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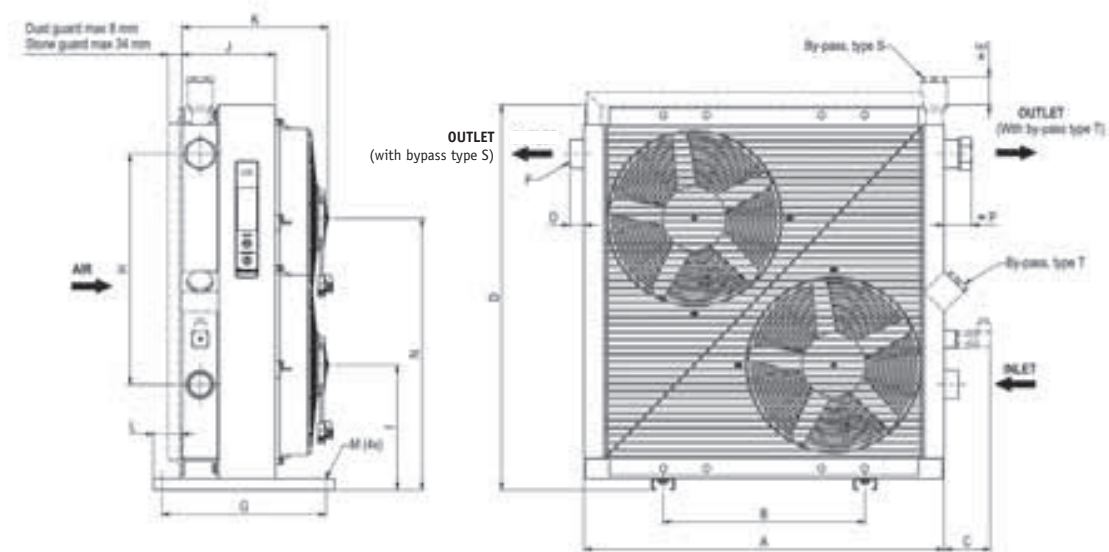


Air Oil Coolers

LDC with DC Motor for Mobile Use

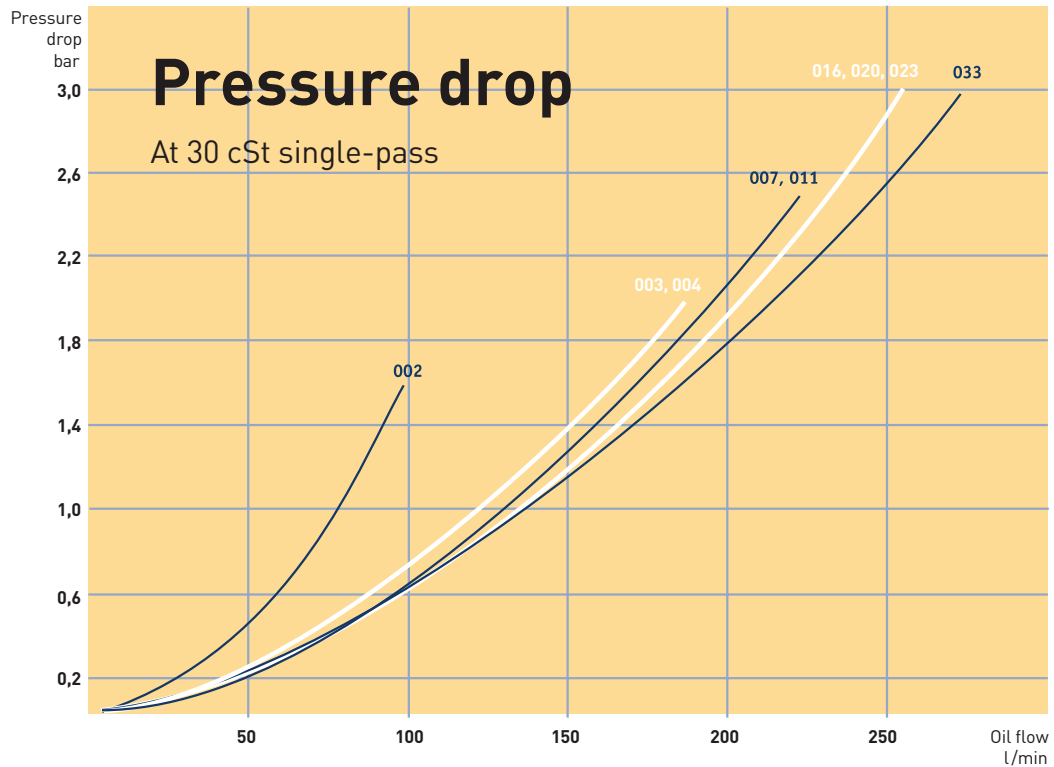
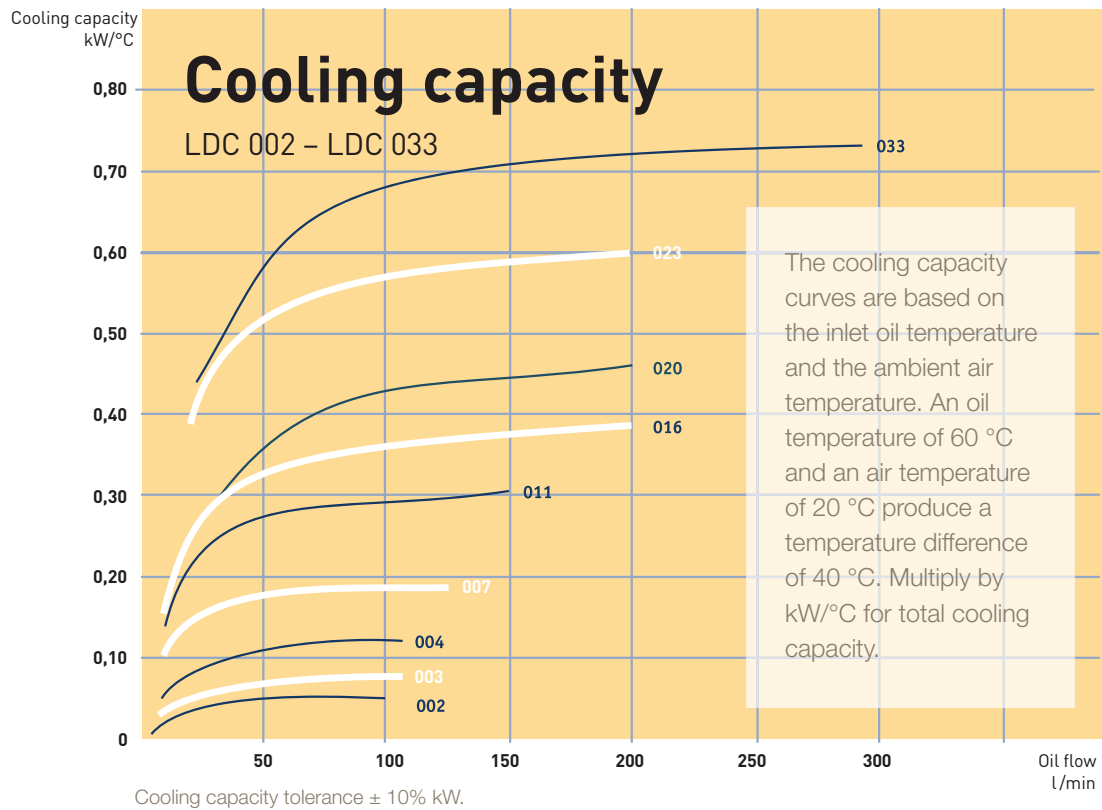


