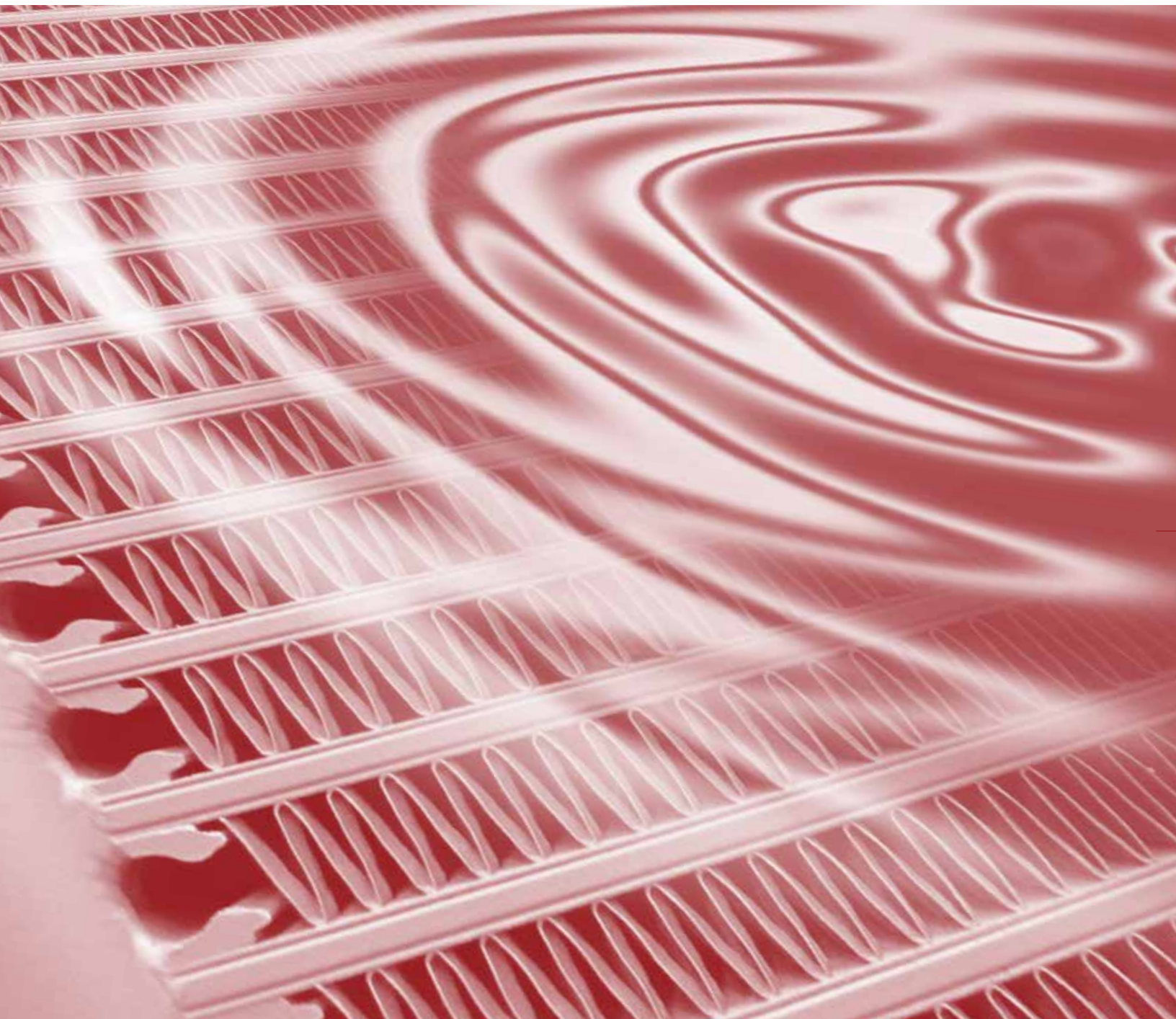


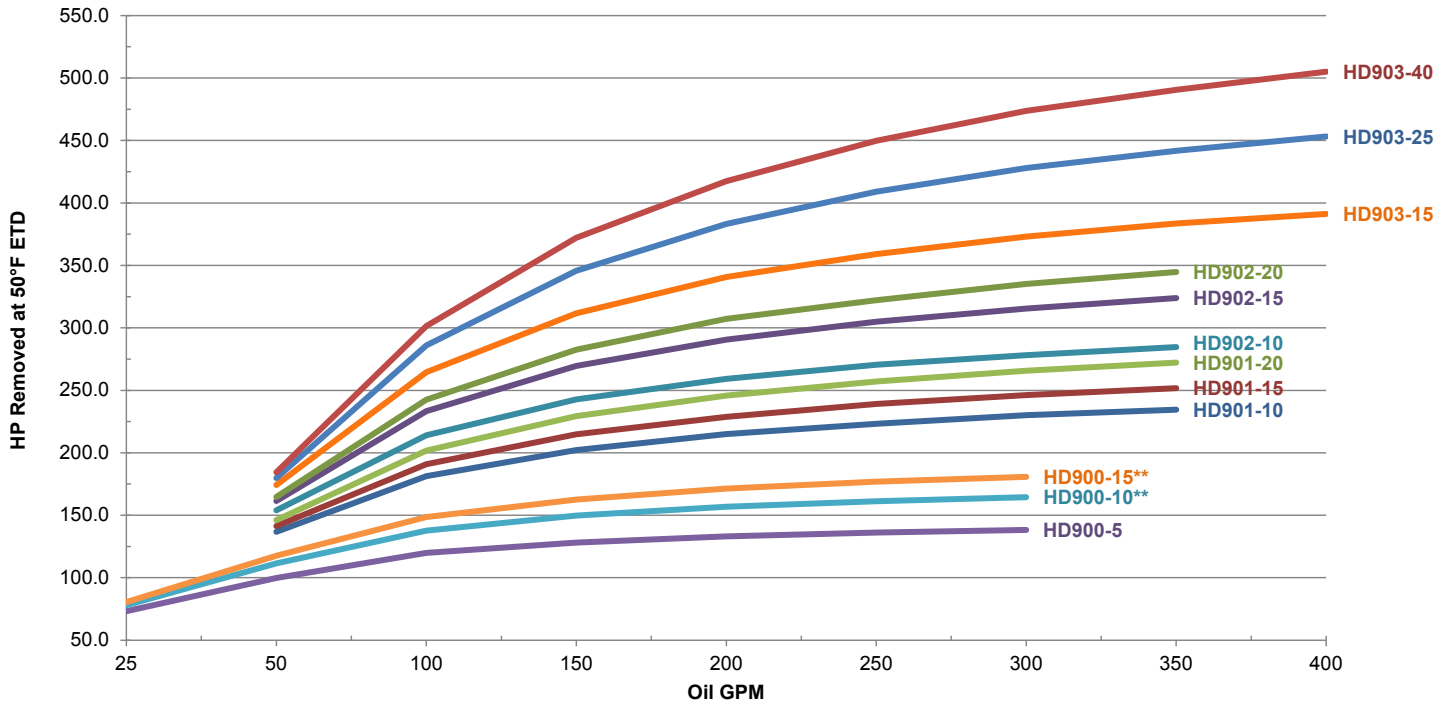
**GLOBAL STANDARD COOLER**

**Cool-Line**

**HD**



## HD PERFORMANCE CHART



### 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

## SELECTION PROCEDURES

The performance curves above are based on the following :

- 50 SUS Oil.
- 50 °F 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.

## HD SERIES TECHNICAL DATA

Model Size	HP RPM	Motor Frame	Voltage (3 Phase)	Hz	Full Load Amps 230 V	Approx. Noise Level (dB(A), 1m)	Working Pressure (psi)	Approx. Shipping Weight (lb.)
HD 900-5	5 1160	NEMA 215T	208- 230/460	60	14.6	85	250	925
HD 900-10	10 1180	NEMA 256T	208- 230/460	60	28.2	86	250	1075
HD 900-15	15 1175	NEMA 284T	208- 230/460	60	42.0	87	250	1175
HD 901-10	10 1180	NEMA 256T	208- 230/460	60	28.2	93	250	1175
HD 901-15	15 1175	NEMA 284T	208- 230/460	60	42.0	93	250	1275
HD 901-20	20 1180	NEMA 286T	208- 230/460	60	54.0	96	250	1325
HD 902-10	10 1180	NEMA 256T	208- 230/460	60	28.2	96	250	1375
HD 902-15	15 1175	NEMA 284T	208- 230/460	60	42.0	96	250	1475
HD 902-20	20 1180	NEMA 286T	208- 230/460	60	54.0	100	250	1525
HD 903-15	15 1175	NEMA 284T	208- 230/460	60	42.0	102	250	1655
HD 903-25	25 1180	NEMA 324T	208- 230/460	60	64.0	103	250	1810
HD 903-40	40 1185	NEMA 364T	208- 230/460	60	98.8	103	250	2180

