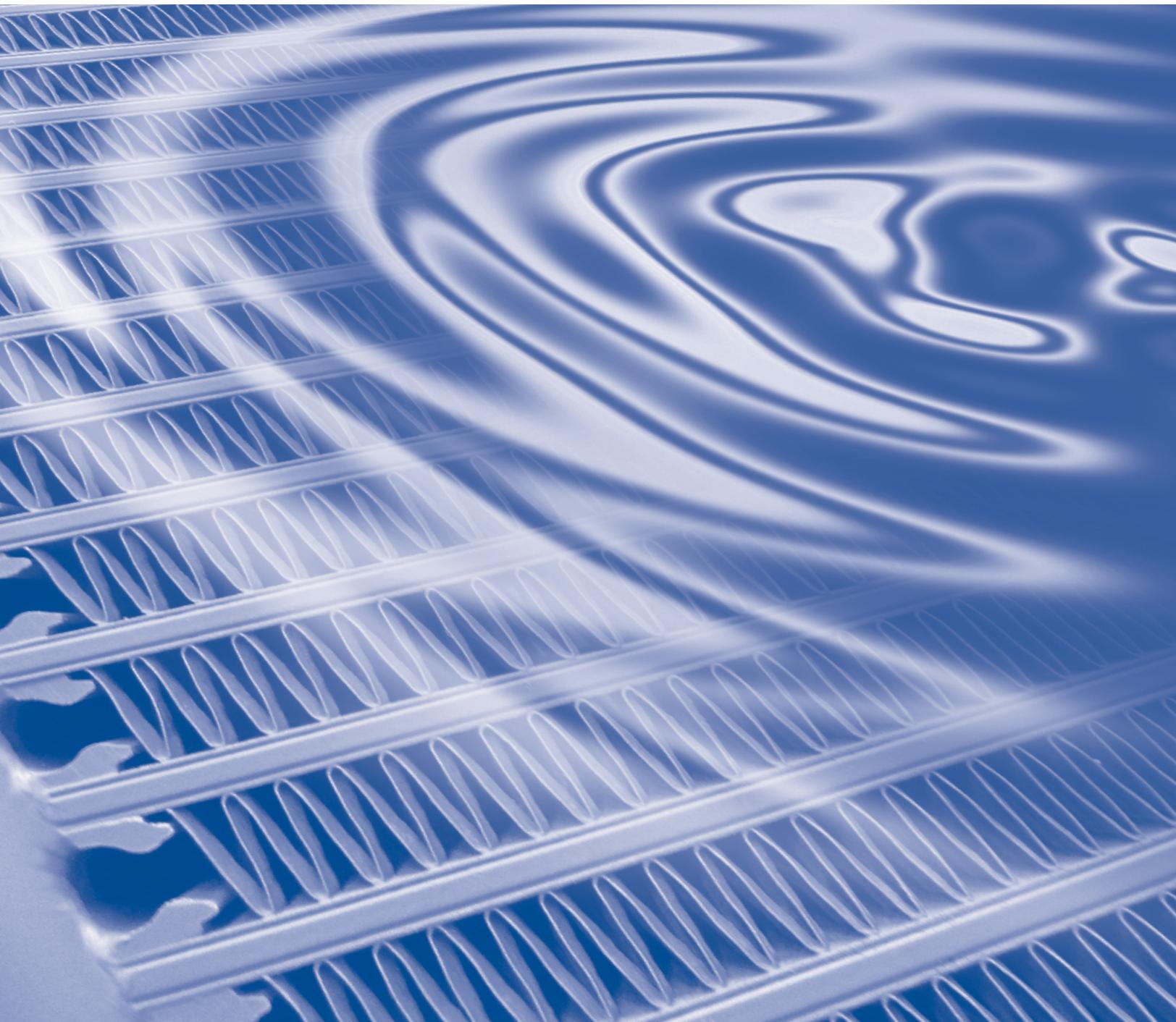




DCS-series

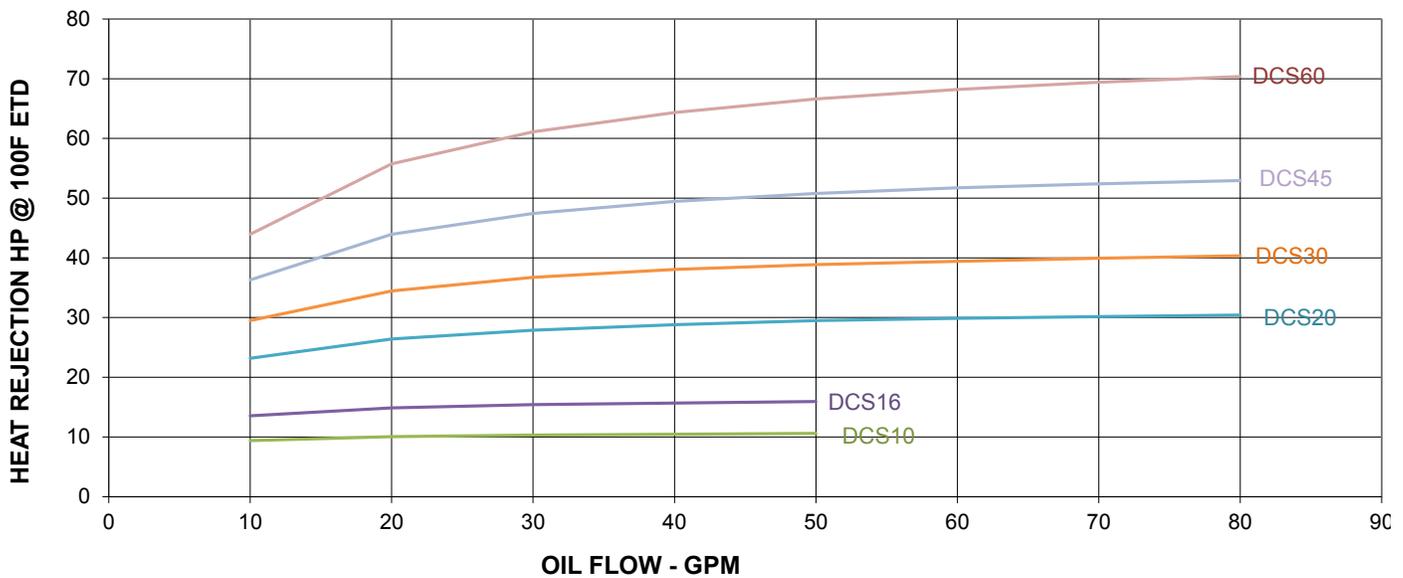
Classic



Classic DCS - Series



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

SELECTION PROCEDURES

The performance curves above are based on the following :

- 50 SUS Oil.
- 100 °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

$$\text{Horse power} \times \frac{100}{\text{Desired ETD}} = \text{Horsepower For Use With Selection Chart}$$

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.

Classic DCS - Series



DCS SERIES TECHNICAL DATA

Model Number	Motor Voltage (V)	Number of Fans	Approx. Current Draw per Fan (A)	Approx. Noise Level (dB(A), 1 m)	Reccomended Fuse Value per Fan (a)	Working Pressure (PSI)	Approx. Shipping Weight (lb.)
DCS-10	12/24	1	5/3	75	20	250	20
DCS-16	12/24	1	10/6	76	35	250	25
DCS-20	12/24	1	19/10	78	50	250	31
DCS-30	12/24v	1	19/10	78	50	250	53
DCS-45	12/24	2	17/9	79	50	250	67
DCS-60	12/24	2	19/10	79	50	250	111

DCS10 TO DCS30 SERIES DIMENSIONS

Model Number	A	B	C	D	E	F	G	H	J	K	L
DCS-10	13.78	11.69	6.3	9.84	9.84	10.87	4.96	4.49	1.00	#12 SAE O-Ring	5/16 x 1/2" slot
DCS-16	15.74	13.5	6.5	11.81	11.81	12.68	5.87	4.92	1.14	#16 SAE O-Ring	5/16 x 1/2" slot
DCS-20	19.88	18.3	7.2	15.75	16.14	17.2	8.11	5.9	1.57	#20 SAE O-Ring	7/16 x 3/4" slot
DCS-30	23.62	22	7.2	19.69	19.84	20.91	7.99	3.82	1.57	#20 SAE O-Ring	7/16 x 3/4" slot

