



# AC-series

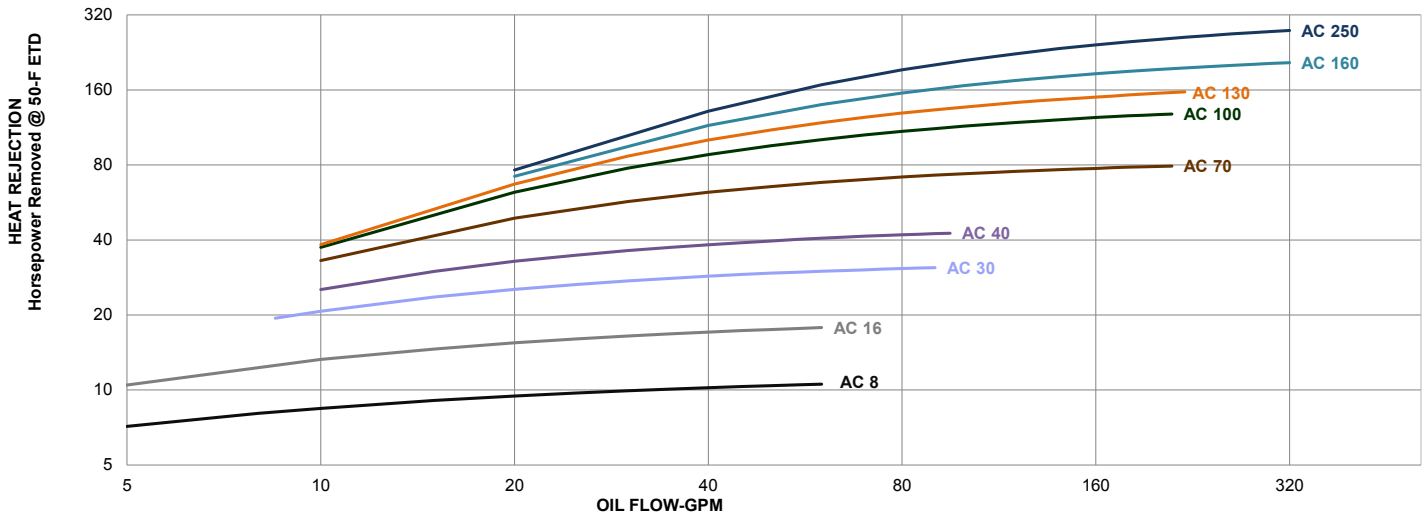
## Classic



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## STANDARD MODELS



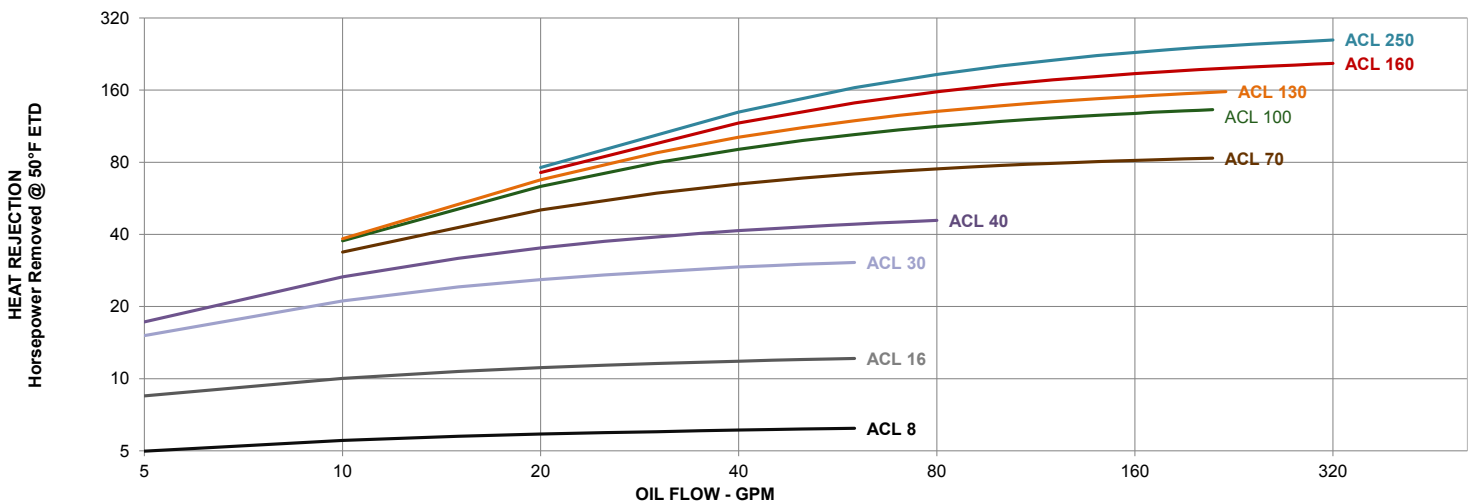
### Specifications:

Maximum Working Pressure	250 PSI
Maximum Working Temperature	250°F

### Materials

Cooler	Aluminum
Shroud	Power Painted Steel
Fan Guard	Zinc Plated Steel
Fan Blade	Polypropylene Blades Aluminum Hub
Mounting Brackets	Powder Painted Steel

## LOW NOISE MODELS



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## AC/ACL TECHNICAL DATA

Model Size	HP RPM		MOTOR FRAME		Voltage (3 Phase)	Hz	Full Load Amps 230V.		Approx Noise Level (dB(A), 1m)		Working Pressure (psi)	Approx. Shipping Weight (lb.)
	AC	ACL	AC	ACL			AC	ACL	AC	ACL		
<b>AC8/ACL8</b>	1/3 3430	1/4 1655	IEC 63	IEC 63	230/460 200/400	60 50	1.1	1.2	80	65	250	45
<b>AC16/ACL16</b>	1/2 3410	1/3 1705	IEC 71	IEC 71	230/460 200/400	60 50	1.6	1.4	85	73	250	55
<b>AC30/ACL30</b>	1/2 1725	1/2 1140	NEMA 56C	NEMA 56C	208-230/460	60*	2.0	2.4	85	75	250	125
<b>AC40/ACL40</b>	1 1725	1/2 1140	NEMA 56C	NEMA 56C	208-230/460	60*	3.8	2.4	88	79	250	163
<b>AC70/ACL70</b>	2 1725	3/4 1140	NEMA 56C	NEMA 56C	208-230/460	60*	6.2	3.0	93	83	250	240
<b>AC100/ACL100</b>	5 1750	1.5 1140	NEMA 184TC	NEMA 56C	208-230/460 190/380	60 50	14.0	5.7	94	86	250	405
<b>AC130/ACL130</b>	7.5 1760	2 1170	NEMA 213TC	NEMA 184TC	208-230/460 190/380	60 50	24.0	7.4	96	88	250	420
<b>AC160/ACL160</b>	7.5 1760	5 1170	NEMA 213TC	NEMA 215TC	208-230/460 190/380	60 50	24.0	19.8	98	89	250	545
<b>AC250/ACL250</b>	10 1750	5 1170	NEMA 215TC	NEMA 215TC	208-230/460 190/380	60 50	29.0	19.8	101	92	250	688

All data based at nominal speed

Electric motors are TEFC and are not thermally protected  
 Actual rating may vary with motor brand. check motor nameplate for actual rating  
 Motor RPM is reduced by 1/16 for 50 Hz service  
 \* - 3 phase motors available in 50 Hz

