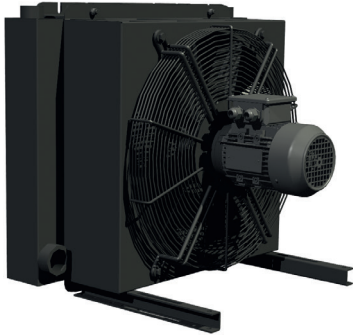




HCA-flex aircooler

HENNLICH - Cooling - Technologies GmbH

HCA-flex aircooler with AC-motor

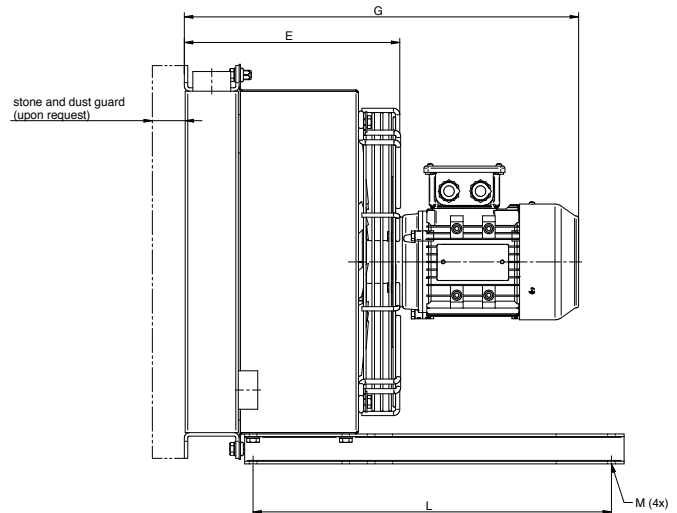
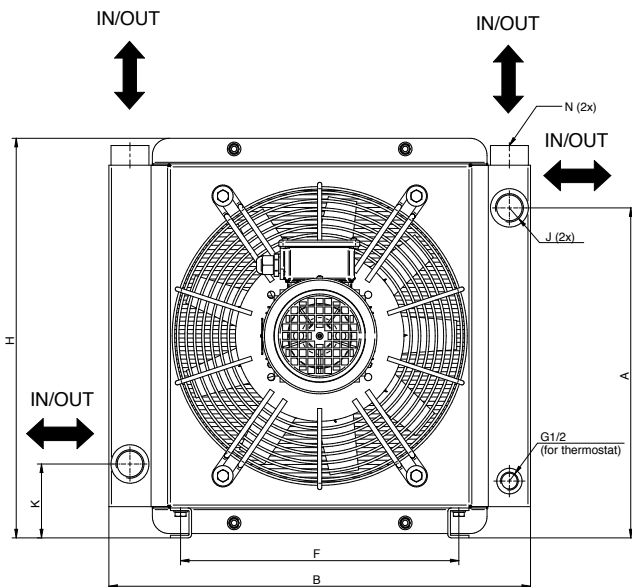


This cooler type with alternating current motor is an extension of our standard-cooler design and focuses on the flexible use.

The numerous ports enable different connections of hoses/pipes, the use of 2-pass and installation of a bypass in a later stage.

However, the flex-design is basically for stationary applications and has been developed for efficient cooling of hydraulic and lubrication oil and for water/glycol mixtures (> 15 % glycol).

Designs available incl. various accessories and as 1-pass, 2-pass or 3-pass.

