50BF Series

Single-Package Cooling Units

90,000-895,500 BTUH

www.carrier.co.th
## Technical specification

<table>
<thead>
<tr>
<th>Description</th>
<th>Single-Package Cooling Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td>5BF8/08SC</td>
</tr>
<tr>
<td><strong>Nominal Capacity</strong></td>
<td>kW</td>
</tr>
<tr>
<td>Buîh (HP)</td>
<td>50.0/0/2</td>
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<tr>
<td><strong>Power consumption</strong></td>
<td>kW</td>
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<tr>
<td>Current (A)</td>
<td>0.96</td>
</tr>
<tr>
<td><strong>Operating Weight</strong></td>
<td>kg</td>
</tr>
<tr>
<td>Operating Charge</td>
<td>kW</td>
</tr>
<tr>
<td>Water Flow Rate</td>
<td>GPM</td>
</tr>
<tr>
<td>PD</td>
<td>16</td>
</tr>
<tr>
<td><strong>Condenser Type</strong></td>
<td>Shell and Tube</td>
</tr>
<tr>
<td><strong>Circuit 1</strong> Circuit 2</td>
<td>kW</td>
</tr>
<tr>
<td>No. of Unloading Cylinders</td>
<td>2</td>
</tr>
<tr>
<td>No. of Capacity Steps</td>
<td>1</td>
</tr>
<tr>
<td><strong>Motor Rotor</strong></td>
<td>Belt Driver / Centrifugal</td>
</tr>
<tr>
<td><strong>Motor K SDS</strong></td>
<td>3.7 (5HP)</td>
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<tr>
<td><strong>Condenser</strong></td>
<td>kW</td>
</tr>
<tr>
<td>Indoor Coil Tube/Fin type</td>
<td>3/8 Copper tube / Aluminium fin</td>
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<tr>
<td><strong>Return Air Filters</strong></td>
<td>Yes</td>
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<tr>
<td><strong>Safety Device</strong></td>
<td>Hi-Pressure Switch-Motor Reset Type</td>
</tr>
</tbody>
</table>

### Features
- Commercial or Industrial Applications
- Single- or Multiple-Unit Systems
- Ductwork Applications
- Efficient
- Reliable
- Easy to Install

With electronic thermostat controller IR33 all model

PDR : Pitch Diameter Range
PD : Pitch Diameter
All water connection sizes are in MPT.
Not : NOMINAL TOTAL CAPACITY BASED ON NOMINAL EVAPORATOR AIR, 67°F ENTERING WET BULB AND 95°F CONDENSER LEAVING WATER TEMPERATURE.

<table>
<thead>
<tr>
<th>Model</th>
<th>Condenser Inlet No.</th>
<th>Condenser Outlet No.</th>
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</thead>
<tbody>
<tr>
<td>008 to 015</td>
<td>1-1 to 1 1/2</td>
<td>1-3 to 2 1/2</td>
</tr>
<tr>
<td>020 to 030</td>
<td>1-3 to 2 1/2</td>
<td>2 to 2 1/2</td>
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<td>040</td>
<td>2 to 2 1/2</td>
<td>2 to 2 1/2</td>
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<tr>
<td>050 to 060</td>
<td>2 to 2 1/2</td>
<td>2 to 2 1/2</td>
</tr>
<tr>
<td>080</td>
<td>2 to 2 1/2</td>
<td>2 to 2 1/2</td>
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</table>
**Unit dimensions**

**Model: 50BF008, 010**

**Model: 50BF015, 020**
Unit dimensions

Model: 50BF025, 030

<table>
<thead>
<tr>
<th>Unit</th>
<th>A</th>
<th>B</th>
<th>C</th>
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<tbody>
<tr>
<td>50BF025, 030</td>
<td>800</td>
<td>1800</td>
<td>1860</td>
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Model: 50BF040

<table>
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<th>Unit</th>
<th>A</th>
<th>B</th>
<th>C</th>
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<tr>
<td>50BF040</td>
<td>800</td>
<td>2300</td>
<td>1890</td>
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</table>
### Compressor

- **Model:** 50BF008SC, 50BF010SC, 50BF015SC, 50BF020SC, 50BF025SC, 50BF030SC, 50BF040SC

  Fully hermetic Compressors.

For unit 50BF020, 50BF025, 50BF030, 50BF040, 50BF050-1, 50BF060-1, 50BF080-1 use the 06E serviceable hermetics.