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TYPE	A	B	C	D	E	F	G	H	I	J	K	L	Mø	N	O	P	Weight kg (approx)	Acoustic Pressure LpA dB(A)1m*
LDC 002	184	74	72	189	73	G½	190	72	97	105	157	39	9	-	11	25	4	66
LDC 003	244	134	82	227	69	G1	148	90	116	115	157	31	9x14	-	23	35	5	68
LDC 004	267	134	82	256	69	G1	148	90	131	115	162	31	9x14	-	23	35	6	68
LDC 007	330	203	82	345	54	G1	267	160	175	115	178	59	9	-	23	44	9	71
LDC 011	400	360	82	396	65	G1	101	230	200	125	218	-	9x29	-	23	44	12	74
LDC 016	464	416	82	466	63	G1	101	300	235	125	218	-	9x29	-	23	44	15	74
LDC 020	510	470	82	510	61	G1	101	280	257	125	211	-	9x29	-	23	44	18	77
LDC 023	615	356	46	635	26	G1	290	305	200	125	218	50	13	455	-	8	25	77
LDC 033	635	356	82	678	59	G1¼	290	406	220	165	258	50	13	478	25	49	30	77

* = Noise level tolerance ± 3 dB(A)





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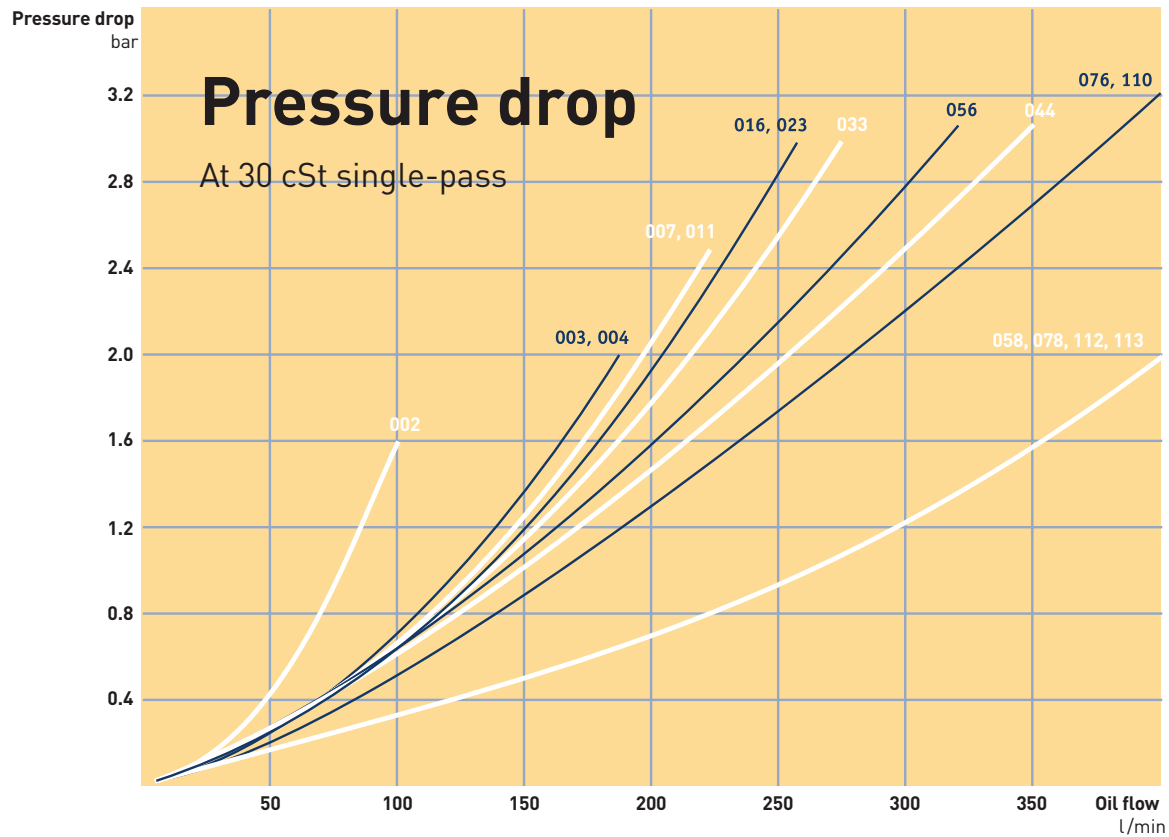
LAC with AC Motor for Industrial Use

