

Compressed Air Cooling AHP / AHPH Series

The AHP/AHPH Series aftercooler is specifically designed for cooling compressed air. The rugged, heavy duty design features high performance bar & plate aluminum construction that is optimized for high air flow, low pressure drop, and maximum heat transfer.

AHP Series features durable black powder coating finish and detachable legs for floor or suspension mounting. Air flow is vertical so hot air can be blown away from any operators. This compact series includes 9 models with flow capacity from 125 – 4800 SCFM (3.5 – 135.9 SCMM) to be used on compressors from 60 – 700 HP (45 – 520 Kw).

AHPH Series features durable black powder coating finish and are designed for horizontal air flows. Fixed mounting feet. This compact series includes 6 models with flow capacity from 30 –2800 SCFM (1 – 80 SCMM) to be used on compressors from 60 – 400 HP (45 – 520 Kw).



Option
Air motor

BRAZED ALUMINUM CONSTRUCTION

Performance Notes

- Air to Air Cooling
- Brazed bar and plate aluminum core
- High flows 50 – 3500 CFM
- Vertical (AHP) or horizontal (AHPH) air flow
- Rugged heavy duty construction
- Excellent for heat recovery
- Detachable legs on AHP (shipped unattached)
- Fixed mounting feet on some AHPH models

Ratings

Maximum Operating Pressure

250 PSI

Maximum Operating Temperature

350°F

*CRN Rating

235 psi at 250°F (121°C)

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		Model Size Selected		Specify Motor Required
AHP - Vertical Air Flow		400		0 - No Motor
		725		2 - Single Phase 60 Hz TEFC 115/208-230 Volt
		950		3 - Three Phase 60 Hz TEFC 230/460 Volt
		1200		5 - Air Motor
		1600		6 - 575 Volt
		2000		
		2500		
		3000		
		3500		

AHPH	-		-	
Model Series		Model Size Selected		Specify Motor Required
AHPH - Horizontal Air Flow		50		0 - No Motor
		100		2 - Single Phase 60 Hz TEFC 115/208-230 Volt
		200		3 - Three Phase 60 Hz TEFC 230/460 Volt
		400		5 - Air Motor (Not available on AHPH-50, 100, and 200)
		725		6 - 575 Volt
		950		
		1200		
		1600		
		2000		

Specifications

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

Inlet Temp. °F		150				200				250				300				350			
Approach Temp. °F		5	10	15	20	5	10	15	20	5	10	15	20	5	10	15	20	5	10	15	20
AHPH-50	SCFM	29	61	87	101	26	56	69	82	24	45	62	74	21	37	51	61	19	34	45	54
AHPH-100	SCFM	56	112	158	180	51	105	126	149	47	85	116	138	40	71	97	114	37	67	85	101
AHPH-200	SCFM	109	216	296	337	97	204	241	280	90	166	223	265	77	138	189	220	72	130	166	196
AHP/AHPH-400	SCFM	210	384	520	605	175	375	430	500	160	300	400	464	135	250	340	396	125	235	305	355
AHP/AHPH-725	SCFM	355	650	890	1025	308	560	760	880	290	545	725	840	245	450	605	701	225	410	540	625
AHP/AHPH-950	SCFM	480	871	1178	1360	415	754	1020	1180	390	712	950	1100	320	588	785	910	280	520	690	780
AHP/AHPH-1200	SCFM	600	1090	1475	1710	520	950	1290	1460	490	900	1200	1380	405	735	980	1130	355	650	865	990
AHP/AHPH-1600	SCFM	790	1440	1950	2260	710	1290	1720	1950	660	1200	1600	1860	530	965	1290	1480	460	840	1135	1300
AHP/AHPH-2000	SCFM	980	1790	2420	2800	870	1580	2140	2460	820	1490	2000	2300	660	1210	1595	1840	572	1040	1400	1610
AHP-2500	SCFM	1220	2220	3000	3470	1090	1980	2680	3100	1035	1880	2500	2870	784	1426	1980	2270	705	1290	1725	1980
AHP-3000	SCFM	1450	2650	3580	4120	1295	2360	3200	3710	1243	2260	3000	3450	985	1794	2360	2715	840	1530	2040	2350
AHP-3500	SCFM	1680	3064	4140	4800	1530	2785	3760	4320	1460	2660	3500	4015	1150	2090	2760	3200	950	1740	2350	2700

