

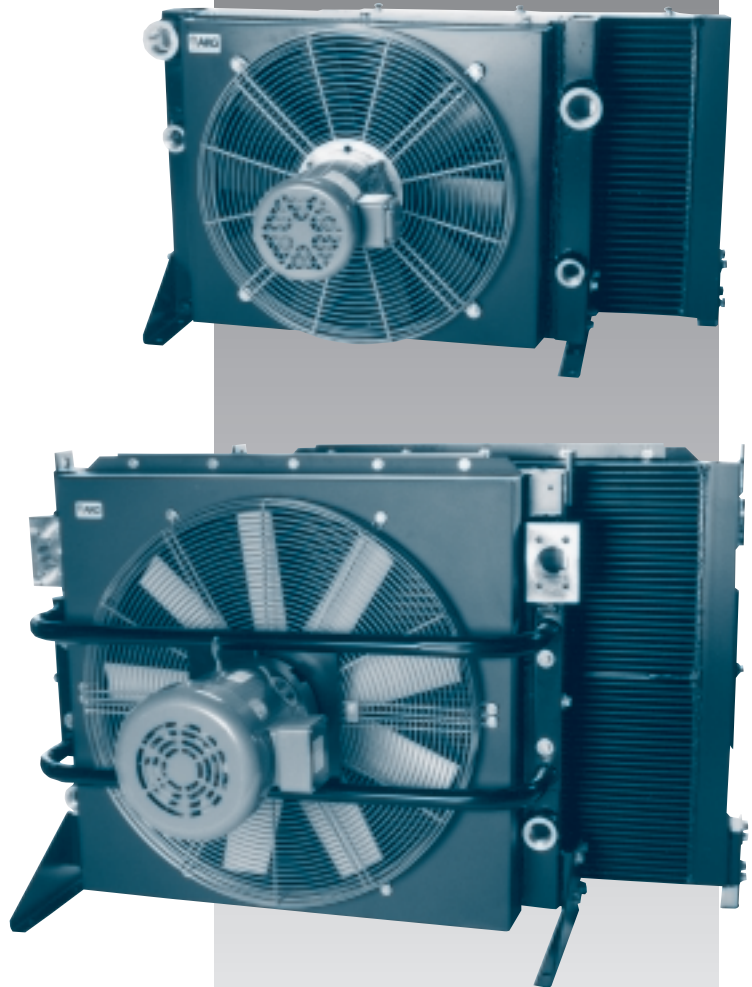


COMBINATION

SERIES

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.

| <u>Air Compressor Horsepower</u> | <u>Recommended AOC Series Model Number</u> |
|--------------------------------------|--|
| 5 - 7.5 HP | AOC - 8 |
| 10 - 15 HP | AOC - 15 |
| 20 - 30 HP | AOC - 30 |
| 40 HP | AOC - 40 |
| 50 - 75 HP | AOC - 75 |
| 100 - 125 HP | AOC - 125 |
| 150 - 175 HP | AOC - 175 |
| 200 - 250 HP | AOC - 250 |
| 300 - 350 HP | AOC - 350 |

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)