Carrier compressors deliver quiet, reliable high-cooling capacity at low cost.

### Engineering excellence assures outstanding performance

- **Compressor** - 50BF008SC, 50BF010SC and 50BF015SC, 50BF020SC, 50BF025SC, 50BF030SC, 50BF040SC

  Fully hermetic Compressors. For unit 50BF020, 50BF025, 50BF030, 50BF040, 50BF050-1, 50BF060-1, 50BF080-1 use the 06E serviceable hermetics. Carrier compressors deliver quiet, reliable high-cooling capacity at low cost.

- **Compressor motor protection** - assured on all units by use of quick-sensing elements that prevent trouble before it starts.

- **Quiet, high-capacity fans** - move large volumes of indoor air quietly and at a lower rpm than most comparable fans. Compact housing and specially designed discharge give fans superior air handling capability.

- **Evaporator coils** - Space saving slab type provides high heat transfer efficiency with large face area; fins are mechanically bonded to seamless copper tubing for high-capacity performance.

- **High-efficiency condensers** - shell and tube construction provide maximum exposed surface for more heat rejection with less water.

- **Crankcase heaters** - remain on during compressor off cycle to prevent dilution of oil by refrigerant...thus, preventing flooded parts.
Selection procedure (with example)

1. Determine job requirements.

   Given:
   - Cooling load (TC: Btu/h) .............. 270,000
   - Evap. air quantity (cfm) ............... 8,000
   - Evap. entering air conditions wb .......... 67°F
   - Condenser entering water temp .......... 90°F
   - Condenser leaving water temp .......... 100°F
   - External static pressure (in WG) ........ 2.8

2. Select unit(s) based on cooling requirements.

   A. Enter Cooling Capacities tables at given evaporator air quantity (8,000 cfm) and condenser leaving water temperature (100°F). By interpolation, if required, determine total cooling capacity (TC) and sensible heat capacity (SHC) at given evaporator entering air wb (67°F).

   A 508F025 unit has a capacity of 271,800 Btu/h (TC) and 197,600 Btu/h (SHC).

   B. Correct the SHC value for evaporator entering air db temperature other than 80°F.

   For this example, no correction is required. The unit can satisfy specified cooling load requirement.

3. Determine required fan motor kW and fan rpm.

   A. Determine total static pressure by adding unit internal pressure drop to a specified external S.P. From 508F025 fan curve, pressure drop for unit is found to be 0.4 in. WG at the specified air quantity (8,000 CFM).

   Total S.P. = 0.4 + 2.8 = 3.20 in. WG.

   Locate on the curve where the specified air quantity and total S.P. (3.20) intersect.

   The intersect point is under 3.7 kW line and fan rpm can be determined as 920 rpm. The standard 3.7 kW motor can satisfy the requirements.

4. Determine condenser water requirements.

   A. Required water flow can be determined using formula below:

   \[
   \text{GPM} = \frac{\text{TC(Btu/h)} + \text{Compressor Power Input(KW)} \times 3414}{500 \times \text{Water Temp. Rise (°F)}}
   \]

   \[
   = \frac{271800 + 17.9 \times 3414}{500 \times (100-90)} = 66.58
   \]

   B. Enter Condenser Pressure Drop table at the determined water flow (66.58 gpm.). Interpolate, if required, to obtain the water pressure drop (4.98 PSI).

   A proper water pump can be selected based on this value.

Fan performance

1. The fan performance curves are based on dry coil and clean filters.

2. Total static pressures are shown on the vertical scale of the chart. To determine external static pressure, deduct Unit Pressure Drop (casing loss bottom curves) from the total S.P. value read at a given air quantity.

Motor selection

The power curve shown on every diagram represents the absorbed power at the shaft after fan measured in kW. To determine the power of the motor to be installed, the following correct factors have to be taken in consideration.

