

COMPRESSED AIR COOLING | Air AHP Series

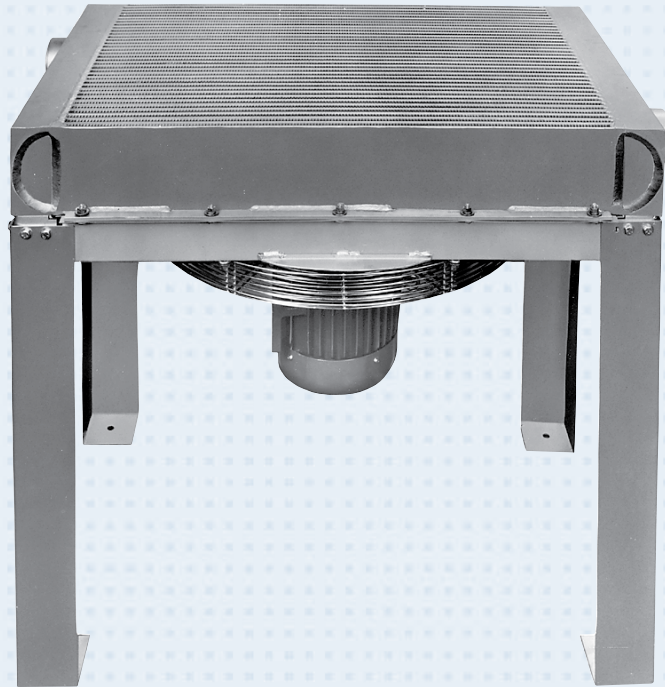
Southwest Thermal Technology

Questions? Call Sales M-F 8am-5pm PT
p. 888-226-8522 | www.SouthwestThermal.com

BRAZED ALUMINUM CONSTRUCTION

Features

- Full Line of Sizes and Features
- Brazed Bar and Plate Aluminum Core
- Energy Efficient
- High Performance
- High Flows 400-3500 CFM
- Vertical Air Flow
- High Technology Compact Design
- Optional Air Motor
- Rugged Heavy Duty Construction
- Excellent for Heat Recovery



Ratings

Maximum Operating Pressure 250 psi

Maximum Operating Temperature 350° F

Materials

Cabinet Steel with Baked Enamel Finish

Core Brazed Aluminum Bar and Plate

Fan Aluminum Hub, Polypropylene Blades

Shroud Painted Steel

Motor TEFC

Fan Guard Steel with Baked Enamel Finish

How to Order

AHP

Model Series
AHP

Model Size Selected

Specify Motor Required

0 - No Motor

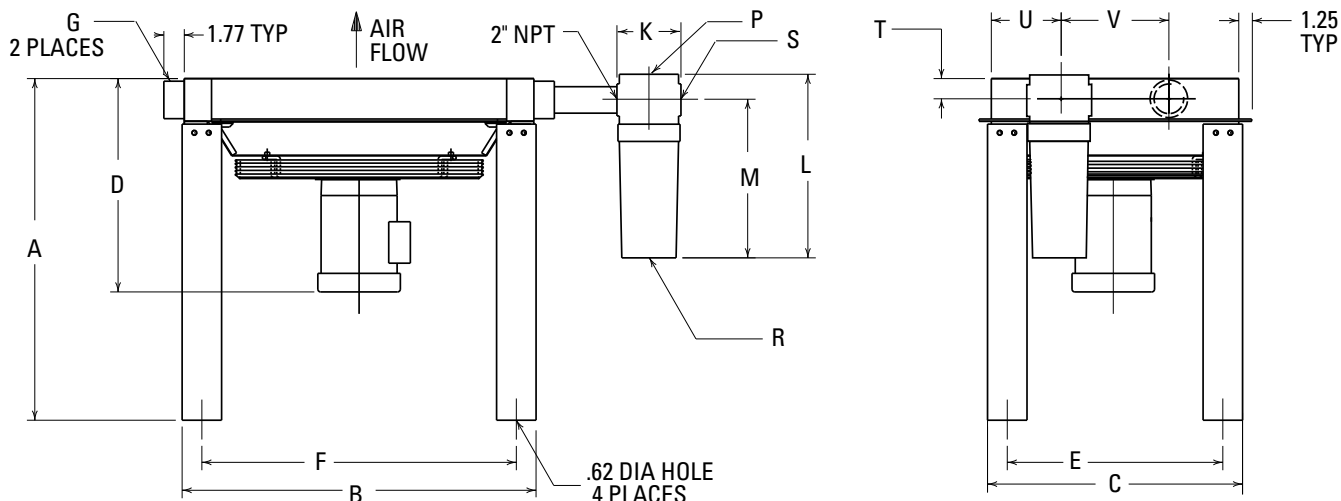
2 - Single Phase 60 Hz TEFC 115/208-230 Volt