Electric Motors are TEFC and are not thermally protected

Electric Motors are Dual Rated 50/60 HZ and CE marked

Actual rating may vary with motor brand. Check motor nameplate for actual rating.

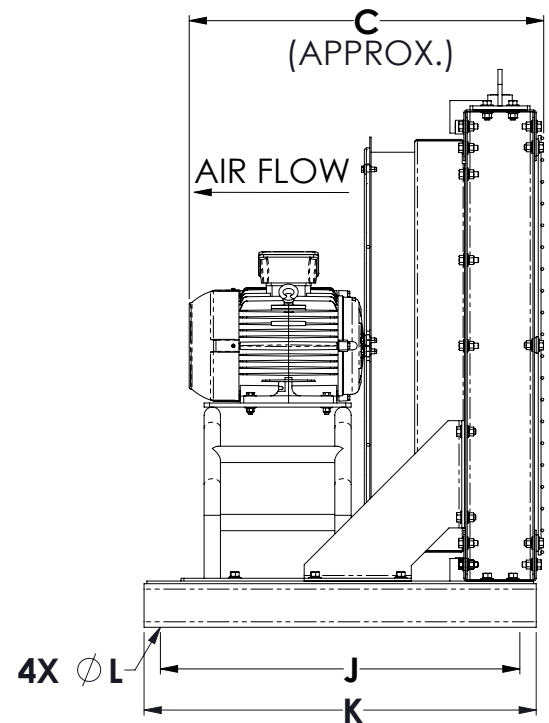
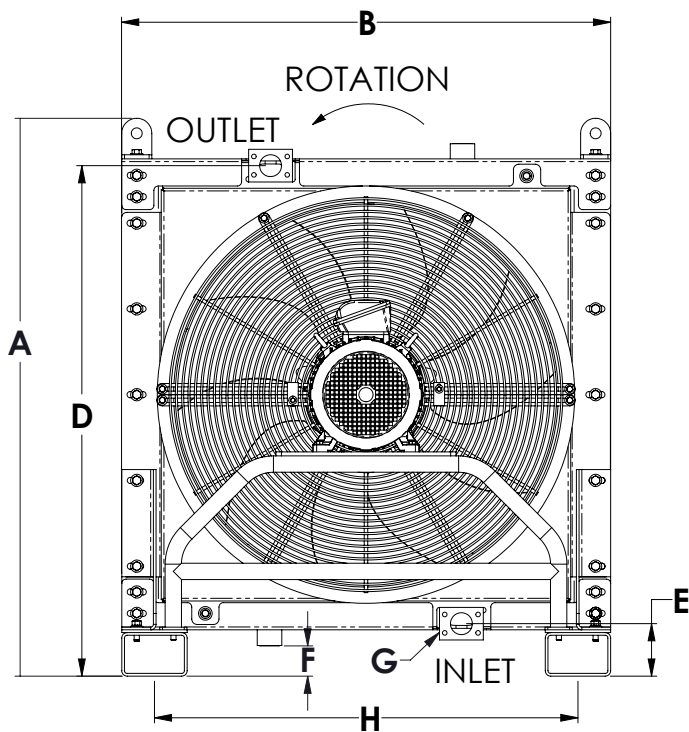
Motor RPM is reduced by 1/6 for 50 Hz service

