



GENERAL DATA

Applications

Circulation pump for hot or cold water with in-line connectors, suitable for direct installation to pipes in civil and industrial heating, conditioning, cooling and domestic water systems. Particularly versatile thanks to the use of the HYDRODRIVER, it offers performance features that can automatically adapt to the various system requirements whilst keeping differential pressures constant.

Construction features of the pump

Pump body and motor support in cast iron.

Cast iron impeller for all models from CME 65 to CME 150; in technopolymer for models from CM 40 to CM 50.

Flanged suction and delivery connections in PN 16 with threaded holes for control pressure gauges.

Mechanical seal in carbon/ceramic.

Construction features of the motor

Closed, asynchronous motor with external ventilation.

Rotor mounted on oversized ball bearings to ensure silent running and long life.

Built to CEI 2-3 standards

Protected to: IP 55

Insulation class: F

Standard voltage:	single-phase	208-240 V / 50-60 Hz
	three-phase	380-480 V / 50-60 Hz

Construction features of electronic part (HYDRODRIVER)

Adjustment unit directly mounted on the electric pump that, by using the signal of the standard differential transducer, already connected and ready to use, modulates the speed of rotation in order to keep the differential pressure of the system on which it is constant used.

The HYDRODRIVER uses an integrated microprocessor that can work with the recent IGBT technology which offers higher levels of reliability and flexibility.

The high frequency impulse width modulation procedure makes the motor work very silently, ensuring elevated starting torque with a current increase programmed and calibrated by the maker.

The device also guarantees gradual acceleration and deceleration ramps (soft-start) thereby preventing hammering effects. It protects the motor it is mounted on with numerous protection systems against overloads, missing phases, overvoltage and undervoltage with automatic 5-try reset feature.

Supplied standard with:

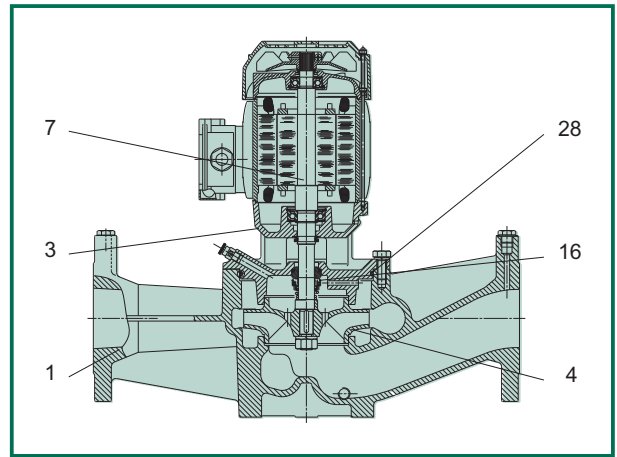
- remote control terminals (start/stop)
- economy function adjustment terminals
- terminals for powering a remote alarm (potential-free)
- Status led's
- adjustment knob for easy calibration of the required set-point.
- Class B integrated radio frequency disturbance filter (EN 55022 level B1)
- integrated ventilation device (from 2.2 kW to 7.5 kW)

Remote control feature through RS 485 serial interface and USS protocol

TECHNICAL DATA

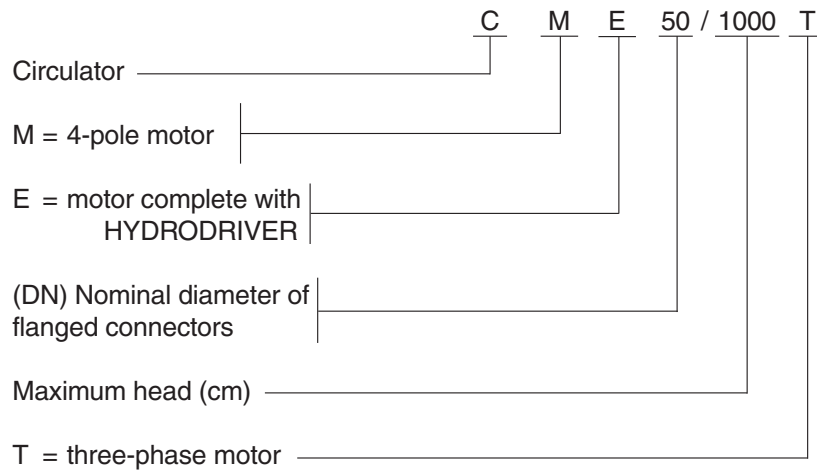
N.	PARTS*	MATERIALS
1	PUMP BODY	CAST IRON 250 ISO UNI 185
3	SUPPORT	CAST IRON 250 ISO UNI 185
4	IMPELLER	TECHNOPOLYMER B
7	SHAFT WITH ROTOR	STAINLESS STEEL AISI 304 X5 Cr Ni 1810 - UNI 6900/71
16	MECHANICAL SEAL	CARBON/CERAMICS
28	OR GASKET	EPDM RUBBER