3 - Three Phase 60 Hz TEFC 230/460 Volt

5 - Air Motor

6 - 575 Volt

Dimensions



| Model | A | B | C | D Approx | E | F | G NPT | Optional Separator | | | | | | T | U | V | Recommended Optional Separator Model Number |
|----------|-------|-------|-------|-------------|-------|-------|----------|--------------------|-------|-------|----------|----------|----------|------|-------|---------|---|
| | | | | | | | | K | L | M | P NPT | R NPT | S NPT | | | | |
| AHP-400 | 34.20 | 22.6 | 17.96 | 18.01 | 13.96 | 18.68 | 2.00 | 4.70 | 18.60 | 16.00 | N/A | .50 | 2.00 | 1.85 | 6.00 | 4.92 | S-600M |
| AHP-725 | | 30.56 | 22.37 | | 18.37 | 26.56 | | | | | | | | | | 9.34 | |
| AHP-950 | 36.01 | 37.24 | 26.78 | 22.76 | 22.78 | 33.24 | 3.00 | 8.00 | 23.00 | 20.00 | N/A | .25 | 3.00 | 2.76 | 8.00 | 13.76 | S-1700M |
| AHP-1200 | | 41.19 | | 25.07 | | | | | | | | | | | | 30.89 | |
| AHP-1600 | | | 34.89 | 25.95 | 30.89 | 20.86 | | | | | | | | | | | |
| AHP-2000 | | 51.04 | 37.88 | 27.57 | 33.88 | 47.04 | 4.009 | 16.75 | 30.50 | 23.25 | .50 | .75 | 4.00 | 8.00 | 26.68 | S-2600M | |
| AHP-2500 | | 49.07 | 43.70 | 28.01 | 39.70 | 45.07 | | | | | | | | | | | |
| AHP-3000 | | 51.04 | 52.52 | 29.17 | 48.52 | 47.04 | 4.009 | 16.75 | 30.50 | 23.25 | .50 | .75 | 4.00 | 8.00 | 35.50 | S-2600M | |
| AHP-3500 | | | 56.30 | | 52.30 | | | | | | | | | | 47.04 | | 39.28 |

Note: We reserve the right to make reasonable design changes without notice. All Dimensions are in inches.

Capacity Selection Chart Max. SCFM @ 5, 10, 15 and 20°F Approach

| Model Number | Approach Temp. °F | 150 | | | | 200 | | | | 250 | | | | 300 | | | | 350 | | | | Recommended Optional Separator Model Number |
|--------------|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|---------|---|
| | | 5 | 10 | 15 | 20 | 5 | 10 | 15 | 20 | 5 | 10 | 15 | 20 | 5 | 10 | 15 | 20 | 5 | 10 | 15 | 20 | |
| AHP-400 | 210 | 384 | 520 | 605 | 175 | 375 | 430 | 500 | 160 | 300 | 400 | 464 | 135 | 250 | 340 | 396 | 425 | 235 | 305 | 355 | S-600M | |
| | 355 | 650 | 890 | 1025 | 308 | 560 | 760 | 880 | 290 | 545 | 725 | 840 | 245 | 450 | 605 | 701 | 225 | 410 | 540 | 625 | | |
| AHP-950 | 480 | 871 | 1178 | 1360 | 415 | 754 | 1020 | 1180 | 390 | 712 | 950 | 1100 | 320 | 588 | 785 | 910 | 280 | 520 | 690 | 780 | S-1700M | |
| | 600 | 1090 | 1475 | 1710 | 520 | 950 | 1290 | 1460 | 490 | 900 | 1200 | 1380 | 405 | 735 | 980 | 1130 | 355 | 650 | 865 | 990 | | |
| AHP-1200 | 790 | 1440 | 1950 | 2260 | 710 | 1290 | 1720 | 1950 | 660 | 1200 | 1600 | 1860 | 530 | 965 | 1290 | 1480 | 460 | 840 | 1135 | 1300 | S-2600M | |
| | 980 | 1790 | 2420 | 2800 | 870 | 1580 | 2140 | 2460 | 820 | 1490 | 2000 | 2300 | 660 | 1210 | 1595 | 1840 | 572 | 1040 | 1400 | 1610 | | |
| AHP-2500 | 1220 | 2220 | 3000 | 3470 | 1090 | 1980 | 2680 | 3100 | 1035 | 1880 | 2500 | 2870 | 784 | 1426 | 1980 | 2270 | 705 | 1290 | 1725 | 1980 | S-2600M | |
| | 1450 | 2650 | 3580 | 4120 | 1295 | 2360 | 3200 | 3710 | 1243 | 2260 | 3000 | 3450 | 985 | 1794 | 2360 | 2715 | 840 | 1530 | 2040 | 2350 | | |
| AHP-3500 | 1680 | 3064 | 4140 | 4800 | 1530 | 2785 | 3760 | 4320 | 1460 | 2660 | 3500 | 4015 | 1150 | 2090 | 2760 | 3200 | 950 | 1740 | 2350 | 2700 | S-2600M | |
| | | | | | | | | | | | | | | | | | | | | | | |