## HD SERIES DIMENSIONS

Model Number	A	B	C	D	E	F	G	H	J	K	L
HD 900-5	49.84	44.88	31.9	46.85	4.8	2.8	2" SAE 4-BOLT FLANGE	38.90	33	35.9	0.75
HD 900-10	49.84	44.88	36.9	46.85	4.8	2.8	2" SAE 4-BOLT FLANGE	38.90	33	35.9	0.75
HD 900-15	49.84	44.88	41.4	46.85	4.8	2.8	2" SAE 4-BOLT FLANGE	38.90	33	35.9	0.75
HD 901-10	57.8	57.3	36.9	54.5	5.2	4.8	3" SAE 4-BOLT FLANGE	47.3	35.2	40	0.75
HD 901-15	57.8	57.3	41.4	54.5	5.2	4.8	3" SAE 4-BOLT FLANGE	47.3	35.2	40	0.75
HD 901-20	57.8	57.3	41.4	54.5	5.2	4.8	3" SAE 4-BOLT FLANGE	47.3	35.2	40	0.75
HD 902-10	69.6	63.6	36.9	67.8	5.2	4.8	3" SAE 4-BOLT FLANGE	60.8	35.2	40	0.75
HD 902-15	69.6	63.6	41.4	67.8	5.2	4.8	3" SAE 4-BOLT FLANGE	60.8	35.2	40	0.75
HD 902-20	69.6	63.6	41.4	67.8	5.2	4.8	3" SAE 4-BOLT FLANGE	60.8	35.2	40	0.75
HD 903-15	73.4	78.1	41.4	70.7	6.8	4.8	4" SAE 4-BOLT FLANGE	75.4	35.2	40	0.75
HD 903-25	73.4	78.1	42.8	70.7	6.8	4.8	4" SAE 4-BOLT FLANGE	75.4	35.2	40	0.75
HD 903-40	73.4	78.1	44.4	70.7	6.8	4.8	4" SAE 4-BOLT FLANGE	75.4	35.2	40	0.75



## COOLER DIMENSIONS HD



## ORDERING INFORMATION

HD SERIES STANDARD	MODEL SIZE SELECTED	MOTOR HP SIZE SELECTED	MOTOR CODE	CUSTOM FEATURE CODE
			0 = NO MOTOR	B = BLOWING FAN
			C = CORE ONLY	AD = SAE TO NPT ADAPT.
			3 = THREE PHASE	E = E COATING CORE
			3EXP = EXPLOSION	
			PROOF 3 PH	
			5 = 575V 3 PH	

## HEAVY DUTY COOLERS FOR SEVERE APPLICATIONS

### PRODUCT INFORMATION

AKG HD 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 HD type series consist of different models for mobile and stationary applications and are available through our global specialist dealer network. This line of products embraces all-purpose complete cooling systems that comply with European or American Standards, is suited for normal or rugged environmental operating conditions, is powered by AC-, DC- or hydraulic-motor-driven fans and is also available with noise-optimized models.

### FEATURES OF THE HD SERIES:

- High-Performance cooling assemblies
- AC-motor powered fan
- The heat is transferred from the fluid 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 anticorrosive additives (other media available)
- Can be exposed to operating pressures of up to 17 bar.
- Capable of high flows and high viscosity fluids for industrial and process markets.

### 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 cooler 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
- As a standard feature, uses louvered high-performance air fins

### HD Series FEATURES/BENEFITS

- HD optimized series coolers with louvered fin design provides the best HEAT TRANSFER per given cooler size in the industry.
- Twelve cooler models available in 4 different cooler sizes for flows from 20 to 500 gpm.
- HD optimized series coolers have proprietary R & D designed, engineered and tested internal and external fins unique to AKG THERMAL SYSTEMS coolers.
- HD optimized series coolers offer the largest, most comprehensive cooler size ranges with competitive pricing and deliveries from stock.

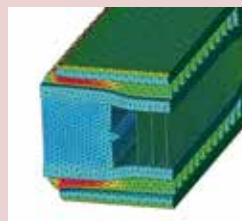
### PATENTED FLEXIBLE AKG HOLLOW PROFILE



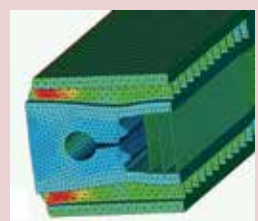
HD uses patented AKG hollow profiles to reduce local peak strains. This way the strength of heat exchangers is significantly increased and their service life time is considerably prolonged.

### 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



## 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 overseas 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.

### Your AKG-Partner

Thermal Transfer Systems Inc  
PH: 800-527-0131  
FAX: 972-242-7568  
Email: [Sales@ThermalTransfersystems.com](mailto:Sales@ThermalTransfersystems.com)

Aluminum Coolers – Made by AKG  
DIN EN ISO 9001