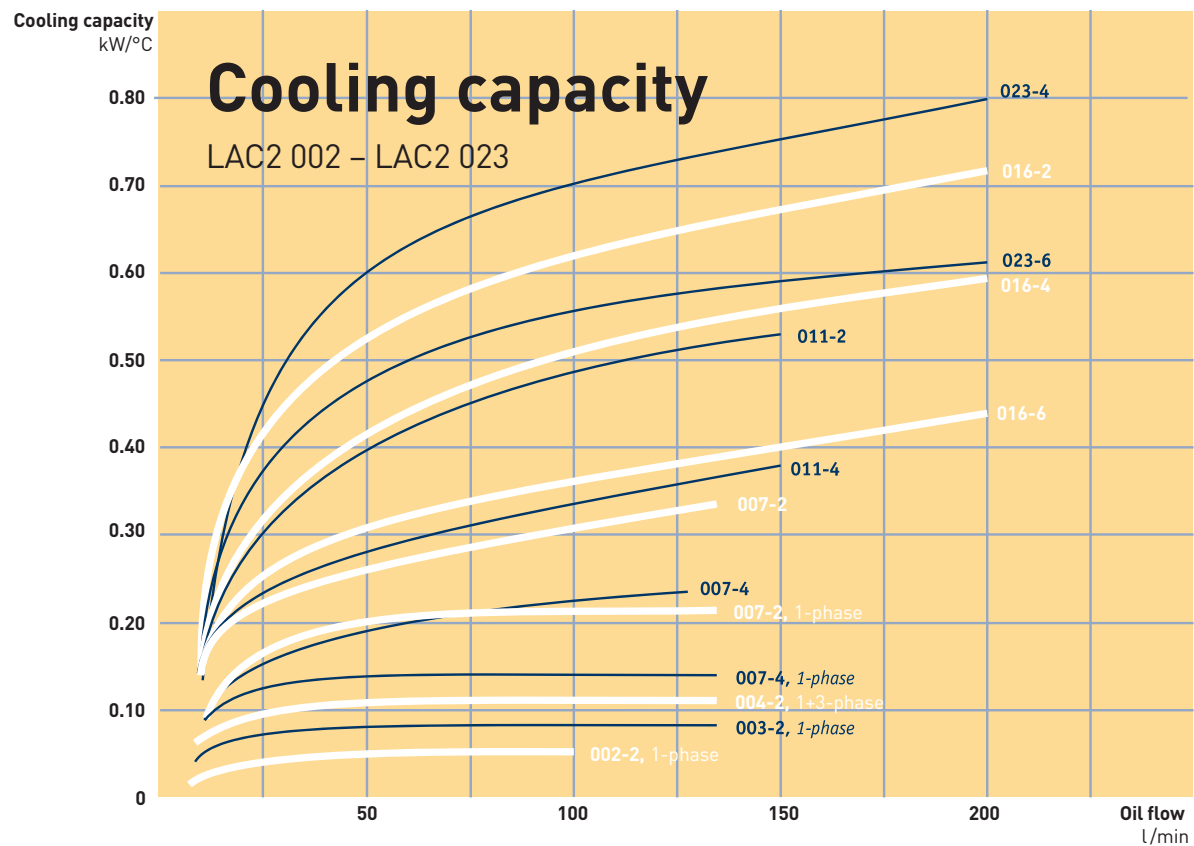
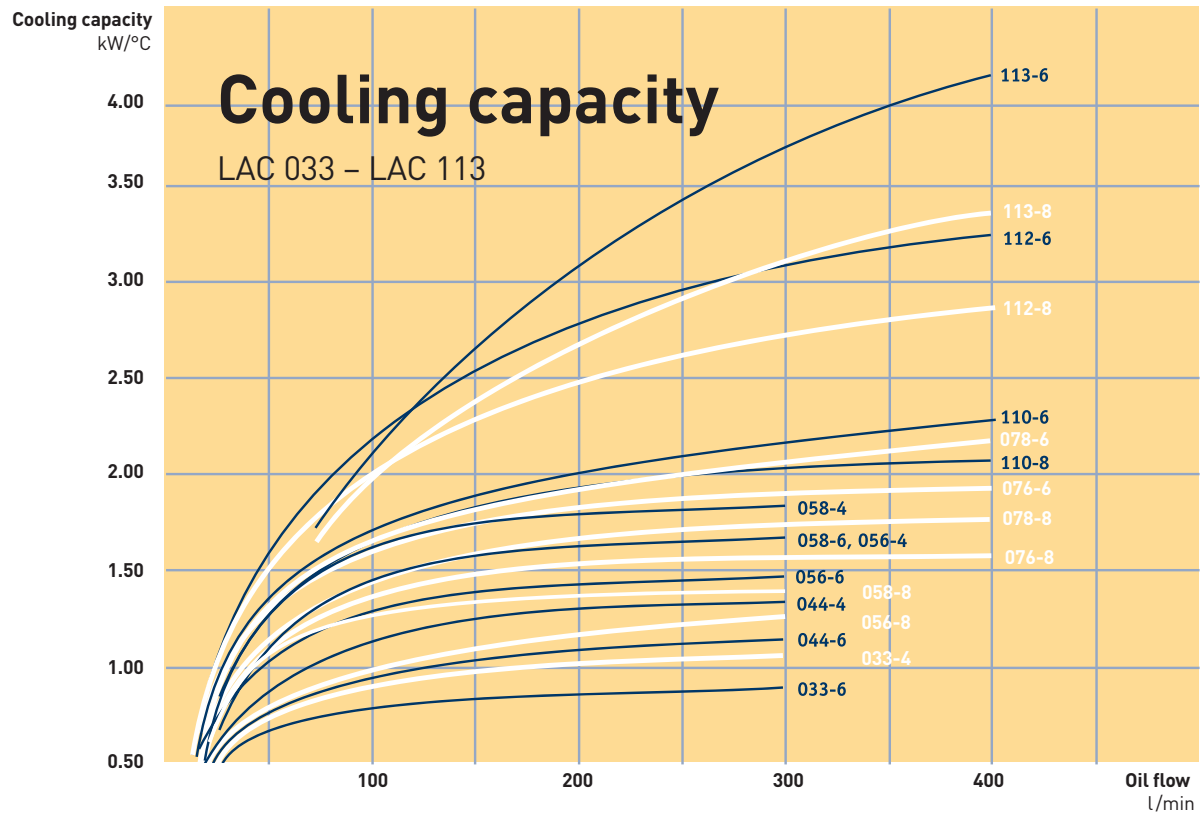