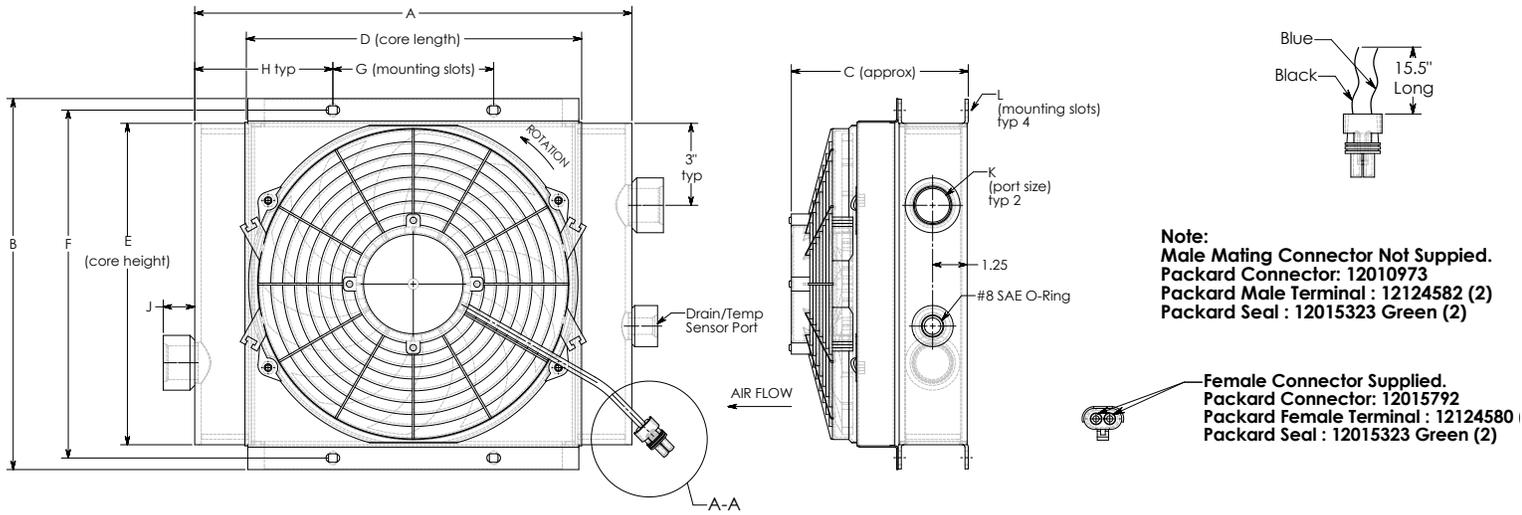
DCS45 TO DCS60 SERIES DIMENSIONS

Model Number	A	B	C	D	E	F	G	H	J	K	L	M	N	P
DCS-45	33.46	18.31	7.2	29.53	16.14	17.21	7.87	4.92	1.57	#20 SAE O-Ring	7/16 x 3/4" slot	2.99	8.01	13.03
DCS-60	35.43	22	7.2	31.49	19.84	20.9	8.86	4.43	1.57	#20 SAE O-Ring	7/16 x 3/4" slot	2.99	9.86	16.73