- For power less than 10 kW x 1.2
- For power more than 10 kW x 1.15
### Performance data

#### 50BF008 Gross Cooling Capacity Tables

<table>
<thead>
<tr>
<th>Cond. Leaving Water Temp. (°F)</th>
<th>EVAP. Air Flow (CFM)</th>
<th>EVAP. Entering Air Temperature DB/WB (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,800</td>
<td>2,800</td>
</tr>
<tr>
<td></td>
<td>84/71</td>
<td>80/87</td>
</tr>
<tr>
<td></td>
<td>84/71</td>
<td>80/87</td>
</tr>
<tr>
<td></td>
<td>84/71</td>
<td>80/87</td>
</tr>
<tr>
<td>95 TC</td>
<td>95,100</td>
<td>87,200</td>
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<tr>
<td>SHC</td>
<td>59,500</td>
<td>61,200</td>
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<tr>
<td>KW</td>
<td>7.2</td>
<td>7.0</td>
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<td></td>
<td>7.3</td>
<td>7.1</td>
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<tr>
<td>100 TC</td>
<td>93,000</td>
<td>85,100</td>
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<td>SHC</td>
<td>58,600</td>
<td>60,400</td>
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<tr>
<td>KW</td>
<td>7.4</td>
<td>7.2</td>
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<tr>
<td></td>
<td>7.5</td>
<td>7.4</td>
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<td>83,100</td>
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<td>59,600</td>
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<tr>
<td>KW</td>
<td>7.7</td>
<td>7.4</td>
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<td>7.8</td>
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#### 50BF010 Gross Cooling Capacity Tables

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<th>Cond. Leaving Water Temp. (°F)</th>
<th>EVAP. Air Flow (CFM)</th>
<th>EVAP. Entering Air Temperature DB/WB (°F)</th>
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<tbody>
<tr>
<td></td>
<td>2,600</td>
<td>3,800</td>
</tr>
<tr>
<td></td>
<td>84/71</td>
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<td>80/87</td>
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<tr>
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<td>112,500</td>
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<td>81,700</td>
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<td>10.9</td>
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<td>11.4</td>
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#### 50BF015 Gross Cooling Capacity Tables

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<tr>
<th>Cond. Leaving Water Temp. (°F)</th>
<th>EVAP. Air Flow (CFM)</th>
<th>EVAP. Entering Air Temperature DB/WB (°F)</th>
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<tbody>
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<td>3,200</td>
<td>4,800</td>
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<td>84/71</td>
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<td>80/87</td>
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<td>84/71</td>
<td>80/87</td>
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<td>10.8</td>
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<td>11.2</td>
</tr>
<tr>
<td></td>
<td>10.6</td>
<td>11.2</td>
</tr>
</tbody>
</table>

**TC** : TOTAL CAPACITY (BTU/H)  
**SHC** : SENSIBLE HEAT CAPACITY (BTU/H)  
**WB** : WET-BULB TEMPERATURE  
**CFM** : CFM, FT. PER MINUTE  
**KW** : COMPRESSOR MOTOR POWER INPUT (KILOWATTS)  
**DB** : DRY-BULB TEMPERATURE
### 50BF020
**Gross Cooling Capacity Tables**

<table>
<thead>
<tr>
<th>Cond. Leaving Water Temp. (°F)</th>
<th>EVAP. Air Flow (CFM)</th>
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<tr>
<td>SHC</td>
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</tr>
<tr>
<td>KW</td>
<td>18.5</td>
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### 50BF025
**Gross Cooling Capacity Tables**

<table>
<thead>
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<th>Cond. Leaving Water Temp. (°F)</th>
<th>EVAP. Air Flow (CFM)</th>
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</thead>
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### 50BF030
**Gross Cooling Capacity Tables**

<table>
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<th>EVAP. Air Flow (CFM)</th>
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<td>80/67</td>
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<td>216,600</td>
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<tr>
<td>KW</td>
<td>26.3</td>
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</tbody>
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TC = TOTAL CAPACITY (BTUH)

SHC = SENSIBLE Heat CAPACITY (BTUH)

KB = COMpressor MOTOR POWER INPUT (KLOWatts)

DB = DRY-BULB TEMPERATURE

CFM = CFU. FT. PER MINUTE
### Performance data

#### 50BF040

<table>
<thead>
<tr>
<th>Cond. Leaving Water Temp. (°F)</th>
<th>EVAP. Air Flow (CFM)</th>
<th>Gross Cooling Capacity Tables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8,900</td>
<td>12,800</td>
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<tr>
<td></td>
<td>84/71</td>
<td>80/67</td>
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<td>95 TC</td>
<td>461,300</td>
<td>425,600</td>
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<td>302,200</td>
<td>316,200</td>
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<td>KW</td>
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<td>416,700</td>
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<td>KW</td>
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<td>407,800</td>
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<td>301,400</td>
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<td>35.1</td>
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#### 50BF050-1