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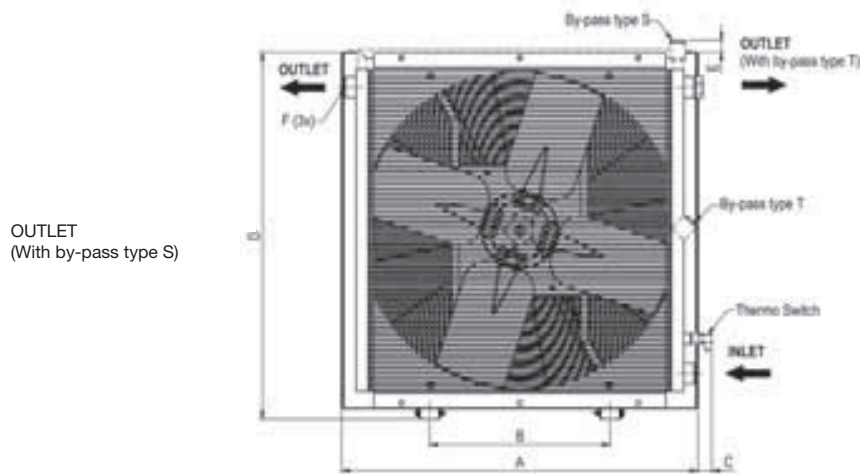
The cooling capacity curves are based on the inlet oil temperature and the ambient air temperature. An oil temperature of 60 °C and an air temperature of 20 °C produce a temperature difference of 40 °C. Multiply by kW/°C for total cooling capacity.





Cooling capacity tolerance $\pm 10\%$ kW.





TYPE		A	B	C	D	E	F	G	H	I	J	K	L	Mø
LAC2	002-2-single-phase	165	74	82	189	-	G1/2	190	72	97	105	167	39	9
LAC2	003-2-single-phase	244	134	82	223	71	G1	148	90	114	161	218	31	9x14
LAC2	004-4-single-phase	267	134	82	256	69	G1	148	90	131	165	222	28	9x14
LAC2	004-2-single-phase	267	134	82	256	69	G1	148	90	131	165	222	28	9x14
LAC2	007-4-single-phase	340	203	77	345	54	G1	267	160	175	189	249	49	9x14
LAC2	007-2-single-phase	340	203	77	345	54	G1	267	160	175	189	249	49	9x14
LAC2	007-4-three-phase	365	203	64	395	42	G1	510	160	213	225	429	50	9
LAC2	007-2-three-phase	365	203	64	395	42	G1	510	160	213	225	434	50	9
LAC2	011-4-three-phase	440	203	62	470	41	G1	510	230	250	249	453	50	9
LAC2	011-2-three-phase	440	203	62	470	41	G1	510	230	250	249	475	50	9
LAC2	016-6-three-phase	496	203	66	526	46	G1	510	230	278	272	474	50	9
LAC2	016-4-three-phase	496	203	66	526	46	G1	510	230	278	272	479	50	9
LAC2	016-2-three-phase	496	203	66	526	46	G1	510	230	278	272	496	50	9
LAC2	023-6-three-phase	580	356	63	610	44	G1	510	305	320	287	489	50	9
LAC2	023-4-three-phase	580	356	63	610	44	G1	510	305	320	287	511	50	9
LAC	033-6-three-phase	692	356	53	722	42	G1 1/4	510	406	376	318	534	50	9
LAC	033-4-three-phase	692	356	53	722	42	G1 1/4	510	406	376	318	618	50	9
LAC	044-6-three-phase	692	356	53	866	59	G1 1/4	510	584	448	343	559	50	9
LAC	044-4-three-phase	692	356	53	866	59	G1 1/4	510	584	448	343	643	50	9
LAC	056-8-three-phase	868	356	49	898	43	G1 1/4	510	584	448	343	643	50	9
LAC	056-6-three-phase	868	508	49	898	43	G1 1/4	510	584	464	368	668	50	9
LAC	056-4-three-phase	868	508	49	898	43	G1 1/4	510	584	464	368	668	50	9
LAC	058-8-three-phase	868	508	49	898	43	G2	510	584	464	388	652	30	9
LAC	058-6-three-phase	868	508	49	898	43	G2	510	584	464	388	682	30	9
LAC	058-4-three-phase	868	508	49	898	43	G2	510	584	464	388	688	30	9
LAC	076-8-three-phase	1022	518	41	1052	45	G1 1/2	800	821	541	393	693	70	14
LAC	076-6-three-phase	1022	518	41	1052	45	G1 1/2	800	821	541	393	710	70	14
LAC	078-8-three-phase	1022	518	41	1052	45	G2	800	821	541	413	713	50	14
LAC	078-6-three-phase	1022	518	41	1052	45	G2	800	821	541	413	730	50	14
LAC	110-8-three-phase	1185	600	54	1215	45	G2	800	985	623	418	785	70	14
LAC	110-6-three-phase	1185	600	54	1215	45	G2	800	985	623	418	785	70	14
LAC	112-8-three-phase	1185	600	54	1215	45	G2	800	985	623	438	805	50	14
LAC	112-6-three-phase	1185	600	54	1215	45	G2	800	985	623	438	805	50	14
LAC	113-8-three-phase	1200	600	82	1215	45	G2	860	985	623	465	833	82	14
LAC	113-6-three-phase	1200	600	82	1215	45	G2	860	985	623	465	871	82	14
LAC	200-8-three-phase	Please see LAC 200 brochure for more information												
LAC	200-6-three-phase													