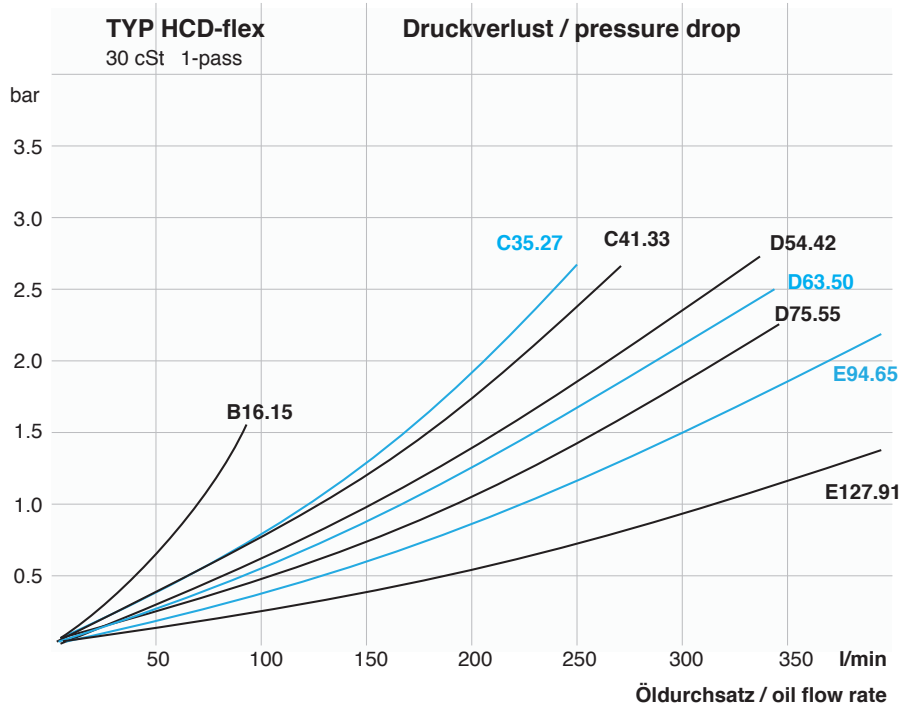


HENNLICH Cooling-Technologies GmbH			Noise level LpA dB (A) 1m*	Pole / power [kW]	Mass [kg]	B	F	H	J	N	L	A	E	G	Mø
HCA-flex standard sizes															
HCAF	B16.15-2	1-phasig	50	2-0.06	4	160		160		G1/2"		130		125	
HCAF	C35.27-2	1-phasig	75	2-0.14	11	330	203	330	G1	G3/4"	300	270	175	180	11
HCAF	C35.27-2	3-phasig	76	2-0,18	11	330	203	330	G1	G3/4"	300	270	175	180	11
HCAF	C41.33-2	1-phasig	76	2-0.14	13	410	203	395	G1	G3/4"	300	315	215	220	11
HCAF	C41.33-2	3-phasig	77	2-0,18	13	410	203	395	G1	G3/4"	300	315	215	220	11
HCAF	D54.42-4	3-phasig	70	4-0.25	30	540	370	485	G1 1/4"	G1	300	418	298	513	11
HCAF	D54.42-2	3-phasig	83	2-1.10	36	540	370	485	G1 1/4"	G1	300	418	298	533	11
HCAF	D63.50-4	3-phasig	71	4-0.37	43	635	530	565	G1 1/2"	G1	300	485	303	518	11
HCAF	D63.50-2	3-phasig	81	2-1.10	49	635	530	565	G1 1/2"	G1	300	485	303	533	11
HCAF	D75.55-4	3-phasig	75	4-0.75	72	750	627	635	G1 1/2"	G1 1/4"	300	530	305	535	11
HCAF	D75.55-2	3-phasig	86	2-2,20	88	750	627	635	G1 1/2"	G1 1/4"	300	530	305	575	11
HCAF	D75.55-4	3-phasig	75	4-0.75	72	750	627	630	SAE 2"	G1 1/4"	300	530	305	535	11
HCAF	D75.55-2	3-phasig	86	2-2,20	88	750	627	630	SAE 2"	G1 1/4"	300	530	305	575	11
HCAF	E94.65-6	3-phasig	76	6-1.50	98	940	400	730	G1 1/2"	G1 1/2"	300	650	305	600	11
HCAF	E94.65-4	3-phasig	88	4-2.20	102	940	400	730	G1 1/2"	G1 1/2"	300	650	305	600	11
HCAF	E127.91-6	3-phasig	89	6-3,00	215	1270	440	1010	SAE 3"	G1 1/2"	430	890	420	800	14
HCAF	E127.91-4	3-phasig	96	4-7.50	235	1270	440	1010	SAE 3"	G1 1/2"	430	890	420	800	14

Other cooler types / dimensions upon request
Noise level tolerance +/- 3 dB(A)