<table>
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<th>EVAP. Air Flow (CFM)</th>
<th>Gross Cooling Capacity Tables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>15,000</td>
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<td></td>
<td>84/71</td>
<td>80/67</td>
</tr>
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<td>95 TC</td>
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<td>526,600</td>
</tr>
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<td>349,900</td>
</tr>
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<td>KW</td>
<td>34.0</td>
<td>33.3</td>
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<td>515,600</td>
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<td>341,300</td>
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<td>KW</td>
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<td>34.6</td>
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<tr>
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<td>546,400</td>
<td>504,600</td>
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<td>332,700</td>
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<tr>
<td>KW</td>
<td>36.7</td>
<td>35.8</td>
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#### 50BF060-1

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<th>EVAP. Air Flow (CFM)</th>
<th>Gross Cooling Capacity Tables</th>
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</thead>
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<td>20,000</td>
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<td>84/71</td>
<td>80/67</td>
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<td>KW</td>
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<td>402,100</td>
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<tr>
<td>KW</td>
<td>51.2</td>
<td>49.5</td>
</tr>
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</table>
## Performance data

### Gross Cooling Capacity Tables

<table>
<thead>
<tr>
<th>Unit Model</th>
<th>Nominal Voltage</th>
<th>Voltage Range</th>
<th>Compressor</th>
<th>Indoor Fan Motor</th>
<th>Power Wire (sq.mm.)</th>
<th>Ground Wire (sq.mm.)</th>
<th>Recommended field</th>
</tr>
</thead>
<tbody>
<tr>
<td>50BF008</td>
<td>380V/3Ph/50Hz</td>
<td>360 - 440</td>
<td>1</td>
<td>400 - 1,111</td>
<td>0.75 - 1.8</td>
<td>6 - 25</td>
<td>25</td>
</tr>
<tr>
<td>50BF010SC</td>
<td>380V/3Ph/50Hz</td>
<td>360 - 440</td>
<td>1</td>
<td>190 - 1,153</td>
<td>1.50 - 3.3</td>
<td>10 - 4</td>
<td>35</td>
</tr>
<tr>
<td>50BF015SC</td>
<td>380V/3Ph/50Hz</td>
<td>360 - 440</td>
<td>1</td>
<td>270 - 1,174</td>
<td>2.20 - 4.7</td>
<td>16 - 6</td>
<td>50</td>
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<tr>
<td>50BF020SC</td>
<td>380V/3Ph/50Hz</td>
<td>360 - 440</td>
<td>2</td>
<td>160 - 1,188</td>
<td>3.70 - 8.0</td>
<td>25 - 6</td>
<td>60</td>
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<tr>
<td>50BF025SC</td>
<td>380V/3Ph/50Hz</td>
<td>360 - 440</td>
<td>2</td>
<td>190 - 1,213</td>
<td>3.70 - 8.0</td>
<td>35 - 10</td>
<td>80</td>
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<td>50BF030SC</td>
<td>380V/3Ph/50Hz</td>
<td>360 - 440</td>
<td>2</td>
<td>220 - 1,235</td>
<td>3.70 - 8.0</td>
<td>45 - 16</td>
<td>150</td>
</tr>
<tr>
<td>50BF040SC</td>
<td>380V/3Ph/50Hz</td>
<td>360 - 440</td>
<td>2</td>
<td>250 - 1,270</td>
<td>5.50 - 11.5</td>
<td>65 - 16</td>
<td>200</td>
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<tr>
<td>50BF050</td>
<td>380V/3Ph/50Hz</td>
<td>360 - 440</td>
<td>2</td>
<td>280 - 1,302</td>
<td>7.50 - 14.0</td>
<td>85 - 17</td>
<td>300</td>
</tr>
<tr>
<td>50BF060</td>
<td>380V/3Ph/50Hz</td>
<td>360 - 440</td>
<td>2</td>
<td>310 - 1,336</td>
<td>7.50 - 14.0</td>
<td>95 - 18</td>
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<tr>
<td>50BF080</td>
<td>380V/3Ph/50Hz</td>
<td>360 - 440</td>
<td>2</td>
<td>340 - 1,370</td>
<td>11.00 - 21.6</td>
<td>150 - 16</td>
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<tr>
<td>50BF080SC</td>
<td>380V/3Ph/50Hz</td>
<td>360 - 440</td>
<td>2</td>
<td>370 - 1,404</td>
<td>15.00 - 28.3</td>
<td>240 - 25</td>
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</tbody>
</table>