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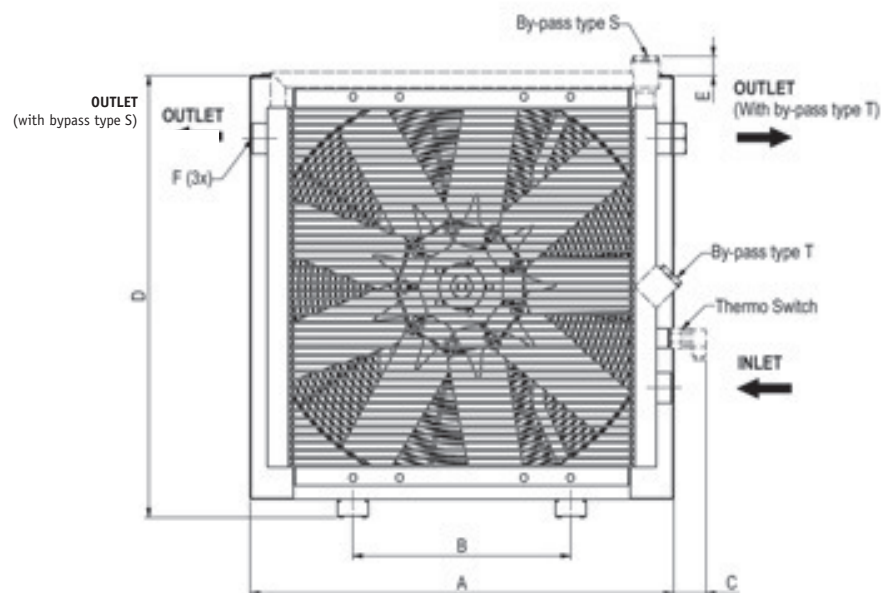


Air Oil Coolers

LHC with Hydraulic Motor for Mobile and Industrial Use



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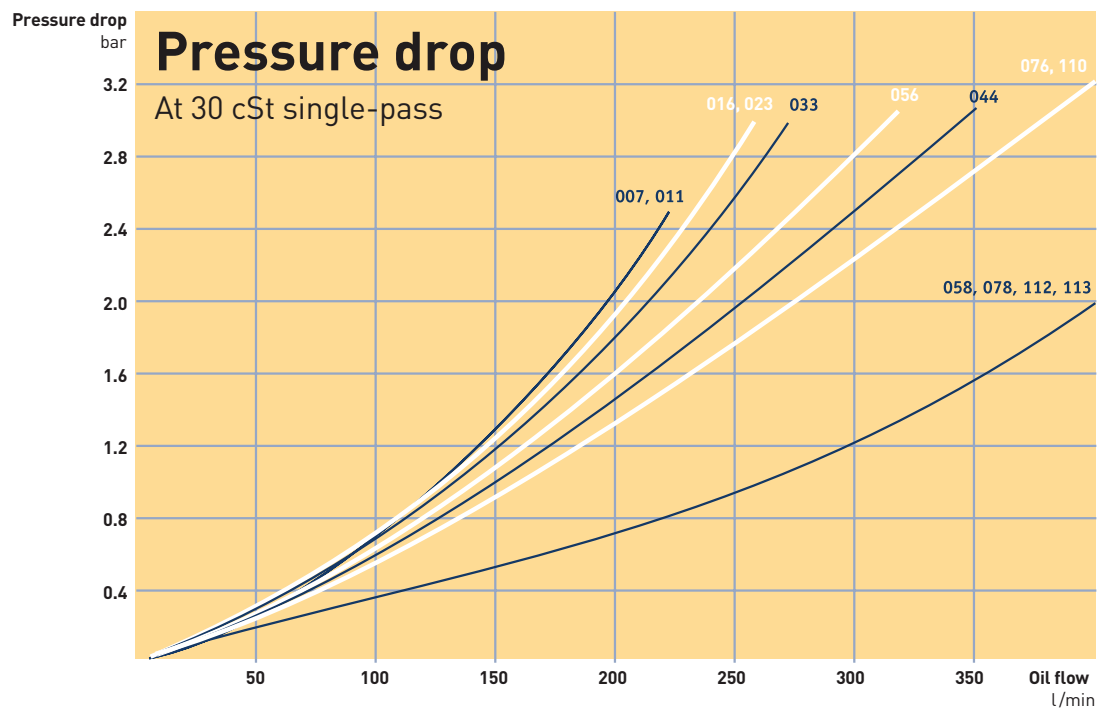


