

KLM / KLP / DKLM / DKLP

ELECTRIC IN-LINE PUMPS



TECHNICAL DATA

Operating range:

from 2 to 67 m³/h with head up to 13,7 metres.

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water. Maximum, glycol content 30 % (for other glycol percentages contact Technical Support).

Pumped liquid temperature range: from -15 °C to +120 °C.

Maximum ambient temperature: +40°C.

Maximum operating pressure: 10 bar (1000 kPa).

Standard flanges:

DN 40, DN 50, DN 65, DN 80 - PN 6/PN 10 (4 holes).

Flanges on request: DN 80 - PN 16 (8 holes).

Counter flanges on request:

threaded DN 40, DN 50, DN 65 in PN 10.

welded DN 40, DN 50, DN 65, in PN 10/PN 16 (4 holes).

welded DN 80 in PN 10/PN 16 (8 holes)

Special executions on requests: alternative voltages and frequencies.

APPLICATIONS

Hot or cold water circulation pump with in-line ports, suitable for installation directly on the pipework of civil and industrial heating, air conditioning, refrigeration, and sanitary water systems.

CONSTRUCTION FEATURES OF THE PUMP

Pump body and motor support in cast iron.

PN 10 flanged suction and delivery ports with threaded holes for control manometers. To make replacement in existing systems easier, the pump can accept PN 6 counter flanges.

Technopolymer impeller.

Carbon/ceramic mechanical seal.

The pumps are available both in the single (KLM-KLP) and in the twin (DKLM-DKLP) versions.

For the single version a built in clapet valve in the delivery port is also included, to avoid water recirculation when the unit is idle. A blind flange is also supplied as a standard, to be used during maintenance of one of the two motors.

The twin version gives the possibility of alternating the operation of the pumps when a backup unit is required, or to have the two pumps operating simultaneously.

CONSTRUCTION FEATURES OF THE MOTOR

External ventilation cooling, closed, asynchronous type, with four poles for the KLM and DKLM versions, and two poles for the KLP and DKLP versions.

Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability.

Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations.

Construction according to CEI 2-3.

