Combination

Aftercooler/Oil Cooler

- Complete Package includes aftercooler/oil cooler, fan, motor, guards and mounting brackets.

- Convert Water cooled compressors to air cooled. Eliminate corrosion and expensive water bills.

- Remote Mount the cooling package from the compressor to reduce noise, or to a cleaner, cooler, more convenient location.

- Canadian Registry Numbers Available

AKG THERMAL SYSTEMS, INC.
**Selection Procedures**

The AOC Series is a complete aftercooler and oil cooler package designed to work on most models of rotary air compressors. To select the appropriate model, simply determine the compressor horsepower, and select the model from the chart below.

<table>
<thead>
<tr>
<th>Air Compressor Horsepower</th>
<th>Recommended AOC Series Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 - 7.5 HP</td>
<td>AOC - 8</td>
</tr>
<tr>
<td>10 - 15 HP</td>
<td>AOC - 15</td>
</tr>
<tr>
<td>20 - 30 HP</td>
<td>AOC - 30</td>
</tr>
<tr>
<td>40 HP</td>
<td>AOC - 40</td>
</tr>
<tr>
<td>50 - 75 HP</td>
<td>AOC - 75</td>
</tr>
<tr>
<td>100 - 125 HP</td>
<td>AOC - 125</td>
</tr>
<tr>
<td>150 - 175 HP</td>
<td>AOC - 175</td>
</tr>
<tr>
<td>200 - 250 HP</td>
<td>AOC - 250</td>
</tr>
<tr>
<td>300 - 350 HP</td>
<td>AOC - 350</td>
</tr>
</tbody>
</table>

**Sizing Notes, Recommendations Are Based On The Following:**

**Temperatures:**
- Ambient Air Temperature + 100°F = Compressor Oil Inlet Temperature.
- Ambient Air Temperature + 15°F = Compressor Air Outlet Temperature.

**Flows:**
- Horsepower x .25 = 2.5 GPM (bearing oil cooling) = Oil Flow
- Compressor Horsepower x 4.5 = SCFM Air Flow

**Heat Removal:**
- Oil Cooler = Compressor Horsepower x 1.15 (motor service factor) x .83 (this assumes 83% of input horsepower is rejected to heat)
- Aftercooler = Compressor Horsepower x 1.15 (motor service factor) x .17 (this assumes 17% of input horsepower is rejected to heat)

**Electric Motor Data**

<table>
<thead>
<tr>
<th>Model Size</th>
<th>HP RPM</th>
<th>Motor Frame</th>
<th>SINGLE PHASE</th>
<th>THREE PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Voltage</td>
<td>Hz</td>
</tr>
<tr>
<td>AOC-8</td>
<td>1/3</td>
<td>IEC 63</td>
<td>115/230</td>
<td>60</td>
</tr>
<tr>
<td>AOC-15</td>
<td>1/2</td>
<td>IEC 71</td>
<td>115-208/230</td>
<td>60</td>
</tr>
<tr>
<td>AOC-30</td>
<td>1/2</td>
<td>NEMA 56C</td>
<td>115-208/230</td>
<td>60</td>
</tr>
<tr>
<td>AOC-40</td>
<td>1</td>
<td>NEMA 56C</td>
<td>115-208/230</td>
<td>60</td>
</tr>
<tr>
<td>AOC-75</td>
<td>2</td>
<td>NEMA 56C</td>
<td>115/230</td>
<td>60</td>
</tr>
<tr>
<td>AOC-125</td>
<td>5</td>
<td>NEMA 184TC</td>
<td>230</td>
<td>60</td>
</tr>
<tr>
<td>AOC-175</td>
<td>7.5</td>
<td>NEMA 213TC</td>
<td>230</td>
<td>60</td>
</tr>
<tr>
<td>AOC-250</td>
<td>7.5</td>
<td>NEMA 213TC</td>
<td>230</td>
<td>60</td>
</tr>
<tr>
<td>AOC-350</td>
<td>10</td>
<td>NEMA 213TC</td>
<td>230</td>
<td>50</td>
</tr>
</tbody>
</table>

**Notes:**
- Electric motors are totally enclosed, and are not thermally protected.
- Actual ratings vary with motor brand. Check motor nameplate for actual ratings.
- Motor RPM is reduced by 1/6 for 50 Hz service.
**Dimensions**

- MAXIMUM WORKING PRESSURE: 250 PSI
- MAXIMUM WORKING TEMPERATURE: 250 °F

**Materials**
- COOLER: Aluminum
- FAN BLADE: Polypropylene Blades
- SHROUD: Powder Painted Steel
- FAN GUARD: Zinc Plated Steel
- MOUNTING BRACKETS: Powder Painted Steel

**Ordering Information**
- AOC SERIES STANDARD
- MODEL SIZE SELECTED
- MOTOR DATA:
  - 0 = NO MOTOR
  - C = CORE ONLY
  - 1 = SINGLE PHASE
  - 3 = THREE PHASE
  - 575 = 575 VOLT
- CUSTOM FEATURE CODE:
  - R = REVERSED AIR FLOW
  - AD = SAE TO NPT ADAPTORS INSTALLED
  - H = HERESITE COATING/CORE ASSEMBLY
  - CRN = CANADIAN REGISTRY, 250 PSI
  - CRS = CANADIAN REGISTRY, 150 PSI
AOC-Series

BULLETIN AOC-1

Aftercooler/Oil Cooler Combination coolers. Side-by-side coolers for cooling both lube oil and compressed air from rotary screw air compressors. Excellent for converting water cooled compressors to air cooled. Also may be used for remote mounting of coolers from the compressor.

FP-Series

BULLETIN FP-1

Water cooled Oil Coolers. Cool a wide range of applications including compressor lube oil, gear boxes, and hydraulic oil. Bar & Plate Construction is both rugged and compact. Six models with cooling capacities to 150 HP.

STA-Series

BULLETIN STA-1

Water Cooled Aftercoolers. Cool compressed air from piston compressors. Air through the tube design allows cooling tubes to be cleaned. Preferred design for piston style air compressors. Available from stock.

AC-Series

BULLETIN ACB-1

Air Cooled Oil Coolers. Cool a wide range of applications including rotary screw compressor lube oil, gear boxes, and hydraulic oil. Bar & Plate Construction is both rugged and compact. Six models with capacities to 1600 SCFM.

CC-Series

BULLETIN CCB-1

Air Cooled Aftercoolers. Compact Bar & Plate Construction is up to 65% smaller in size than competition. TEFC motors and baked powder paint for all-weather service. Six models with capacities to 1600 SCFM.

Accessories

- Electrical temperature switches cycle cooling fans to maintain desired oil temperature.
- Three-way thermostatic valves bypass cold oil to speed warm-up, then modulate oil flow to maintain desired oil temperatures.
- Moisture separators, install on the aftercooler discharge to remove unwanted water and dirt from compressed air. Provides economical moisture removal.