* In contact with the liquid.

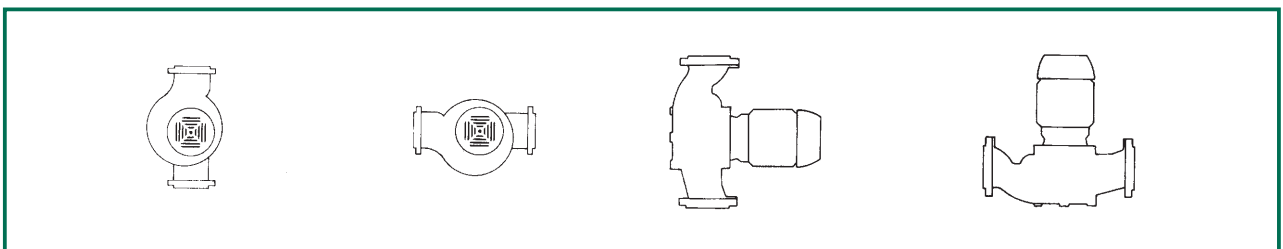


- Operating range: from 1.5 a to 270 m³/h with a head of up to 21 metres.
- Pumped liquid: clean, without solid or abrasive substances, not viscous, not aggressive, not crystallised and chemically neutral, close to water characteristics.
- Liquid temperature range: from -15°C to +120°C.
- Maximum ambient temperature: +40°C
- Maximum operating pressure: 16 bar (1600 kPa).
- Flanging: PN 16.
- Counterflanging on request: DN 40 - DN 50 - DN 65 - DN 80 - DN 100 - DN 125 - DN 150; PN 16.
- Special versions on request: other voltages and/or frequencies.
- Installation: with the motor horizontal or vertical provided it is always above the pump.

- Classification index:
(example)