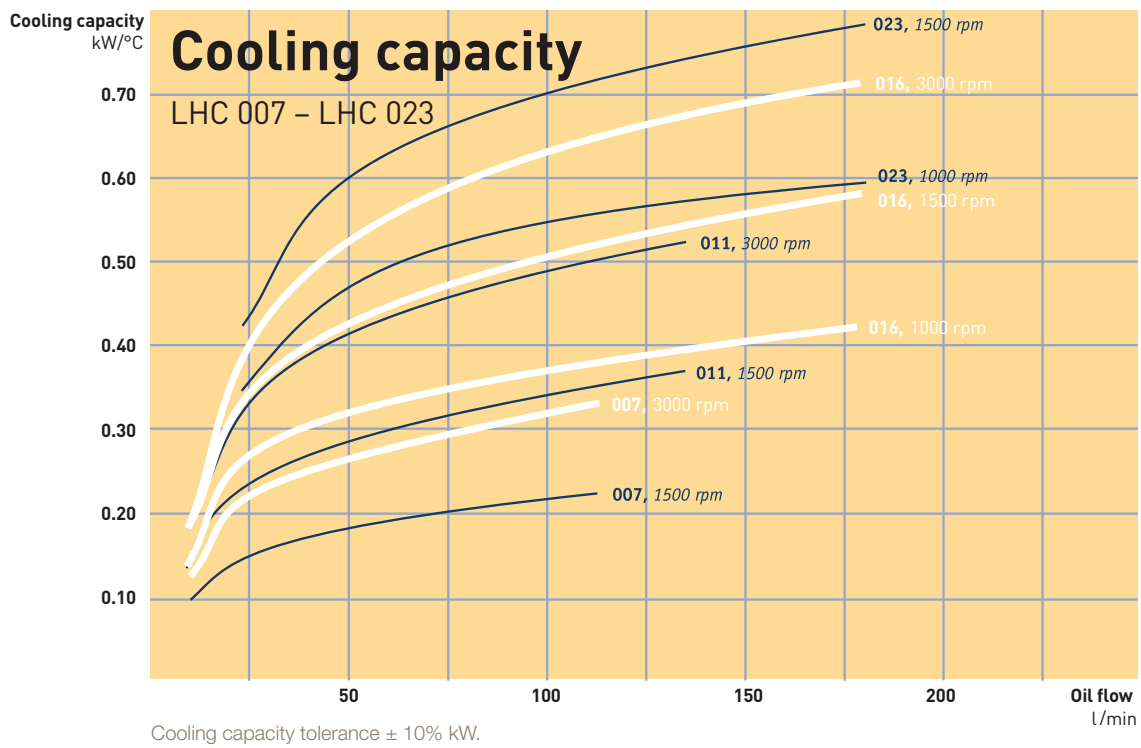
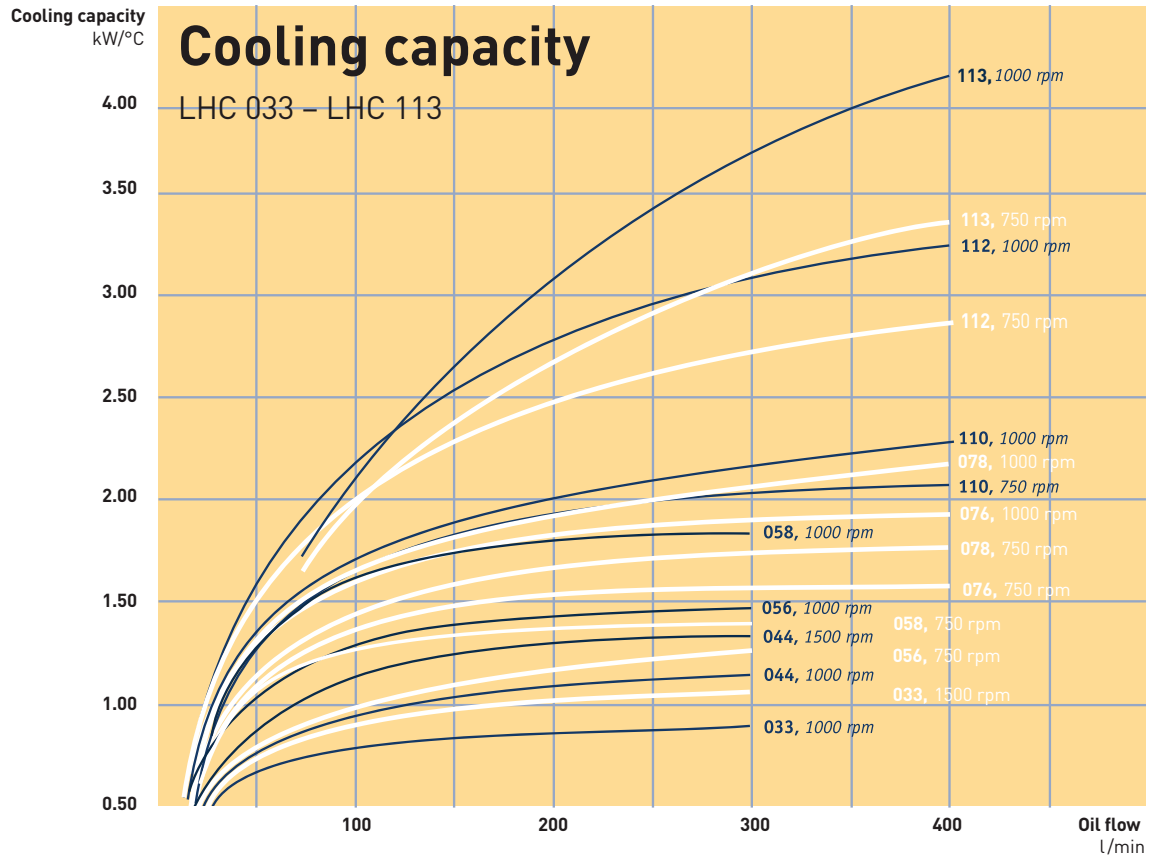
TYPE	A	B	C	D	E	F	G	H	I	J	K	L	M
LHC2 007	365	203	64	395	42	G1	510	160	197	225	J+N	50	9
LHC2 011	440	203	62	470	41	G1	510	230	234	249	J+N	50	9
LHC2 016	496	203	66	526	46	G1	510	230	262	272	J+N	50	9
LHC2 023	580	356	44	610	44	G1	510	305	304	287	J+N	50	9
LHC 033	692	356	42	722	42	G1¼	510	406	360	318	J+N	50	9
LHC 044	692	356	59	866	59	G1¼	510	584	432	343	J+N	50	9
LHC 056	868	508	49	898	43	G1¼	510	584	448	368	J+N	50	9
LHC 058	868	508	49	898	43	G2	510	584	448	388	J+N	30	9
LHC 076	1022	518	41	1052	45	G1½	610	821	525	393	J+N	70	14
LHC 078	1022	518	41	1052	45	G2	610	821	525	413	J+N	50	14
LHC 110	1185	600	54	1215	45	G2	610	985	607	418	J+N	70	14
LHC 112	1185	600	54	1215	45	G2	610	985	607	438	J+N	50	14
LHC 113	1200	600	82	1215	45	G2	610	985	607	485	J+N	132	14