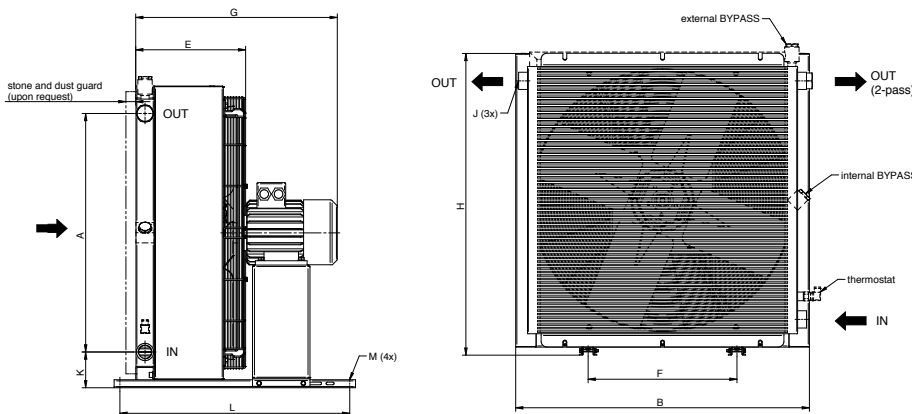
HCA-flex aircooler with AC-motor



General motor data

3-phase motor
IP55, Insulation class F temperature class B
* 1- and 3-phase motor as external rotor
IP44, Insulation class B temperature class B

Max. oil temperature [Tmax]
120 °C
Max. oil pressure
26 bar (statically, standard conditions)



Please note our standard cooler design HCA with short delivery time.

Selection of cooler:

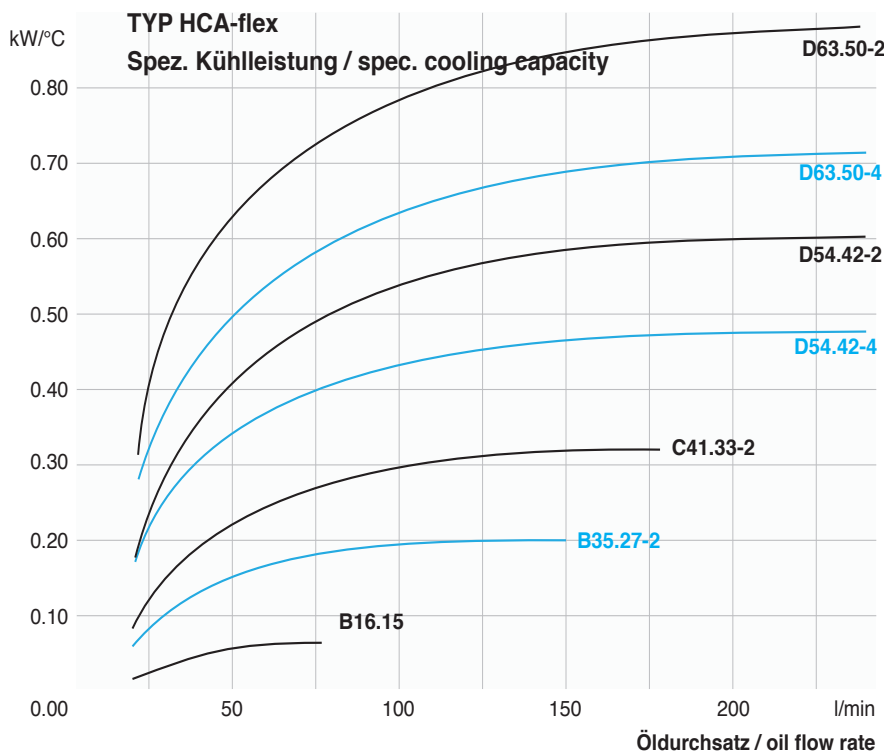
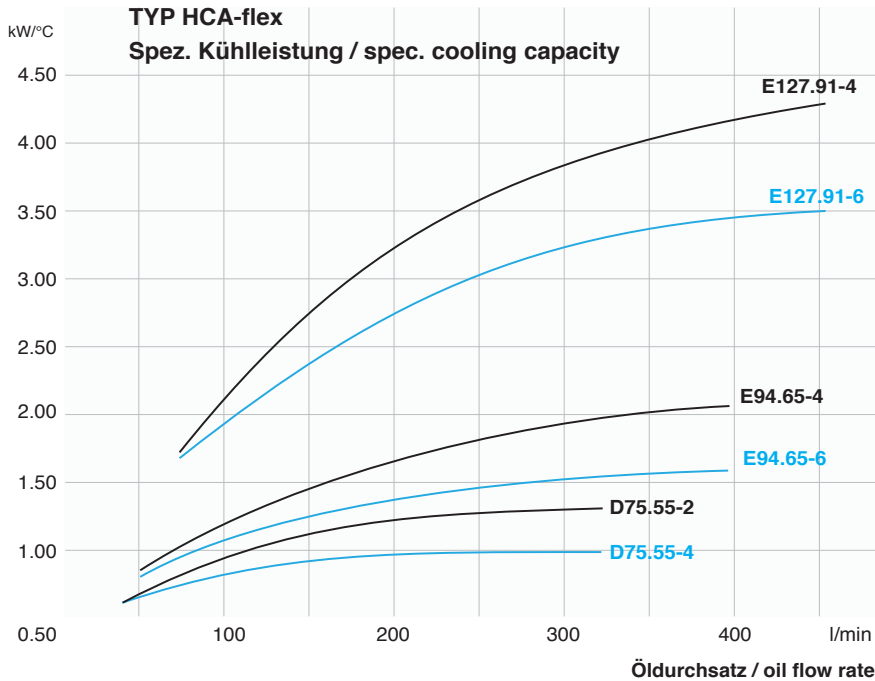
The pressure drop can be determined for each type by using the oil flow rate based on a viscosity of 30cst. For other viscosities please ask our application engineers.