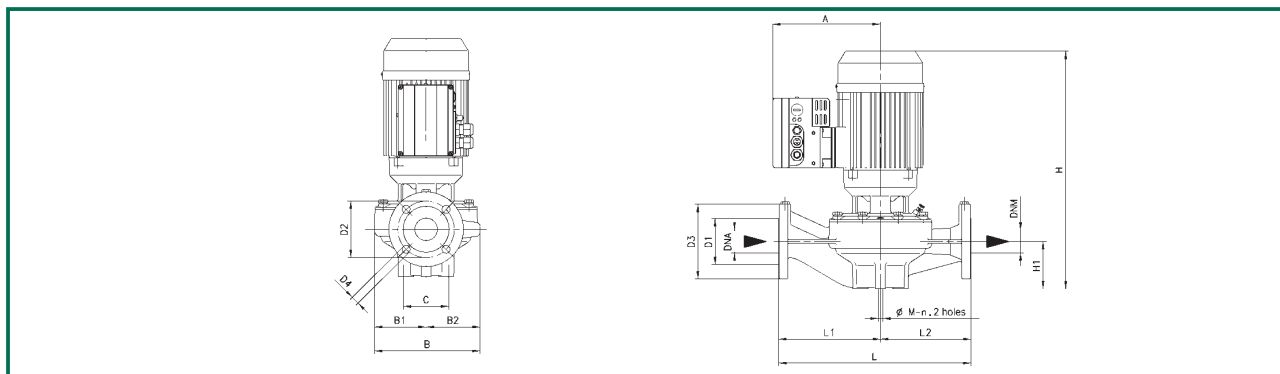
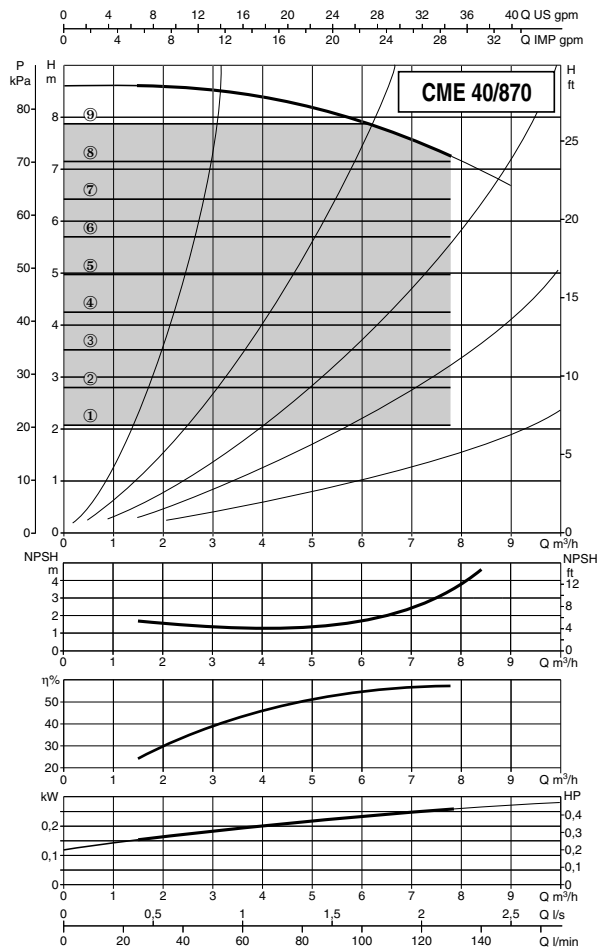
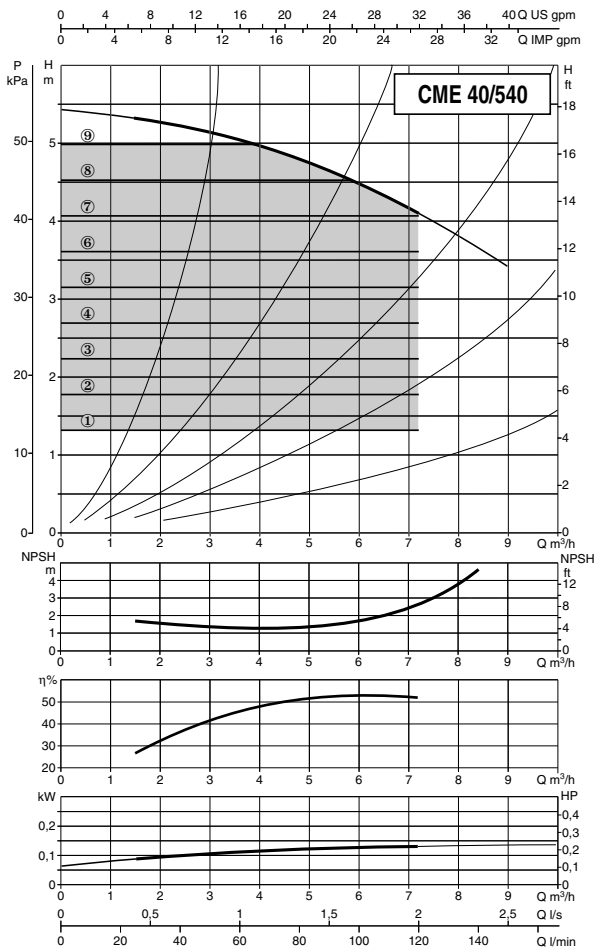
- Installation: fixed horizontal or vertical provided the motor is always positioned above the pump.