### Electrical data

- **Unit Model**: 50BF080-1
- **Nominal Voltage**: 380V/3Ph/50Hz
- **Evap Air Flow (CFM)**: 20,500 - 30,500

<table>
<thead>
<tr>
<th>Cond. Leaving Water Temp. (°F)</th>
<th>20,500</th>
<th>25,500</th>
<th>30,500</th>
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<tbody>
<tr>
<td>85</td>
<td>918,600</td>
<td>973,000</td>
<td>1,012,000</td>
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<tr>
<td>SHC</td>
<td>567,100</td>
<td>583,600</td>
<td>649,700</td>
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<tr>
<td>KW</td>
<td>63.8</td>
<td>65.4</td>
<td>66.6</td>
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<tr>
<td>100</td>
<td>899,600</td>
<td>949,300</td>
<td>985,800</td>
</tr>
<tr>
<td>SHC</td>
<td>556,000</td>
<td>599,000</td>
<td>598,600</td>
</tr>
<tr>
<td>KW</td>
<td>67.9</td>
<td>69.7</td>
<td>70.9</td>
</tr>
<tr>
<td>105</td>
<td>879,700</td>
<td>925,600</td>
<td>959,700</td>
</tr>
<tr>
<td>SHC</td>
<td>544,900</td>
<td>585,400</td>
<td>622,700</td>
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<tr>
<td>KW</td>
<td>72.0</td>
<td>73.9</td>
<td>75.3</td>
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### Water pressure drop thru condensers (PSI)

<table>
<thead>
<tr>
<th>Unit Model</th>
<th>Total Water Flow (GPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>50BF008</td>
<td>3.3</td>
</tr>
<tr>
<td>50BF010SC</td>
<td>1.8</td>
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<tr>
<td>50BF015SC</td>
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</tr>
<tr>
<td>50BF020SC</td>
<td>-</td>
</tr>
<tr>
<td>50BF025SC</td>
<td>-</td>
</tr>
<tr>
<td>50BF030SC</td>
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<tr>
<td>50BF040SC</td>
<td>-</td>
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<tr>
<td>50BF050-1</td>
<td>-</td>
</tr>
<tr>
<td>50BF060-1</td>
<td>-</td>
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<tr>
<td>50BF080-1</td>
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</tbody>
</table>

### Notes:
- **Unit Model**: 50BF050-50BF080 have 2 compressors. Values are for each compressor.
- **FLA**: Full Load Amps
- **RLA**: Rated Load Amps
- **LRA**: Locked Rotor Amps
- **MCOP**: Maximum Overcurrent Protective Device
Water pressure drop thru condensers (PSI)

<table>
<thead>
<tr>
<th>Model</th>
<th>Total Water Flow (GPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20</td>
</tr>
<tr>
<td>50BF008</td>
<td>3.3</td>
</tr>
<tr>
<td>50BF010</td>
<td>1.8</td>
</tr>
<tr>
<td>50BF015</td>
<td>-</td>
</tr>
<tr>
<td>50BF020</td>
<td>-</td>
</tr>
<tr>
<td>50BF025</td>
<td>-</td>
</tr>
<tr>
<td>50BF030</td>
<td>-</td>
</tr>
<tr>
<td>50BF040</td>
<td>-</td>
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<tr>
<td>50BF050-1</td>
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<tr>
<td>50BF060-1</td>
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<tr>
<td>50BF080-1</td>
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</table>