The specific cooling capacity (y-axis) can be determined with the oil flow rate (x-axis) and the intersection of the cooler type. In order to get the actual cooling capacity it has to be multiplied with the temperature-difference of the max. oil temperature (= cooler inlet) and the max. air temperature suctioned to the cooler.



HCA-flex aircooler

HENNLICH - Cooling - Technologies GmbH



Example:

Max. oil temperature: 70 °C
 Max. air temperature: 30 °C
 ($\Delta t = 40$ °C temperature difference)

Oil flow rate: 300 l/min

For cooler type E127.91-6 with spec. cooling capacity of 3,2 kW / °C (acc. chart) multiplied by $\Delta t = 40$ °C results a cooling capacity of 128 kW.

To calculate thermal dissipation loss or cooling power we provide support in any case!

The characteristic curves are based on data of typical hydraulic oil at 60 °C and can differ due to other physical figures.

Please note that dust, dirt or circulating air can cause a loss of capacity. Consider some safety or contact a HENNLICH Cooling technician!

Motor type plate has to be noted as well. For higher temperatures up to 250 °C compact solutions are going to be provided.

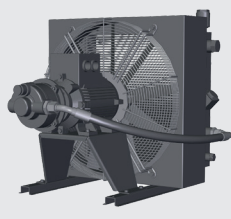
Higher pressure rates upon request.

If water/glycol is used, the cooling characteristics are better. Please send us the mixture and the technical data or fill in and send us the technical questionnaire on our website: www.hennlich.at

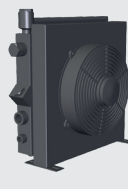
Other Types:



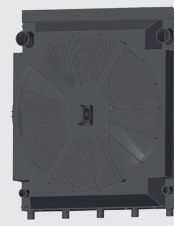
HCH with hydraulic motor



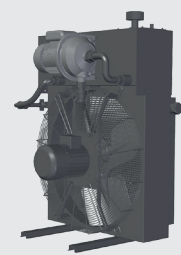
HCP with AC-Motor + pump



HCD with 12/24VDC



HCC for diesel engines



HCS cooling systems



Key code

HCAF - C33.26 – 4D - 100 - TSS - Z

Cooler type	
HCA	air cooler with AC-motor
HCAF	Flex-design with AC-motor
HCAX	aircooler with ATEX-design
HCAM	aircooler with marine-design
Cooler size	
B16.15 bis XXXX	acc. table
Pole quantity	
2	2-pole (3000 1/min)
4	4-pole (1500 1/min)
6	6-pole (1000 1/min)
8	8-pole (750 1/min)
12	12-pole (500 1/min)
Z	special
Motor voltage	
A	230/400V, 50 Hz / 3-phase
B	275/480V, 60 Hz / 3-phase
C	230V, 50/60 Hz / 1-phase
D	230/400V, 50 Hz; 275/480V, 60 Hz
E	500V, 50 Hz / 3-phase
F	400/690 V, 50 Hz / 3-phase
G	special voltage
Z	special motor
X	without motor
Bypass-accessories	
1XX	1-pass excl. bypass valve)
2XX	standard 2-pass
3XX	standard 3-pass
5XX	2-pass with accesories
X2X	bypass valve (2bar)
X5X	bypass valve (5bar)
XX4	thermostat 40 °C
XX5	thermostat 50 °C
XX6	thermostat 60 °C
XX7	thermostat 70 °C
XX8	thermostat 80 °C
XX9	thermostat 90 °C
X25	with internal thermal-bypass (2 bar, 50 °C)
X26	with internal thermal-bypass (2 bar, 60 °C)
Internal codes	
TSS	internal codes
Internal codes	
Z	Options for stone and dust guard, painting, filter, accessories, ...