MOTOR	Displacement cm³/r	N LHC2 007 – LHC2 023	N LHC 033 – LHC 112	O Angular 90° connection	Max. working pressure bar
A	8.4	91	133	G½	250
B	10.8	98	138	G½	250
C	14.4	101	144	G½	250
D	16.8	105	148	G¾	250
E	19.2	110	151	G¾	250
F	25.2	120	165	G¾	250



The cooling capacity curves are based on the inlet oil temperature and the ambient air temperature. An oil temperature of 60 °C and an air temperature of 20 °C produce a temperature difference of 40 °C. Multiply by kW/°C for total cooling capacity.







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Air Oil Coolers

LOC for Industrial Use



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Technical specification

- LOC is designed primarily for synthetic oils, vegetable oils and mineral oil type HL/HLP in accordance with DIN 51524. Maximum oil temperature 100 °C.
- Maximum negative pressure in the inlet line is 0.4 bar with an oil-filled pump. Maximum pressure on the pump's suction side is 0.5 bar.
- Maximum working pressure for the pump is 10 bar. For information about suction height, pressure, etc. see the QPM3 pump manual.

3-PHASE MOTOR

3-phase asynchronous motors in accordance with IEC 60034-1

Nominal voltage	*
Insulation class	F
Rise of temperature	B
Protection class	IP 55
Recommended ambient temperature	-20 °C – +40 °C

MATERIAL

Pump housing	Aluminum
Cooler matrix	Aluminum
Fan blades/hub	Glass fibre reinforced polypropylene/Aluminum
Fan housing	Steel

Fan guard	Steel
Other parts	Steel
Surface treatment	Electrostatically powder-coated

CONTACT PARKER HANNIFIN FOR ADVICE ON

- Oil temperatures > 100 °C
- Oil viscosity > 100 cSt
- Aggressive environments
- Ambient air rich in particles
- High-altitude locations

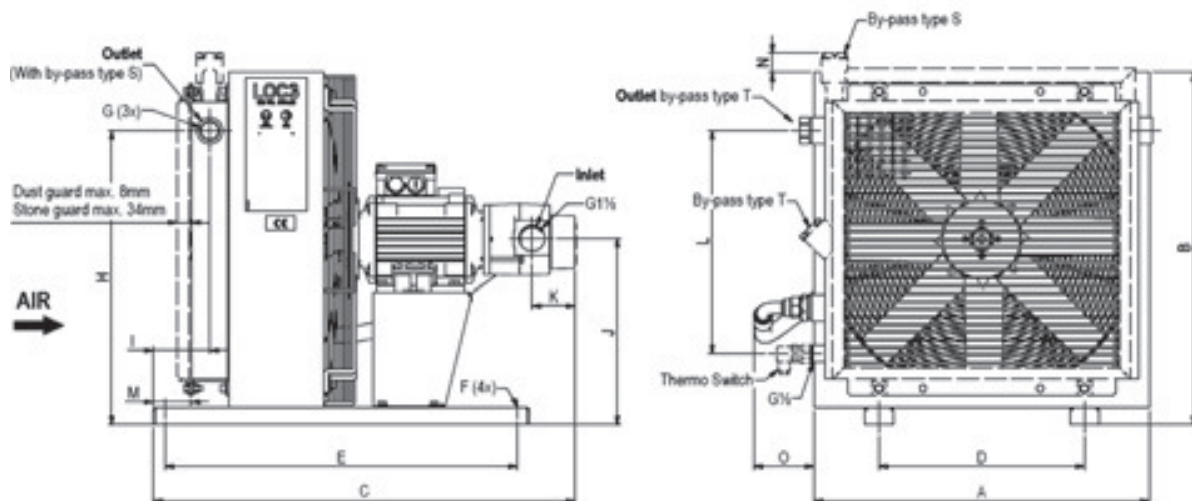
* = See separate instructions for electric motor.