Performance curves are based on kinematic viscosity values equal to 1m²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CME 40

Liquid temperature range: from -15°C to +120°C
 Maximum temperature operating: +40°C



MODEL	A	B	B1	B2	C	DNA	DNM	D1	D2	D3	D4	H	H1	L	L1	L2	M
CME 40/540 M	230	231	118	113	85	40	40	88	110	150	18	453	95	390	200	190	12
CME 40/870 M	230	231	118	113	85	40	40	88	110	150	18	453	95	390	200	190	12

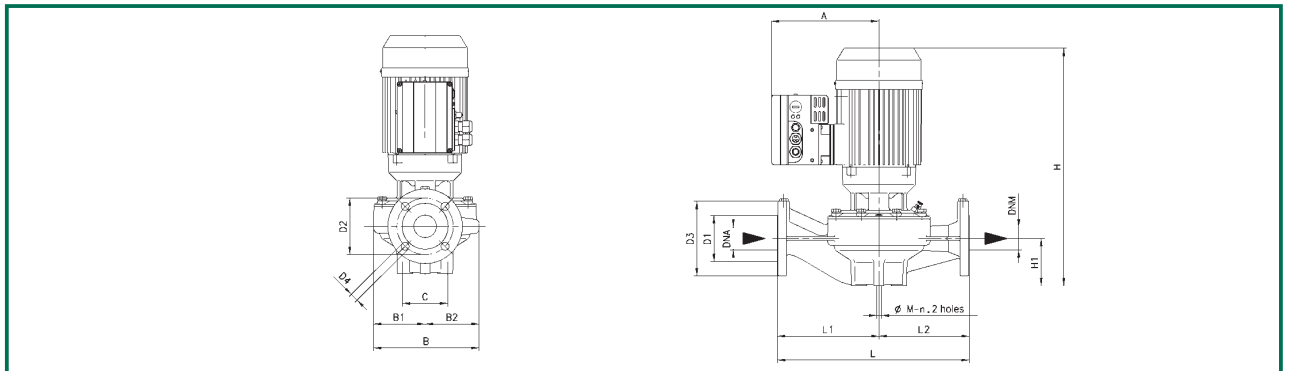
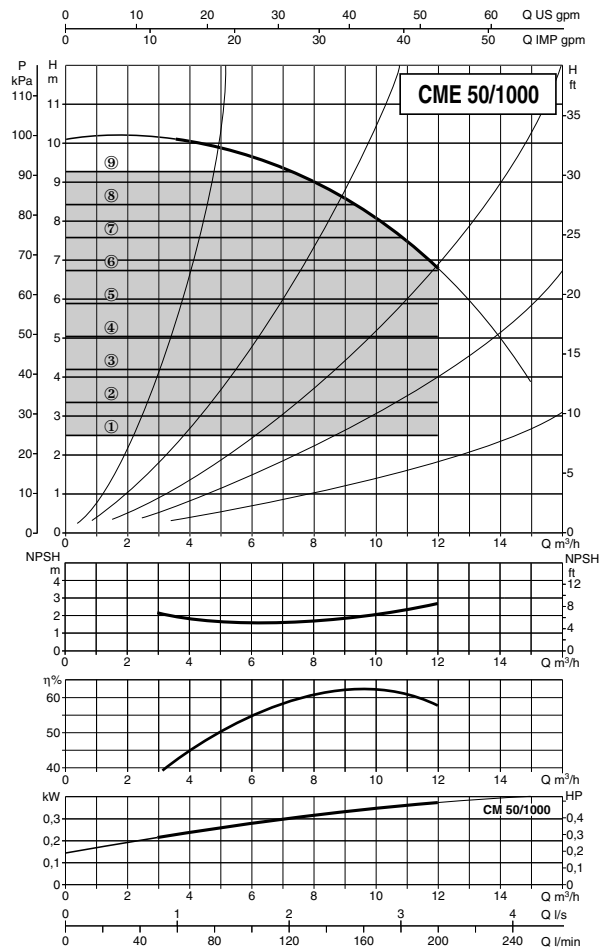
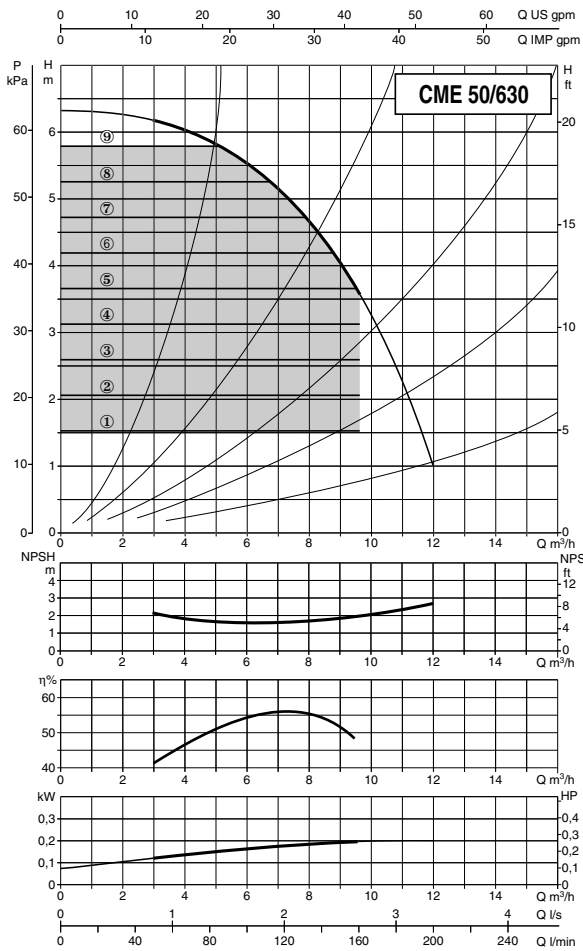
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	R.P.M. n. 1/min.	P1 MAX kW	P2 NOMINAL		In A
CME 40/540 M	1x208-240 V ~	4 POLE	1480	0,34	0,73	1	4-4,6
CME 40/870 M	1x208-240 V ~	4 POLE	1480	0,52	0,73	1	4-4,6