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 HP	Voltage	Phase	Full Load Amps	HZ	RPM	Nema Frame	Thermal Overload	Approximate Shipping Weight (LBS)	Sound dB(A) at 3 FT
AHPH-50	800	1/3	115/230	1	3.0	60 Hz	3450	48C	No	40	80
			208-230/460	3	1.4						
AHPH-100	800	1/3	115/230	1	3.0	60 Hz	3450	48C	No	45	80
			208-230/460	3	1.4						
AHPH-200	1425	1/2	115/230	1	3.7	60 Hz	3450	48C	No	55	85
			208-230/460	3	2.2						
AHP/AHPH-400	2200	1.0	115/208-230	1	6.0	60	3450	56C	No	120	97
	1825/2200	1.0	208-230/460	3	3.6/3.2	50/60	2850/3450	56C	No	120	97
AHP/AHPH-725	3600	1.5	115/208-230	1	8.5	60	3450	56C	No	170	100
	3025/2200	1.5	208-230/460	3	4.9-4.6/2.3	50/60	2850/3450	56C	No	170	100
AHP/AHPH-950	4700	1.5	115/208-230	1	8.6	60*	1740	145TC	No	330	92
	4700	1.5	208-230/460	3	4.6	60*	1740	145TC	No	330	92
AHP/AHPH-1200	7000	5.0	230	1	23.0	60*	1740	184TC	No	450	94
	7000	3.0	208-230/460	3	8.8	60*	1740	182TC	No	450	94
AHP/AHPH-1600	9700	5.0	208-230/460	3	13.4	60*	1740	184TC	No	515	96
AHP/AHPH-2000	11000	7.5	230/460	3	19.6	60*	1740	213TC	No	600	98
AHP-2500	14000	7.5	230/460	3	19.6	60*	1740	213TC	No	625	98
AHP-3000	17500	10.0	230/460	3	24.8	60*	1740	215TC	No	645	102
AHP-3500	17500	10.0	230/460	3	24.8	60*	1740	215TC	No	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%.

Specifications

Recommended Typical Installation

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

Air Motor Data

Model	PSI ¹	CFM ²	Approximate Shipping Weight of Cooler with Air Motor (LBS)
AHP/AHPH-400	60	50	105
AHP/AHPH-725	85	65	140
AHP/AHPH-950	60	55	425
AHP/AHPH-1200	70	100	481
AHP/AHPH-1600	100	180	595
AHP/AHPH-2000	90	230	700
AHP-2500	90	230	735
AHP-3000	100	275	795
AHP-3500	100	275	825

Note: We reserve the right to make reasonable design changes without notice.

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.

³ Air motor is not available with AHPH-50, 100, and 200 models.

Crossover Chart

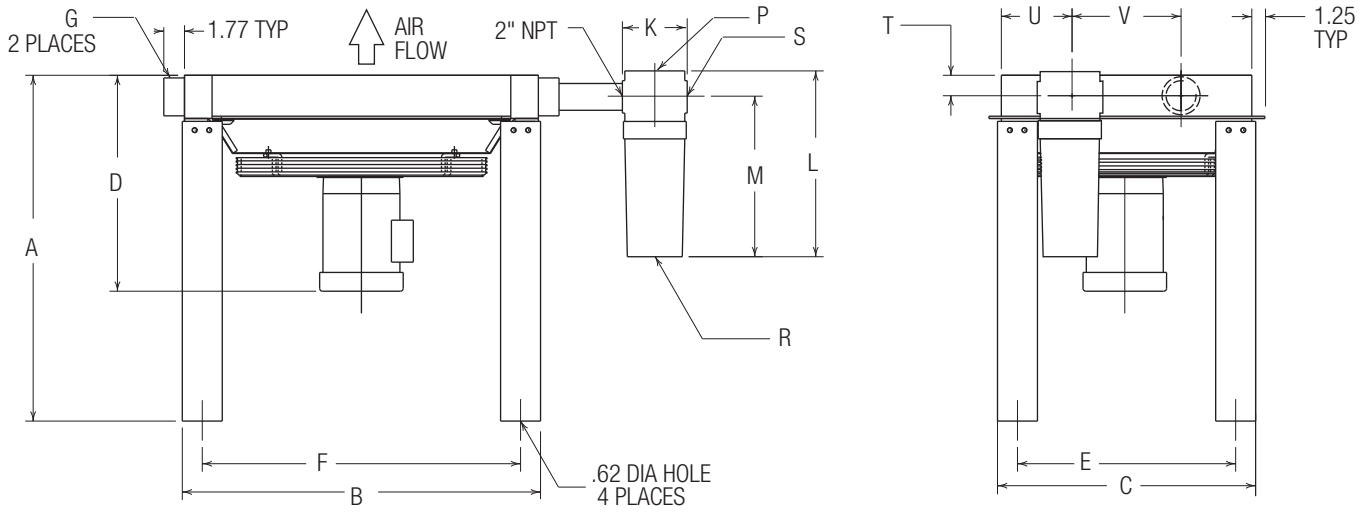
AHP/AHPH	AA	UPA
AHPH-50	AA-50	UPA-20
		UPA-35
		UPA-50
AHPH-100	AA-80	UPA-100
AHPH-200	AA-120	N/A
	AA-150	
AHP/AHPH-400	AA-240	
	AA-300	

Model	Recommended Optional Separator Model Number
AHP-400	S-600M
AHP-725	S-600M
AHP-950	S-1700M
AHP-1200	S-1700M
AHP-1600	S-2600M
AHP-2000	S-2600M
AHP-2500	S-2600M
AHP-3000	S-2600M
AHP-3500	S-2600M

Model	Recommended Optional Separator Model Number
AHPH-50	S-100 M
AHPH-100	S-300 M
AHPH-200	S-300 M
AHPH-400	S-600 M
AHPH-725	S-600 M
AHPH-950	S-1700 M
AHPH-1200	S-1700 M
AHPH-1600	S-2600 M
AHPH-2000	S-2600 M