Protection class: IP 55

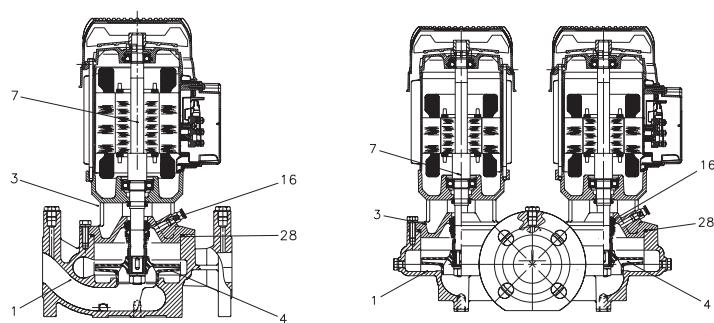
Insulation class: F

Standard voltage:	single-phase	220-240 V, 50 Hz.
	three-phase	230/400 V, 50 Hz

MATERIALS

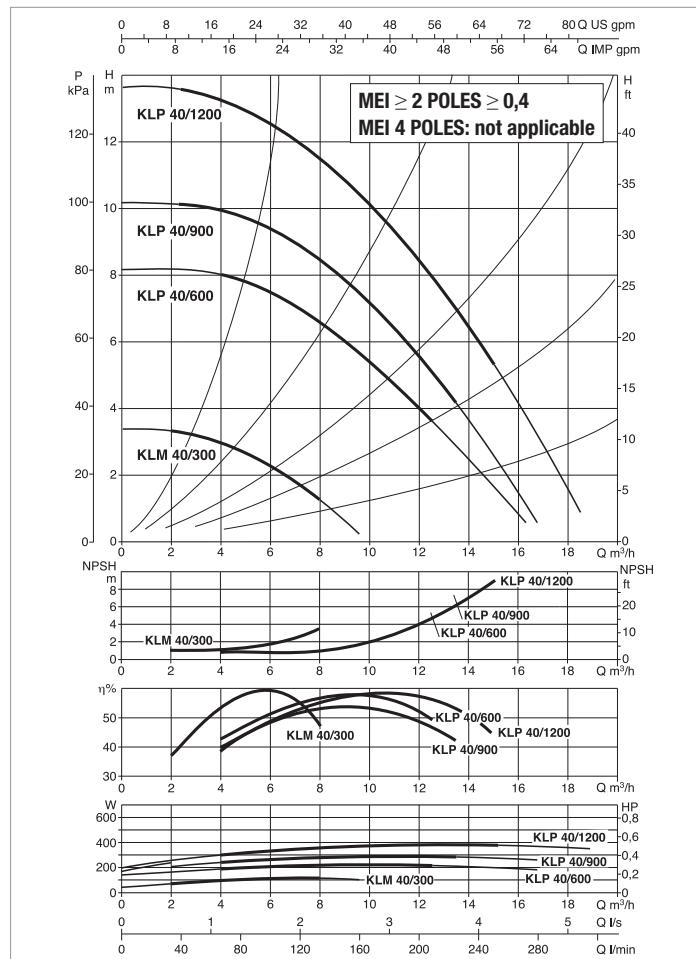
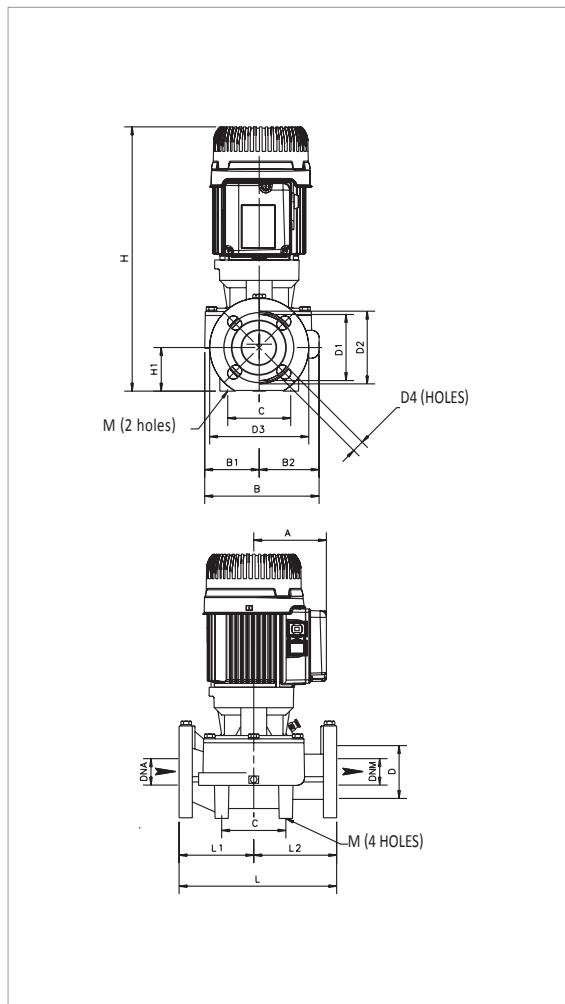
N.	PARTS*	MATERIALS
1	PUMP BODY	CAST IRON 250 UNI ISO 185
3	SUPPORT	CAST IRON 250 UNI ISO 185
4	IMPELLER	TECHNOPOLYMER B
7	SHAFT WITH ROTOR	AISI 303 STAINLESS STEEL X10 CrNiS 1809 UNI 6900/71
16	MECHANICAL SEAL	CARBON / CERAMIC
26	OR RING	EPDM RUBBER

* In contact with the liquid



KLM / KLP 40 - IN-LINE ELECTRIC PUMPS FOR HEATING, AIR CONDITIONING, REFRIGERATION, SOLAR, AND SANITARY SYSTEMS - SINGLE, FLANGED

Pumped liquid temperature range: from -15 °C to +120 °C - Maximum ambient temperature: +40 °C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE	PUMP CONNECTIONS	ELECTRICAL DATA										
			POWER INPUT 50 Hz	MOTOR TYPE	n r.p.m.	P1 MAX W	P2 NOMINAL		In A	CAPACITOR		μF	Vc
							kW	HP					
KLM 40-300 M	250	DN 40	1x230V~	4 POLES	1450	0,17	0,25	0,33	1	8	450		
KLM 40-300 T	250	DN 40	3x230 - 400V~	4 POLES	1450	0,14	0,25	0,33	0.9-0.55	-	-		
KLP 40-600 M	250	DN 40	1x230V~	2 POLES	2940	0,47	0,37	0,5	3	20	450		
KLP 40-600 T	250	DN 40	3x230 - 400V~	2 POLES	2950	0,39	0,37	0,5	1.7-1	-	-		
KLP 40-900 M	250	DN 40	1x230V~	2 POLES	2920	0,54	0,37	0,5	3,2	20	450		
KLP 40-900 T	250	DN 40	3x230 - 400V~	2 POLES	2920	0,45	0,37	0,5	1.9-1.1	-	-		
KLP 40-1200 M	250	DN 40	1x230V~	2 POLES	2890	0,7	0,55	0,75	3,4	20	450		
KLP 40-1200 T	250	DN 40	3x230 - 400V~	2 POLES	2890	0,6	0,55	0,75	2-1.2	-	-		

MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	L	L1	L2	M	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
																			L/A	L/B	H		
KLM 40/300	110	179	82	97	100	40	40	80	100	110	150	4 HOLES 18x23	395	66	250	125	125	2 HOLES 10	470	280	330	0,043	21,1
KLP 40/600	110	179	82	97	100	40	40	80	100	110	150		395	66	250	125	125		470	280	330	0,043	22,5
KLP 40/900	110	179	82	97	100	40	40	80	100	110	150		395	66	250	125	125		470	280	330	0,043	22,5
KLP 40/1200	110	179	82	97	100	40	40	80	100	110	150		395	66	250	125	125		470	280	330	0,043	23,2