PACKING DIMENSIONS			VOLUME m ³	WEIGHT Kg
L/A	L/B	H		
680	330	580	0.13	46
680	330	580	0.13	46

Performance curves are based on kinematic viscosity values equal to 1m²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CME 50

Liquid temperature range: from -15°C to +120°C
 Maximum temperature operating: +40°C



MODEL	A	B	B1	B2	C	DNA	DNM	D1	D2	D3	D4	H	H1	L	L1	L2	M
CME 50/630 M	230	233	120	113	100	50	50	102	125	165	18	463	105	425	225	200	12
CME 50/1000 M	230	233	120	113	100	50	50	102	125	165	18	463	105	425	225	200	12

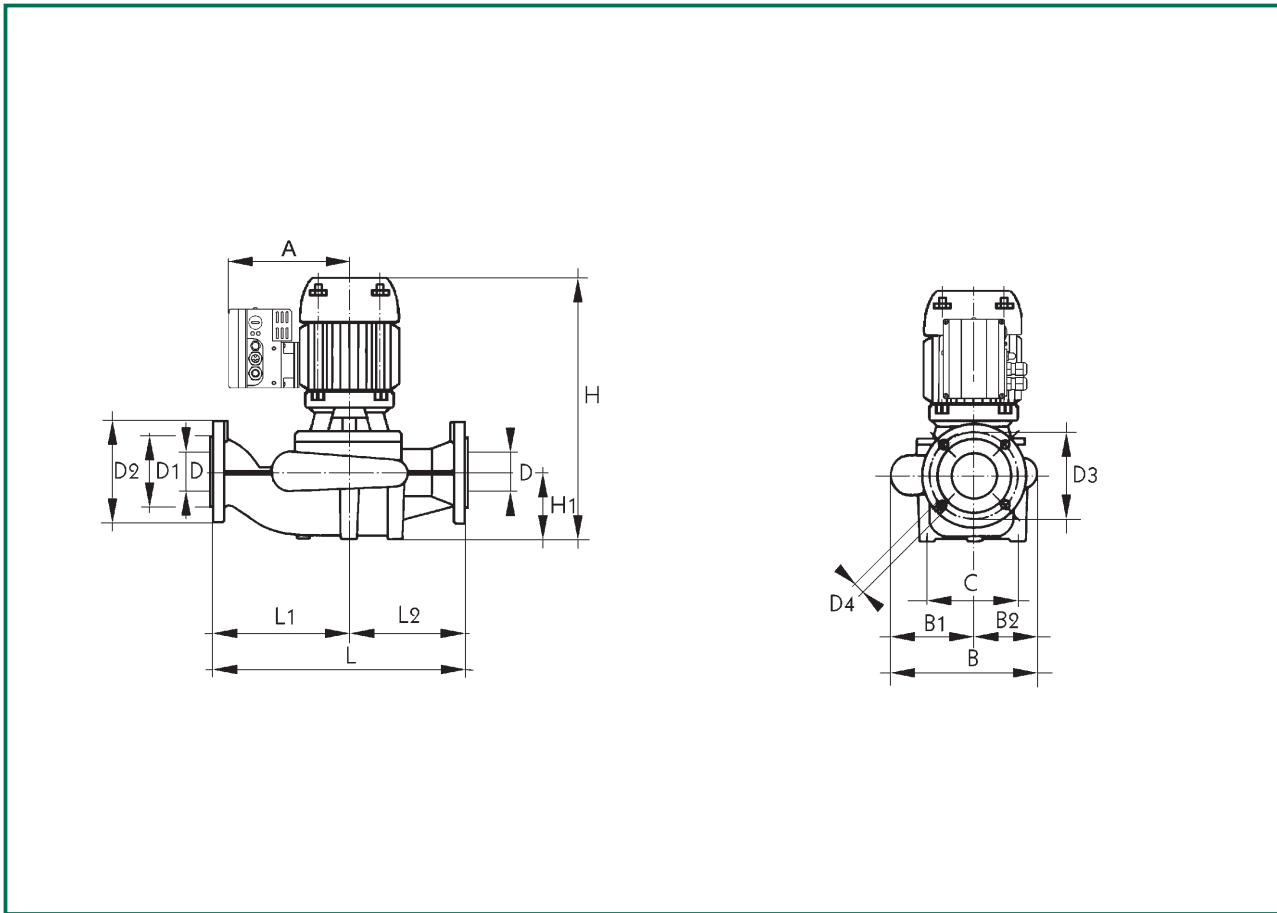
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	R.P.M. n. 1/min.	P1 MAX kW	P2 NOMINAL		In A
					kW	HP	
CME 50/630 M	1x208-240 V ~	4 POLE	1480	0,51	0,73	1	4-4,6
CME 50/1000 M	1x208-240 V ~	4 POLE	1470	0,66	0,73	1	5,4-6,2

PACKING DIMENSIONS			VOLUME m ³	WEIGHT Kg
L/A	L/B	H		
680	330	580	0.13	51,6
680	330	580	0.13	51,6

Performance curves are based on kinematic viscosity values equal to 1m²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CME 65

Liquid temperature range: from -15°C to +120°C
 Maximum temperature operating: +40°C



MODEL	L	L1	L2	B	B1	B2	C	H	H1	D	D1	D2	D3	D4	M
CME 65/650 M	475	237,5	237,5	230	125	105	125	419	110	65	122	185	145	4 HOLES Ø 18	16
CME 65/960 M	475	237,5	237,5	283	150	133	125	438	110	65	122	185	145		16
CME 65/1400 T	475	237,5	237,5	283	150	133	125	515	110	65	122	185	145		16