TYPE	Nom. oil flow l/min	Cooling capacity in kW at EDT 40 °C	Cooling capacity kW/°C	Acoustic pressure level LpA dB(A) 1m*	No. of poles/ Capacity kW	Weight kg (approx)
LOC3 004 - 4 - D - A	20	2.7	0.07	57	4-0.75	23
LOC3 007 - 4 - D - A	20	5.6	0.14	64	4-0.75	30
LOC3 007 - 4 - D - B	40	7.2	0.18	64	4-0.75	30
LOC3 007 - 4 - D - C	60	8.0	0.20	65	4-1.50	36
LOC3 007 - 4 - D - D	80	8.4	0.21	65	4-1.50	36
LOC3 011 - 4 - D - A	20	9.2	0.23	70	4-0.75	34
LOC3 011 - 4 - D - B	40	10.4	0.26	70	4-0.75	34
LOC3 011 - 6 - D - C	40	7.6	0.19	61	6-1.10	40
LOC3 011 - 6 - D - D	55	8.8	0.22	61	6-1.10	40
LOC3 011 - 4 - D - C	60	12.0	0.30	70	4-1.50	40
LOC3 011 - 4 - D - D	80	13.2	0.33	70	4-1.50	40
LOC3 016 - 4 - D - A	20	11.2	0.28	74	4-1.50	45
LOC3 016 - 4 - D - B	40	15.6	0.39	74	4-1.50	45
LOC3 016 - 6 - D - C	40	12.4	0.31	64	6-1.10	45
LOC3 016 - 6 - D - D	55	14.0	0.35	64	6-1.10	45
LOC3 016 - 4 - D - C	60	18.0	0.45	74	4-1.50	45
LOC3 016 - 4 - D - D	80	19.6	0.49	74	4-1.50	45
LOC3 023 - 4 - D - B	40	21.2	0.53	77	4-1.50	53
LOC3 023 - 6 - D - C	40	16.8	0.42	67	6-1.10	53
LOC3 023 - 6 - D - D	55	18.4	0.46	67	6-1.50	53
LOC3 023 - 4 - D - C	60	24.4	0.61	77	4-2.20	62
LOC3 023 - 4 - D - D	80	26.8	0.67	77	4-2.20	62
LOC3 033 - 6 - A - D	55	26.0	0.65	74	6-2.20	92
LOC3 033 - 4 - A - C	60	32.0	0.80	85	4-3.00	76
LOC3 033 - 4 - A - D	80	34.8	0.87	85	4-3.00	76
LOC3 044 - 6 - A - D	55	34.0	0.85	77	6-2.20	98
LOC3 044 - 4 - A - C	60	40.0	1.00	86	4-3.00	85
LOC3 044 - 4 - A - D	80	44.8	1.12	86	4-3.00	85

* = Electric motors specified are calculated for max. working pressure 6 bar at 125 cSt and 50 Hz, 4 bar at 125 cSt and 60 Hz. If you require higher pressure, please contact us for a choice of motors with a higher output.

** = Noise level tolerance \pm 3 dB(A).





All dimensions are reference.
The design specification take presence at all time.

Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
LOC3 004-4-D-A	267	284	542	134	420	Ø9	G1	206	88	159	62	90	55	67	123
LOC3 007-4-D-A	365	395	602	203	510	Ø9	G1	292	83	214	62	80	50	45	105
LOC3 007-4-D-B	365	395	615	203	510	Ø9	G1	292	83	214	74	80	50	45	105
LOC3 007-4-D-C	365	395	667	203	510	Ø9	G1	292	83	214	87	80	50	45	105
LOC3 007-4-D-D	365	395	680	203	510	Ø9	G1	292	83	214	100	80	50	45	105
LOC3 011-4-D-A	440	470	626	203	510	Ø9	G1	366	83	252	62	175	50	41	103
LOC3 011-4-D-B	440	470	639	203	510	Ø9	G1	366	83	252	74	175	50	41	103
LOC3 011-4-D-C	440	470	691	203	510	Ø9	G1	366	83	252	87	175	50	41	103
LOC3 011-4-D-D	440	470	704	203	510	Ø9	G1	366	83	252	100	175	50	41	103
LOC3 011-6-D-C	440	470	717	203	510	Ø9	G1	366	83	252	87	175	50	41	103
LOC3 011-6-D-D	440	470	730	203	510	Ø9	G1	366	83	252	100	175	50	41	103
LOC3 016-4-D-A	496	526	687	203	510	Ø9	G1	427	83	280	62	300	50	46	107
LOC3 016-4-D-B	496	526	699	203	510	Ø9	G1	427	83	280	74	300	50	46	107
LOC3 016-4-D-C	496	526	712	203	510	Ø9	G1	427	83	280	87	300	50	46	107
LOC3 016-4-D-D	496	526	725	203	510	Ø9	G1	427	83	280	100	300	50	46	107
LOC3 016-6-D-C	496	526	738	203	510	Ø9	G1	427	83	280	87	300	50	46	107
LOC3 016-6-D-D	496	526	725	203	510	Ø9	G1	427	83	280	100	300	50	46	107
LOC3 023-4-D-B	580	610	729	356	610	Ø14	G1	509	98	322	74	385	65	44	104
LOC3 023-4-D-C	580	610	770	356	610	Ø14	G1	509	98	322	87	385	65	44	104
LOC3 023-4-D-D	580	610	783	356	610	Ø14	G1	509	98	322	100	385	65	44	104
LOC3 023-6-D-C	580	610	770	356	610	Ø14	G1	509	98	322	87	385	65	44	104
LOC3 023-6-D-D	580	610	783	356	610	Ø14	G1	509	98	322	100	385	65	44	104
LOC3 033-4-A-C	692	722	798	356	610	Ø14	G1 1/4	619	103	378	87	326	70	38	99
LOC3 033-4-A-D	692	722	810	356	610	Ø14	G1 1/4	619	103	378	100	326	70	38	99
LOC3 033-6-A-D	692	722	825	356	610	Ø14	G1 1/4	619	103	378	100	326	70	38	99
LOC3 044-4-A-C	629	866	823	356	610	Ø14	G1 1/4	780	103	450	87	504	70	59	99
LOC3 044-4-A-D	629	866	835	356	610	Ø14	G1 1/4	780	103	450	100	504	70	59	99
LOC3 044-6-A-D	629	866	850	356	610	Ø14	G1 1/4	780	103	450	100	504	70	59	99