Above specifications are based on 80 to 125 PSIG operating pressures. Maximum pressure drop, less than 3 psi. A flexible metal hose must be properly installed between the compressor and aftercooler to validate warranty. In addition, for mobile and other applications where there may be additional stresses to the connections, our 4-bolt SAE Flange should be used. Consult factory for pricing and availability.

Electric Motor & Fan Data

| Model | Fan CFM | Motor H.P. | Voltage | Phase | Full Load Amps | Hz | RPM | Nema Frame | Thermal Overload | Approx. Shipping Weight (Lbs.) | Sound dB(A) at 3 ft |
|----------|-------------------|------------|----------------------------|--------|----------------|-------------|-------------------|------------|------------------|--------------------------------|---------------------|
| AHP-400 | 2200 1825/2200 | 1.0 | 115/208-230 208-230/460 | 1 3 | 6.0 3.6/3.2 | 60 50/60 | 3450 2850/3450 | 56C | No | 120 | 97 |
| AHP-725 | 3600 3025/3600 | 1.5 | 115/208-230 208-230/460 | 1 3 | 8.5 4.8/4.2 | 60 50/60 | 3450 2850/3450 | | | 170 | 100 |
| AHP-950 | 4700 | 1.5 | 115/208-230 208-230/460 | 1 3 | 8.6 4.6 | 60* | 1740 | 145TC | | 330 | 92 |
| AHP-1200 | 7000 | 5.0 | 230 | 1 | 23.0 | | | 184TC | | 450 | 94 |
| | | 3.0 | 208-230/460 | 3 | 8.8 | | | 182TC | | 515 | 96 |
| AHP-1600 | 9700 | 5.0 | 208-230/460 | 3 | 13.4 | | | 184TC | | 600 | 98 |
| AHP-2000 | 11000 | 7.5 | 230/460 | | 19.6 | | | 213TC | | 625 | 98 |
| AHP-2500 | 14000 | | | | 24.8 | | | 215TC | | 645 | 102 |
| AHP-3000 | 17500 | 10.0 | | | 750 | | | 102 | | | |
| AHP-3500 | 17500 | | | | 750 | | | 102 | | | |

All motors shown are TEFC. Other motor options available upon request. Published electrical ratings are approximate, and may vary because of motor brand. Actual ratings are on motor nameplate.

Fan motors **must not** be cycled. Outdoor applications must be protected from direct weather. If ductwork or additional static resistance is added to the cooler airstream, an auxiliary air mover may be required.