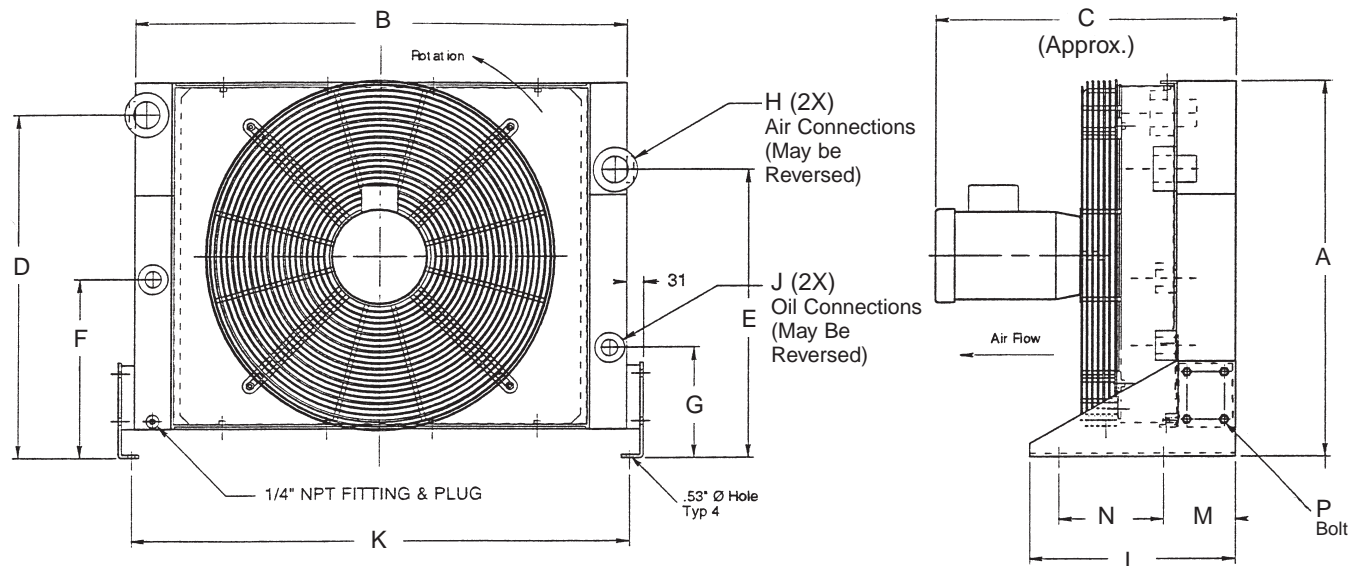
Aftercooler = Compressor Horsepower x 1.15 (motor service factor) x .17
(this assumes 17% of input horsepower is rejected to heat)

Electric Motor Data

| Model Size | HP RPM | Motor Frame | SINGLE PHASE | | | THREE PHASE | | | |
|------------|-------------|---------------|--------------------|----|-----------------------|-------------|---------|-----------------------|------|
| | | | Voltage | Hz | Full Load Amps 230 V. | Voltage | Hz | Full Load Amps 230 V. | |
| AOC-8 | 1/3 3250 | IEC 63 | 115/230 | 60 | 2.6 | 208-230/460 | | 60 | 1.2 |
| | | | | | | 200/220 | | 50 | |
| | | | | | | 380/440 | | | |
| AOC-15 | 1/2 3250 | IEC 71 | 115-208/230 | 60 | 3.4 | 208-230/460 | | 60 | 2.0 |
| | | | | | | 200/220 | | 50 | |
| | | | | | | 380/440 | | | |
| AOC-30 | 1/2 1725 | NEMA 56C | 115-208/230 | 60 | 4.4 | 208-230/460 | | 60 | 3.4 |
| | | | | | | 190/200 | 208/220 | 50 | |
| | | | | | | 380/400 | 416/440 | | |
| AOC-40 | 1 1725 | NEMA 56C | 115-208/230 | 60 | 6.4 | 208-230/460 | | 60 | 6.2 |
| | | | | | | 190/200 | 208/220 | 50 | |
| | | | | | | 380/400 | 416/440 | | |
| AOC-75 | 2 1725 | NEMA 56C | 115/230 | 60 | 10.0 | 208-230/460 | | 60 | 13.4 |
| | | | | | | 190/200 | 208 | 50 | |
| | | | | | | 380/400 | 416 | | |
| AOC-125 | 5 1725 | NEMA 184TC | 230 | 60 | 23.0 | 208-230/460 | | 60 | 19.2 |
| | | | | | | 190/200 | 208 | 50 | |
| | | | | | | 380/400 | 416 | | |
| AOC-175 | 7.5 1725 | NEMA 213TC | Consult Factory | | | 208-230/460 | | 60 | 19.2 |
| | | | | | | 190/200 | 208 | 50 | |
| | | | | | | 380/400 | 416 | | |
| AOC-250 | 7.5 1725 | NEMA 213TC | Consult Factory | | | 208-230/460 | | 60 | 25.0 |
| | | | | | | 190/200 | 208 | 50 | |
| | | | | | | 380/400 | 416 | | |
| AOC-350 | 10 1725 | NEMA 215TC | Consult Factory | | | 208-230/460 | | 60 | 25.0 |
| | | | | | | 190/200 | 208 | 50 | |
| | | | | | | 380/400 | 416 | | |