## AC/ACL DIMENSIONS

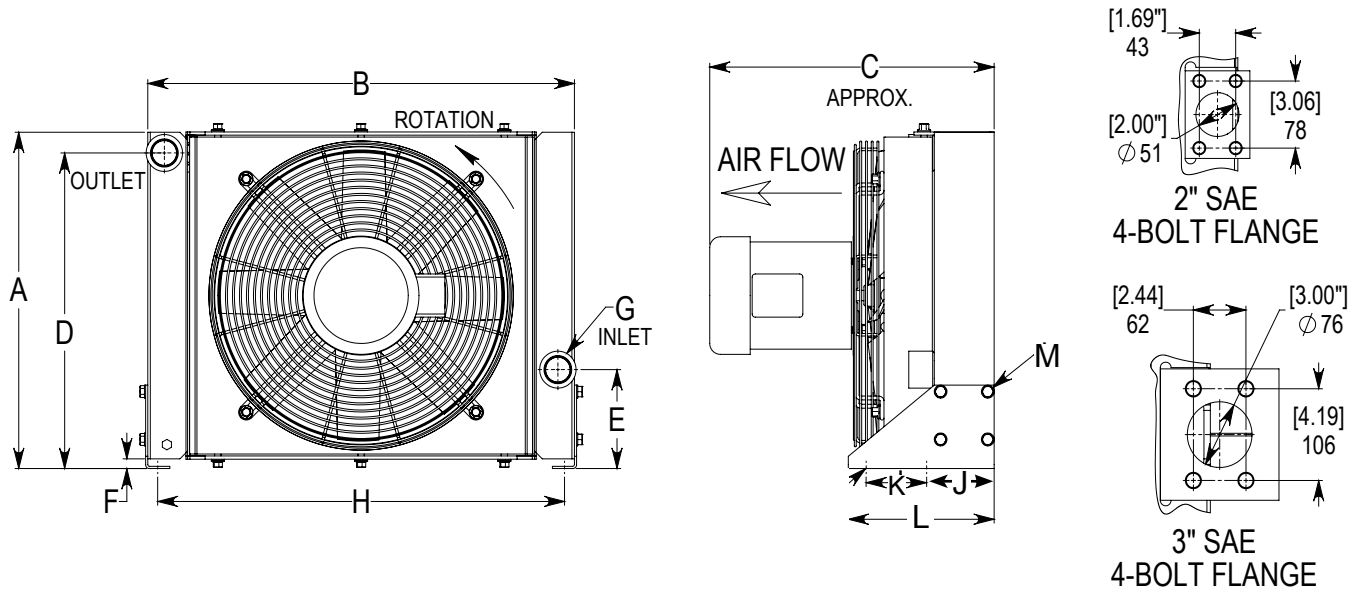
Model Number	A	B	C (approx.)	D	E	F	G (SAE)	H	J	K	L	M
<b>AC8/ACL8</b>	12.48	16.02	15.08	11.3	3.3	0.55	SAE #16	14.33	3.07	3.5	7.36	M8 X 10
<b>AC16/ACL16</b>	16.14	19.96	15.71	14.96	3.31	0.59	SAE #16	18.46	3.07	3.5	7.36	M8 X 10
<b>AC30/ACL30</b>	20.47	26.65	17.6	19.21	6.02	0.59	SAE #20	25.16	4.17	3.74	9.02	M10X 20
<b>AC40/ACL40</b>	22.32	30.59	18.27	21.06	6.02	0.59	SAE #20	29.09	4.17	3.74	9.02	M10 X 20
<b>AC70/ACL70</b>	28.15	39.45	22.52	20.12	10.2	2.12	2" SAE 4 BOLT FLG	37.64	5.39	7.87	15.47	M12 X 20
<b>AC100/ACL100</b>	37.24	43.39	24.57	29.45	9.09	0.59	2" SAE 4 BOLT FLG	42.76	5.39	7.87	15.47	M12 X 20
<b>AC130/ACL130</b>	38.94	45.33	29.75	32.38	9.02	0.59	2" SAE 4 BOLT FLG	43.52	5.39	7.87	15.47	M12 X 20
<b>AC160/ACL160</b>	45.33	51.24	30.26	34.49	11.02	0.65	3" SAE 4 BOLT FLG	49.44	5.39	7.87	15.47	M12 X 20
<b>AC250/ACL250</b>	59.76	53.27	30.55	43.62	17.56	2.00	3" SAE 4 BOLT FLG	50.35	7.8	10.00	20.00	.75 X 2.25

We reserve the right to make reasonable changes without notice  
 All dimensions in inches  
 Weights are in pounds

# Classic AC- series



## COOLER DIMENSIONS



## SELECTION PROCEDURES

The performance curves above are based on the following :

- 50 SUS Oil.
- 50 oF Entering Temperature Difference (ETD)

If your application conditions are difference, use the following selection procedure:

### STEP 1. Determine the Heat Load

In most cases you can use 1/3 of the input horsepower.  
Example: 30 HP Power Unit = 10 HP Heat Load

### STEP 2. Determine the Actual ETD Desired

Entering **OIL** Temperature — Entering **AIR** Temperature = **ETD**

The Entering oil temperature is the highest desired oil temperature. The entering air temperature is the highest anticipated ambient air temperature, plus any pre-heating of the air prior to it entering the cooler.

### STEP 3. Calculate the Adjusted BTU/hr for Selection

$$\frac{\text{Horse power}}{\text{Heat Load}} \times \frac{50}{\text{Desired ETD}} = \text{Horsepower For Use With Selection Chart}$$

### STEP 4. Determine The Model From The Curves

Read up from the GPM to the required heat rejection.  
Select any model on, or above this point.