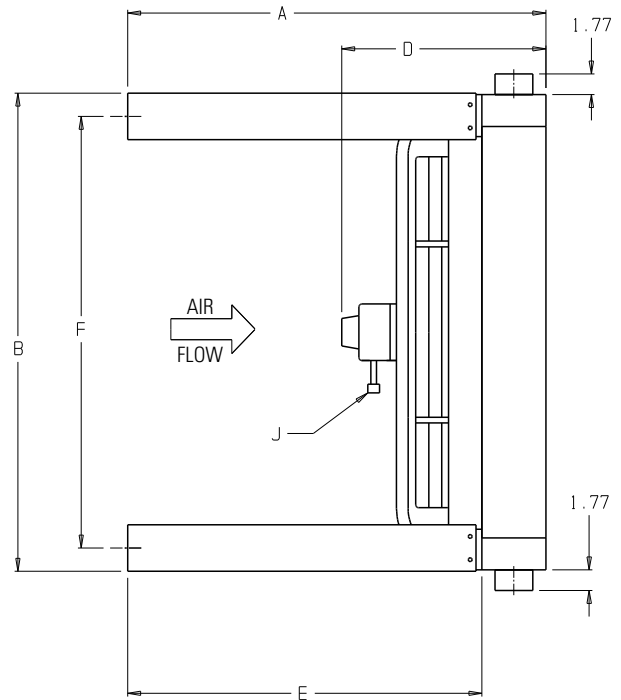
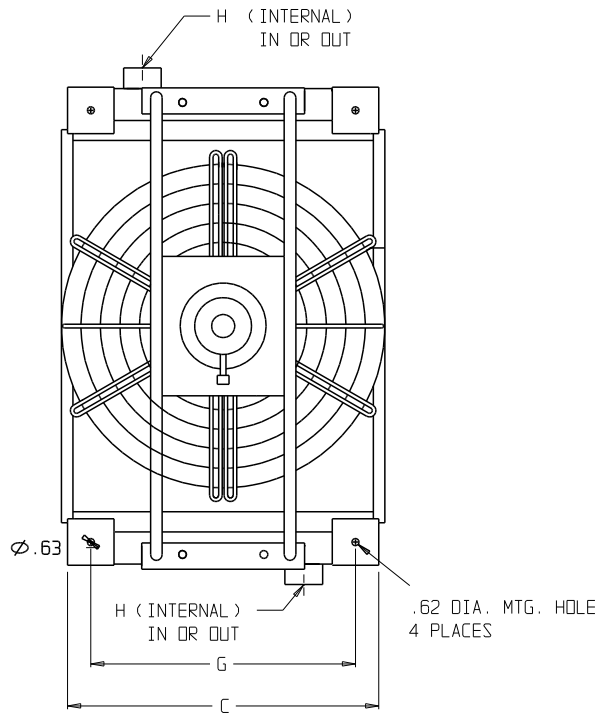
*3 phase motors available in 50Hz. Reduce performance by 10%.

Recommended Typical Installation

- Support piping as needed. Flexible connectors must be properly installed to validate warranty.
- Coolers should not operate in ambient temperatures below 35°F (1°C). Consult factory for recommendations.
- The fan cannot be cycled.
- AHP coolers operated outdoors must be protected from weather. Consult factory for recommendations.
- If ductwork or additional static resistance is added to the cooler airstream, an auxiliary air mover may be required.

Dimensions

AHP Series with AIR MOTOR



| Model | A | B | C | D Approx. | E | F | G | H NPT | J NPT | PSI ⁽¹⁾ | CFM ⁽²⁾ | Approx. Shipping Wt. (lbs.) |
|----------|-------|-------|-------|--------------|-------|-------|-------|----------|----------|--------------------|--------------------|-----------------------------------|
| AHP-400 | 34.20 | 22.68 | 17.96 | 13.55 | 30.00 | 13.96 | 18.68 | 2.00 | .25 | 60 | 50 | 105 |
| AHP-725 | | 30.56 | 22.37 | | | 18.37 | 26.56 | | | 85 | 45 | 140 |
| AHP-950 | 36.01 | 37.24 | 26.78 | 19.01 | 30.00 | 22.78 | 33.24 | 3.00 | .50 | 60 | 55 | 425 |
| AHP-1200 | | 41.19 | | 20.50 | | | 37.19 | | | 70 | 100 | 481 |
| AHP-1600 | | 51.04 | 34.89 | 17.06 | | 30.89 | 47.04 | 1.00 | 100 | 180 | 595 | |
| AHP-2000 | | | 37.88 | 22.23 | | 33.88 | 47.04 | 4.00 | 1.25 | 90 | 230 | 700 |
| AHP-2500 | | | 49.07 | 43.70 | | 39.70 | 45.07 | | | 735 | | |
| AHP-3000 | | | 52.52 | 23.56 | | 48.52 | 47.07 | 795 | | | | |
| AHP-3500 | 51.04 | 56.30 | 52.30 | 47.07 | 100 | 275 | 825 | | | | | |

Note: We reserve the right to make reasonable design changes without notice. All dimensions are in inches.

⁽¹⁾ Air inlet to the air motor must be regulated to this pressure.

⁽²⁾ CFM (Free Air) consumption of the air motor. Lubrication = One drop of oil for every 50-75 CFM of air going through the motor. Use detergent SAE #10 oil. Filter, regulator and lubricators for the air motors are required, but not included.

