

# 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

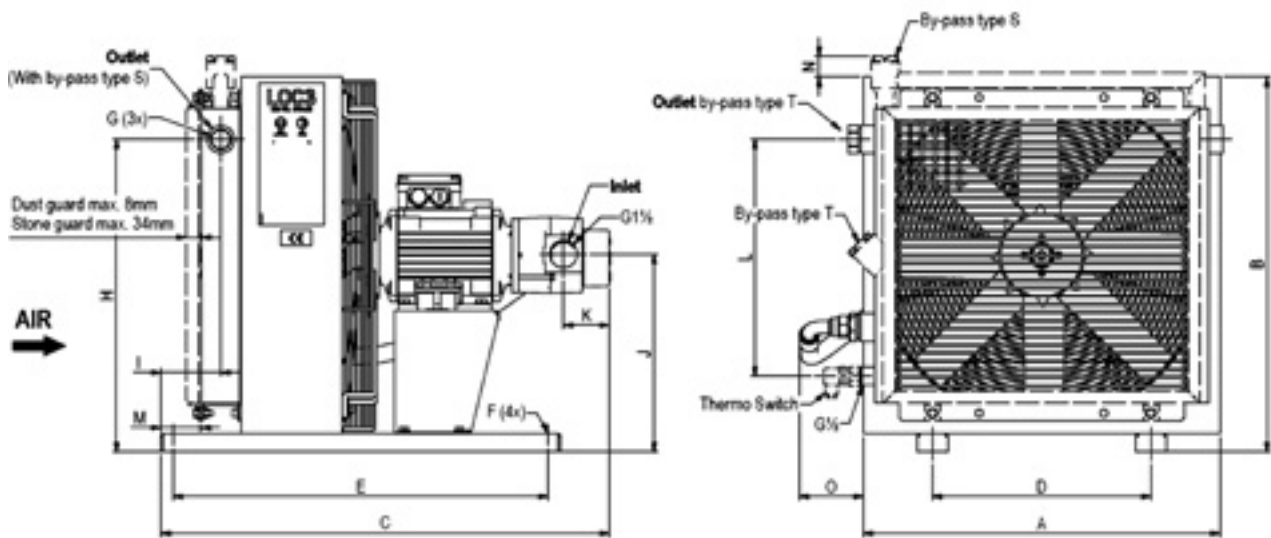
\* = See separate instructions for electric motor.

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 ± 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



# Key for LOC3 cooling systems

All positions must be filled in when ordering

EXAMPLE: LOC3 - 011 - 6 - A - C - L - 50 - S20 - D - 00 - 0  
 1 2 3 4 5 6 7 8 9 10/11 12

## 1. TYPE OF COOLING SYSTEM = LOC3

## 2. COOLER SIZE

004, 007, 011, 016, 023, 033, 044

## 3. NUMBER OF POLES, MOTOR

4 - pole = 4  
 6 - pole = 6

## 4. VOLTAGE AND FREQUENCY

230/400V 50Hz<sup>1)</sup> = A  
 460 alt 480V 60Hz<sup>1)</sup> = B  
 230/400V 50Hz alt  
 480V 60Hz<sup>2)</sup> = D  
 500V 50Hz (not standard) = E  
 400/690V 50Hz, 460 alt  
 480V 60Hz = F  
 525V 50Hz, 575V 60Hz = G

Motor for special voltage  
 (stated in plain language)<sup>3)</sup> = X

<sup>1)</sup> = for LOC3 033 to LOC3 044.

<sup>2)</sup> = for LOC3 007 to LOC3 023.

<sup>3)</sup> For other options contact Parker Hannifin for assistance. All motors apply to IEC 60034, IEC 60072 and EN 50347.

## 5. PUMP SIZE

Displacement 15 cm<sup>3</sup>/r = A  
 Displacement 30 cm<sup>3</sup>/r = B  
 Displacement 45 cm<sup>3</sup>/r = C  
 Displacement 60 cm<sup>3</sup>/r = D  
 Special = X

## 6. BYPASS VALVE, PUMP

No bypass valve = O  
 Built-in bypass valve,  
 5 bar internal = L  
 Built-in bypass valve,  
 10 bar internal = H  
 Built-in bypass valve,  
 5 bar external = K  
 Built-in bypass valve,  
 10 bar external = M

## 7. THERMO CONTACT

For temperature alarm, not for direct control of electric motor.

No thermo contact = 00  
 40 °C = 40  
 50 °C = 50  
 60 °C = 60  
 70 °C = 70  
 80 °C = 80  
 90 °C = 90

## 8. COOLER MATRIX

Standard = 000  
 Two-pass = T00  
**Built-in, pressure-controlled bypass, single-pass**  
 2 bar = S20  
 5 bar = S50  
 8 bar = S80  
**Built-in, pressure-controlled bypass, two-pass\***  
 2 bar = T20  
 5 bar = T50  
 8 bar = T80

## Built-in temperature and pressure-controlled bypass, single-pass

50 °C, 2.2 bar = S25  
 60 °C, 2.2 bar = S26  
 70 °C, 2.2 bar = S27  
 90 °C, 2.2 bar = S29

## Built-in temperature and pressure-controlled bypass, two-pass\*

50 °C, 2.2 bar = T25  
 60 °C, 2.2 bar = T26  
 70 °C, 2.2 bar = T27  
 90 °C, 2.2 bar = T29

\* = not valid for LOC 004

## 9. MATRIX GUARD

No guard = 0  
 Stone guard = S  
 Dust guard = D  
 Dust and stone guard = P

## 10. FILTER UNIT

No filter unit = 0  
 Filter unit = X

Please contact Parker Hannifin for guidance and information regarding filter units.

## 11. PRESSURE DROP INDICATOR

No pressure drop indicator. = 0  
 Pressure drop indicator = X

## 12. STANDARD/SPECIAL

Standard = 0  
 Special = Z

The information in this brochure is subject to change without prior notice.

