                                   |  |   |   |   |     |   |   |   | L 460 3 60                              |
|                                   |  |   |   |   |     |   |   |   | S 575 3 60                              |
| SERIES                            |  |   |   |   |     |   |   |   | Factory Installed Hail Guard            |
| E = Series                        |  |   |   |   |     |   |   |   | CAPACITY BTUH 075 = 75,000 090 = 90,000 |

DIMENSIONS  
ALL DIMENSIONS IN INCHES