Dimensions

AHP – Vertical Air Flow

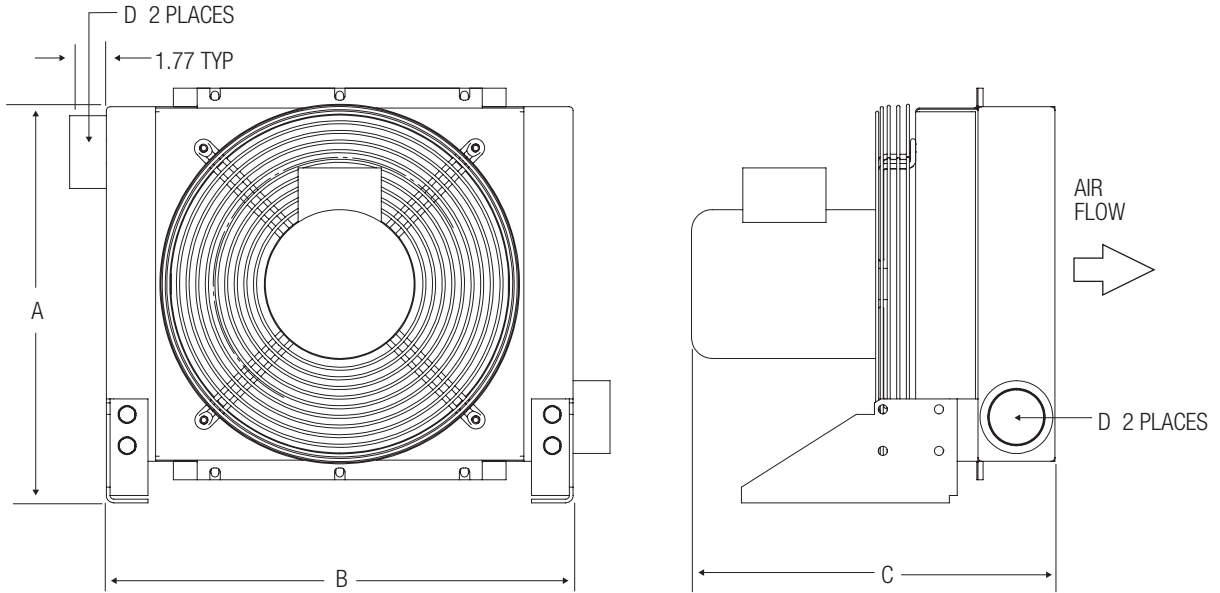


Model	A	B	C	D Approx.		E	F	G NPT	Optional Separator						T	U	V
				Electric Motor	Air Motor				K	L	M	P NPT	R NPT	S NPT			
AHP-400	34.20	22.6	17.96	18.01	13.55	13.96	18.68	2	4.70	18.60	16.00	N/A	.50	2	1.85	6.00	4.92
AHP-725	34.20	30.56	22.37	18.01	13.55	18.37	26.56	2	4.70	18.60	16.00	N/A	.50	2	1.85	6.00	9.34
AHP-950	36.01	37.24	26.78	22.76	19.01	22.78	33.24	3	8.00	23.00	20.00	N/A	.50	2	1.85	6.00	13.76
AHP-1200	36.01	41.19	26.78	25.07	20.50	22.78	37.19	3	8.00	23.00	20.00	N/A	.25	3	2.76	6.00	13.76
AHP-1600	36.01	41.19	34.89	25.95	17.06	30.89	37.19	3	8.00	23.00	20.00	.50	.25	3	2.76	8.00	17.86
AHP-2000	36.01	51.04	37.88	27.57	22.23	33.88	47.04	4	16.75	30.50	23.25	.50	.25	3	2.76	8.00	20.86
AHP-2500	36.01	49.07	43.70	28.01	22.23	39.70	45.07	4	16.75	30.50	23.25	.50	.75	4	2.76	8.00	26.68
AHP-3000	36.01	51.04	52.52	29.17	23.56	48.52	47.04	4	16.75	30.50	23.25	.50	.75	4	2.76	8.00	35.50
AHP-3500	36.01	51.04	56.30	29.17	23.56	52.30	47.04	4	16.75	30.50	23.25	.50	.75	4	2.76	8.00	39.28

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

Dimensions

AHPH – Horizontal Air Flow



Model	A	B	C		D NPT
			Electric Motor	Air Motor	
AHPH-50	12.80	15.86	13.71	NA	1.00
AHPH-100	13.24	15.86	15.09	NA	1.50
AHPH-200	17.23	19.72	16.28	NA	1.50
AHPH-400	17.96	22.60	18.01	13.55	2.00
AHPH-725	22.37	30.56	18.01	13.55	2.00
AHPH-950	26.78	27.24	22.76	19.01	3.00
AHPH-1200	26.78	41.19	25.07	20.50	3.00
AHPH-1600	34.89	41.19	25.95	17.06	3.00
AHPH-2000	37.88	51.04	27.57	22.23	4.00

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