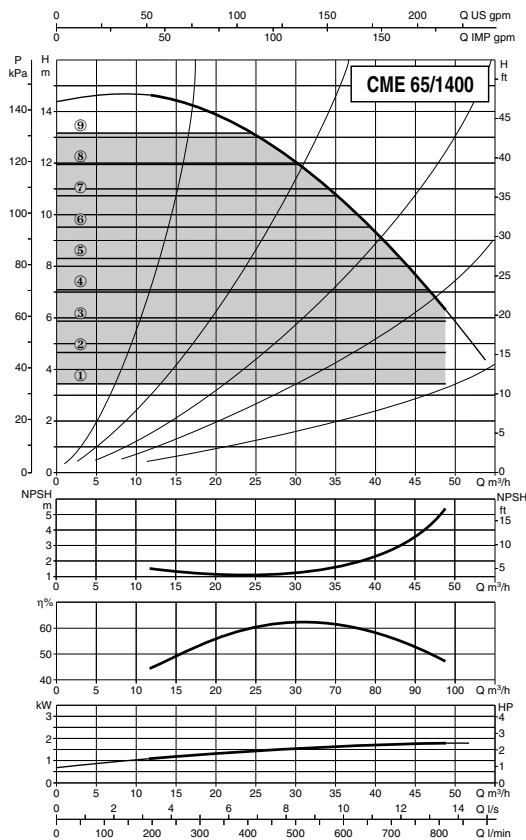
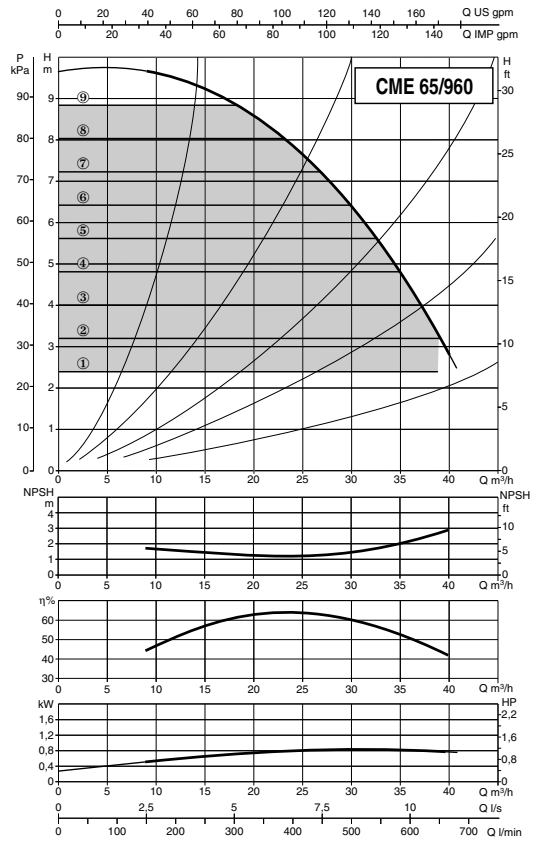
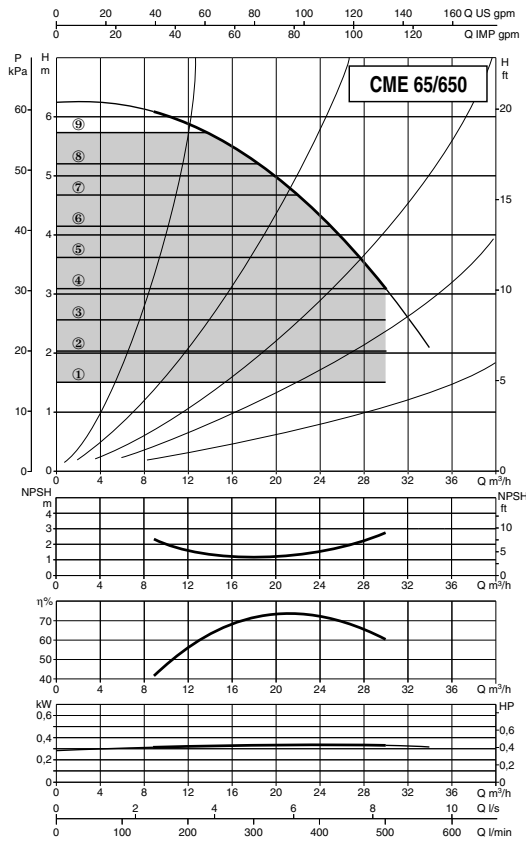
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	R.P.M. n. 1/min.	P1 MAX kW	P2 NOMINAL		In A
					kW	HP	
CME 65/650 M	1x208-240 V ~	4 POLE	1430	0,64	0,55	0,75	5,4-6,2
CME 65/960 M	1x208-240 V ~	4 POLE	1430	1,8	1,1	1,5	7,1-8,2
CME 65/1400 T	3x380-480 V ~	4 POLE	1450	2,16	2,2	3	3,7-4,7

PACKING DIMENSIONS			VOLUME m ³	WEIGHT Kg
L/A	L/B	H		
680	330	560	0,12	50
670	390	710	0,18	70
670	390	710	0,18	79

Performance curves are based on kinematic viscosity values equal to $1\text{m}^2/\text{s}$ at a density equal to $1000\text{ kg}/\text{m}^3$. Curve tolerance in accordance with ISO 9906.