## ORDERING INFORMATION

<b>AC SERIES</b> STANDARD	<b>MODEL SIZE</b> SELECTED	<b>MOTOR DATA</b> 0=MOTOR C=CORE ONLY 1=SINGLE PHASE 3=THREE PHASE 575=575 VOLT	<b>BYPASS DATA</b> BPNV = BYPASS NO VALVE BP25 = 25PSI INTERNAL BYPASS BP30 = 30PSI INTERNAL BYPASS BP60 = 60PSI INTERNAL BYPASS BP65 = 65PSI INTERNAL BYPASS	<b>CUSTOM FEATURE CODE</b> R=REVERSED AD=SAE TO NPT ADAPTORS INSTALLED H=HERESITE COATING/CORE ASSEMBLY F=FOAM FILTER
<b>ACL SERIES</b> LOW NOISE				

## OIL-TO-AIR COOLING SYSTEMS WITH AC-MOTOR

### PRODUCT INFORMATION

AKG Classic Series is a standard line of products from the market leader in high performance aluminum cooling systems. AKG is best known for its world-wide presence, German engineering and extremely reliable product quality on the one hand and very competitive prices on the other hand.

The Classic series consists of different models for mobile and stationary applications and are available through our global dealer network. This line of products embraces complete cooling systems that comply with both European and American standards, is suited for normal or rugged environmental operating conditions, and is powered by AC-, DC or hydraulic-motor-driven fans and is also available with noise-optimized models.

All of AKG's solutions have been developed with state-of-the-art technology, produced in compliance with the highest quality standards and are comprehensively tested in the company's own research and test facility.

### FEATURES OF THE AC/ACL SERIES:

- High-Performance cooling assemblies
- AC-motor powered fan
- The heat is transferred from the medium to be cooled to the ambient air
- Cooler can be universally used in hydraulic oil, transmission oil, engine oil, lubricating oil and coolant circuits.
- For the cooling of mineral oil, synthetic oil, biological oil as well as of HFA, HFB, HFC and HFD liquids and water with at least 50 per cent of antifreeze and anti corrosive additives (other media available).
- Can be exposed to operating pressures of up to 17 bar.

### BENEFITS:

- Highly flexible complete, ready-to-use cooling packages
- Compact and robust design, field-tested during many years of use in rugged real life conditions
- Largest and most comprehensive series of industrial coolers
- Best heat transfer results per given coolers size due to comprehensive research and development
- Highest quality due to professional engineering and in-house manufacturing
- Available from stock or at short notice
- As a standard, equipped with **AKG's** patented **double-life** hollow sections designed to increase cooler service life
- Noise-optimized models available (low-noise series)

### AC/ACL - FEATURES/BENEFITS

- AC series coolers with louvered fin design provides the best HEAT TRANSFER per given cooler size in the industry
- ACL low noise series coolers offer slower fan speeds for reduced noise level & lower fan HP requirements
- AC/ACL rugged series coolers have proprietary R & D designed, engineered and tested internal and external fins unique to AKG THERMAL SYSTEMS coolers.
- AC/ACL series coolers are available with internal pressure BYPASS option
- AC/ACL series coolers offer the largest, most comprehensive coolers size ranges with competitive pricing and deliveries from stock.

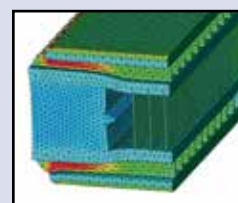
### PATENTED FLEXIBLE AKG HOLLOW PROFILE



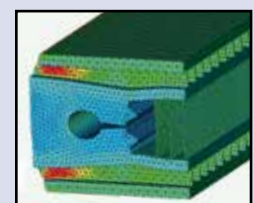
Classic Series uses patented AKG profiles to reduce local peak strains. this way, the strength of heat exchanges is significantly increased and their service life time considerably prolonged.

### AKG HOLLOW PROFILE FEATURES:

- **Reduced Strain:**  
Strength calculations show that when using AKG hollow profiles maximum strain is reduced by a factor of 2
- **Prolonged Service Life Time:**  
Extensive rig tests have shown that service life time increases by a factor ranging from 3 to 5



with standard profile



with hollow profile



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## AKG – A STRONG GLOBALLY INTEGRATED GROUP OF COMPANIES

AKG is a globally leading supplier of high-performance coolers and heat exchangers as well as customized system solutions, that comply with the highest quality standards.

On a world-wide scale, 2,400 employees work at 14 manufacturing facilities located in Germany, France, United Kingdom, Latvia, the U.S.A., China and India. Together with a number of additional oversea sales companies they are on duty around the clock.

The longstanding and competent partnership with global OEM customers from 22 lines of business

such as construction machinery, compressed-air systems, agricultural and forestry machines, vehicle construction and many other fields of application give fresh and innovative impetus to the mobile and industrial standard type series.

AKG operates one of the world's largest research, development, measurement and validation centres for cooling solutions and customized applications.

For 98 years AKG's heat exchangers have stood for innovative solutions as well as highest engineering and manufacturing competence.

**Aluminum Coolers – Made by AKG**

**DIN EN ISO 9001**