- ▶ 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



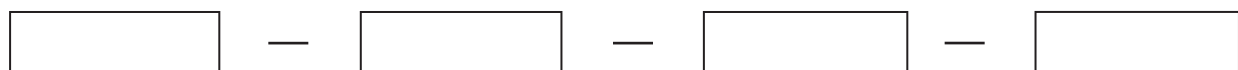
| MODEL SIZE | A | B | C | D | E | F | G | H | J | K | L | M | N | P | APPROX. WEIGHTS | |
|------------|-------|-------|-------|-------|-------|-------|-------|-----------|----------|----------|-------|-------|-------|-------------------|-------------------------|----------|
| | | | | | | | | | | | | | | | NET | SHIPPING |
| AOC-8 | 12.52 | 15.75 | 14.72 | 11.06 | 11.06 | 6.85 | 3.35 | 1.00 NPT | 0.50 NPT | 14.53 | 7.36 | 3.07 | 3.50 | M8X10 BOLT (4PL) | 30 | 40 |
| AOC-15 | 16.25 | 19.88 | 16.69 | 14.80 | 13.62 | 10.47 | 3.50 | | 18.58 | 50 | | | | | 60 | |
| AOC-30 | 20.63 | 26.36 | 17.75 | 18.86 | 15.55 | 10.67 | 3.86 | 1.50 NPT | 1.00 NPT | 25.20 | 9.02 | 4.17 | 3.74 | M10X15 BOLT (8PL) | 100 | 145 |
| AOC-40 | 22.52 | 30.31 | 18.74 | 20.67 | 17.09 | 13.70 | 5.79 | | | 29.09 | | | | | 130 | 170 |
| AOC-75 | 28.19 | 37.00 | 22.60 | 25.79 | 21.69 | 13.50 | 8.35 | 2.00 NPT | 1.25 NPT | 37.48 | 15.47 | 5.40 | 7.87 | M12X20 BOLT (8PL) | 200 | 250 |
| AOC-125 | 36.30 | 40.94 | 24.76 | 31.10 | 31.10 | 10.12 | 4.29 | | | 41.42 | | | | | 300 | 350 |
| AOC-175 | 37.44 | 42.91 | 29.84 | 30.87 | 30.87 | 9.29 | 9.29 | 2.50* SAE | 1.50 NPT | 43.39 | 20.00 | 7.80 | 10.00 | M12X20 BOLT (8PL) | 400 | 460 |
| AOC-250 | 44.37 | 48.82 | 30.28 | 37.87 | 34.88 | 12.48 | 9.37 | 3.00* SAE | 2.00 NPT | 49.29 | | | | | 530 | 600 |
| AOC-350 | 57.48 | 52.76 | 32.48 | 51.97 | 43.86 | 17.72 | 17.72 | | 2.50 SAE | 2.50 SAE | 50.55 | 20.00 | 7.80 | 10.00 | 3/4-10 1 1/2 BOLT (8PL) | 755 |

*SAE 4-BOLT FLANGES. MAY BE CONVERTED TO NPT BY ADDING - AD TO THE END OF THE MODEL CODE AS SHOWN BELOW.

Specifications

| | | |
|------------------|--|--|
| RATINGS | MAXIMUM WORKING PRESSURE250 PSI | MAXIMUM WORKING TEMPERATURE250 °F |
| MATERIALS | COOLERAluminum | FAN BLADEPolypropylene Blades |
| | SHROUDPowder Painted Steel | ALUMINUM HUB |
| | FAN GUARDZinc Plated Steel | MOUNTING BRACKETSPowder 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