Electrical data

<table>
<thead>
<tr>
<th>Unit/Model</th>
<th>Nominal Voltage</th>
<th>Voltage Range</th>
<th>Compressor</th>
<th>Indoor Fan Motor</th>
<th>Power Wire</th>
<th>Recommended field</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>380V/3Ph/50Hz</td>
<td>Min</td>
<td>Max</td>
<td>RLA</td>
<td>LRA</td>
<td>QTY</td>
</tr>
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<td>50BF008SC</td>
<td>380V/3Ph/50Hz</td>
<td>360</td>
<td>440</td>
<td>1</td>
<td>18</td>
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</tr>
<tr>
<td>50BF010SC</td>
<td>380V/3Ph/50Hz</td>
<td>360</td>
<td>440</td>
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<td>22</td>
<td>1</td>
</tr>
<tr>
<td>50BF015SC</td>
<td>380V/3Ph/50Hz</td>
<td>360</td>
<td>440</td>
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<td>33</td>
<td>1</td>
</tr>
<tr>
<td>50BF020</td>
<td>380V/3Ph/50Hz</td>
<td>360</td>
<td>440</td>
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<td>44</td>
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</tr>
<tr>
<td>50BF025</td>
<td>380V/3Ph/50Hz</td>
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<td>440</td>
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<td>44</td>
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<tr>
<td>50BF050-1</td>
<td>380V/3Ph/50Hz</td>
<td>360</td>
<td>440</td>
<td>2</td>
<td>44</td>
<td>2</td>
</tr>
<tr>
<td>50BF060-1</td>
<td>380V/3Ph/50Hz</td>
<td>360</td>
<td>440</td>
<td>2</td>
<td>58</td>
<td>2</td>
</tr>
<tr>
<td>50BF080-1</td>
<td>380V/3Ph/50Hz</td>
<td>360</td>
<td>440</td>
<td>2</td>
<td>97</td>
<td>2</td>
</tr>
</tbody>
</table>

Note:
- Unit 50BF050-1 - 50BF080-1 have 2 compressors. Values are for each compressor.
- FLA: Full Load Amps
- RLA: Rated Load Amps
- LRA: Locked Rotor Amps
- MOCBP: Maximum Overcurrent Protective Device

Unit model for which data is needed.
BASE UNIT

UNIT shall be single-package vertical type and shall include self contained water cooled condenser(s).

Units shall be similar to the Carrier 50BF range.

TOTAL COOLING CAPACITY of the unit shall be ___ Btuhr or greater at conditions of ___ cfm. Evaporator air entering at ___ °F wet bulb temperature. Total sensible capacity shall be Btuhr or greater with ___ °F dry bulb temperature at the above conditions.

WATER COOLED CONDENSER(S) shall maintain ___ °F saturated condensing temperature when supplied with ___ GPM of ___ water at a ft² - hr - F/BTU water fouling factor.

MAXIMUM WATER PRESSURE DROP for the condenser(s) all these conditions shall be ___ IN. of water. Unit(s) of nominal 187,600 Btuhr or greater cooling capacity shall be provided with 2 steps of cooling capacity.

COMPRESSION(S) shall be fully hermetic type for the smaller units 50BF008 and 50BF015 and serviceable hermetic type for the unit 50BF020 onward. The compressor(s) shall be equipped with suitable vibration isolators, crankcase heater, filter drier(s), discharge shut off valves and shall be located in a sound attenuating compartment within the cabinet. Power input to the compressor motor(s) shall not exceed ___ kW at the conditions specified.

CABINET shall be of heavy gauge galvannealed steel, phosphatised and powder painted. Unit sections shall be insulated to prevent sweating and to muffle sound using 1 IN. thick rockwool covered with aluminium foil. The unit dimensions shall be ___ mm wide, ___ mm deep and ___ mm high. A self contained filter frame for use of standard throwaway or permanent filters of ___x___x___ IN shall be located inside the cabinet.

CONDENSERS

WATER COOLED CONDENSERS shall be shell and tube type for all units of 50BF series. Each shall be equipped with a pressure relief device and liquid line shut off valve. Tubes shall be seamless with no interior joints. Threaded pipe connections shall be provided for water supply and return lines. Each unit shall contain a full operating refrigerant charge. CONTROLS shall be factory wired to operate on ___volts, 1 phase, ___ Hz power supply. A factory mounted multi position switch shall control the unit for continuous fan and cooling operation. Circuit breakers or overload relay shall be factory installed. Compressor protection shall include high and low pressure switched and inherent over temperature protection (units thru__).

EVAPORATOR COILS shall be of non-ferrous construction with copper tubing and shall be fed by capillary tube for 50BF008, 50BF010 and thermostatic expansion valve(s) for 50BF015 to 50BF080. Coils shall be of the same manufacture as unit.

EVAPORATOR AIR FAN(S) shall be capable of delivering ___cfm. of air with an external static pressure of ___ in. Evaporator air fans shall be centrifugal forward curved and belt driven by a TEFC induction motor of nominal ___KW or less when operating at ___rpm.