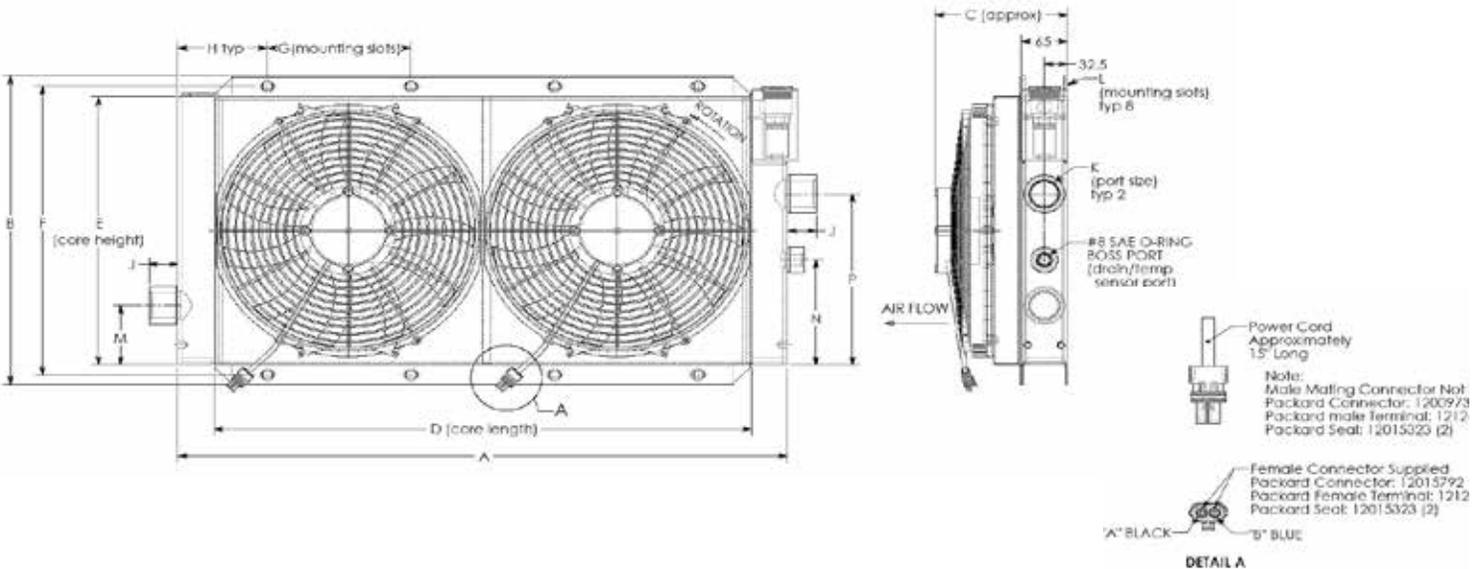
Classic DCS - Series



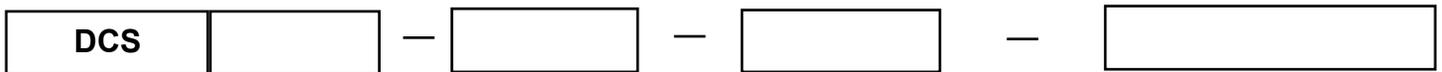
STANDARD DCS SERIES DIMENSIONS



STANDARD DCS DUAL FAN SERIES DIMENSIONS



ORDERING INFORMATION



DCS SERIES
STANDARD

MODEL SIZE
SELECTED

MOTOR DATA
12=12 VOLT
24=24 VOLT

BYPASS DATA
BP25 = 25PSI INTERNAL BYPASS
BP65 = 65PSI INTERNAL BYPASS
BPNV = BYPASS NO VALVE

CUSTOM FEATURE CODE
 R=REVERSED
 AD=SAE TO NPT ADAPTORS INSTALLED
 TC115 = 115 F TEMP SWITCH
 TC140 = 140 F TEMP SWITCH
 M404 = M404 Temp Switch
 TCP1 = Single Fan LED Temp Switch
 TCP2 = Dual Fan LED Temp Switch
 MTG = Feet Mounting Bracket Set (included on Models D45/60/70)

ORDER EXAMPLE: Heat Exchanger. 30 HP, 12 volt, 65 PSI Bypass, TCP1 shipped w/cooler

DCS30-12-BP65-TCP1

OIL-TO-AIR COOLING SYSTEMS WITH DC-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 DCS SERIES:

- High-Performance cooling assemblies
- DC-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 mobile hydraulic 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

DCS SERIES FEATURES/BENEFITS

- DCS series coolers are available with internal pressure BYPASS option.
- DCS series coolers provide the best HEAT TRANSFER per given cooler size in the industry
- DCS coolers have proprietary R & D designed, engineered and tested internal and external fins unique to AKG THERMAL SYSTEMS coolers.
- DCS series coolers offer the largest, most comprehensive DC COOLER size ranges with competitive pricing and deliveries.

PATENTED FLEXIBLE AKG HOLLOW PROFILE



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

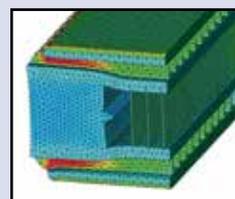
AKG HOLLOW PROFILE FEATURES:

Reduced Strain:

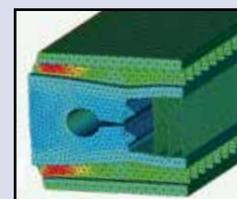
- Strength calculations show that when using AKG hollow profiles maximum strain is reduced by a factor of 2

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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E-Mail: sales@akgts.com
Internet: www.akgts.com

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