CME 65

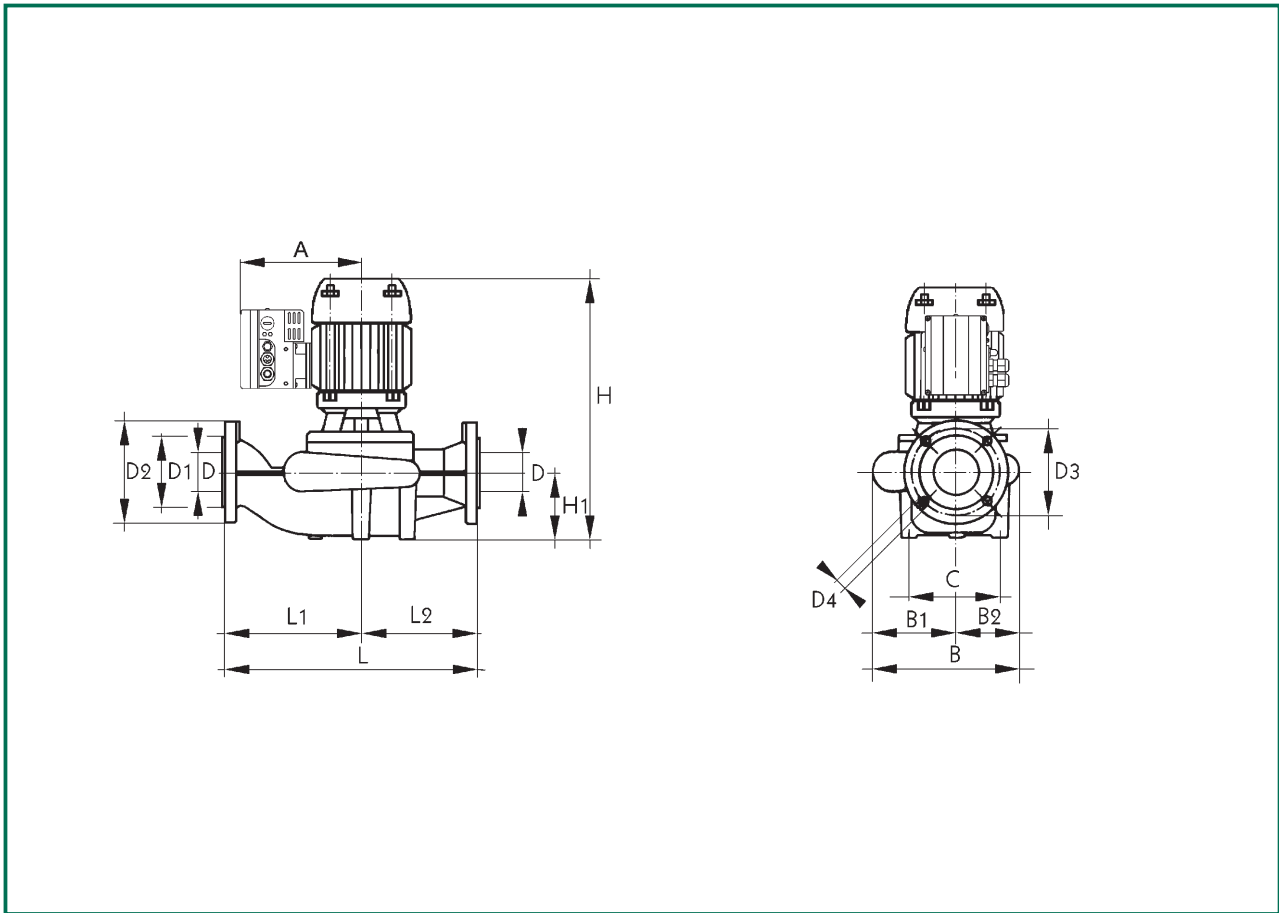
Liquid temperature range: from -15°C to $+120^\circ\text{C}$
 Maximum temperature operating: $+40^\circ\text{C}$



Performance curves are based on kinematic viscosity values equal to $1\text{m}^2/\text{s}$ at a density equal to 1000 kg/m^3 . Curve tolerance in accordance with ISO 9906.

CME 80

Liquid temperature range: from -15°C to $+120^\circ\text{C}$
 Maximum temperature operating: $+40^\circ\text{C}$



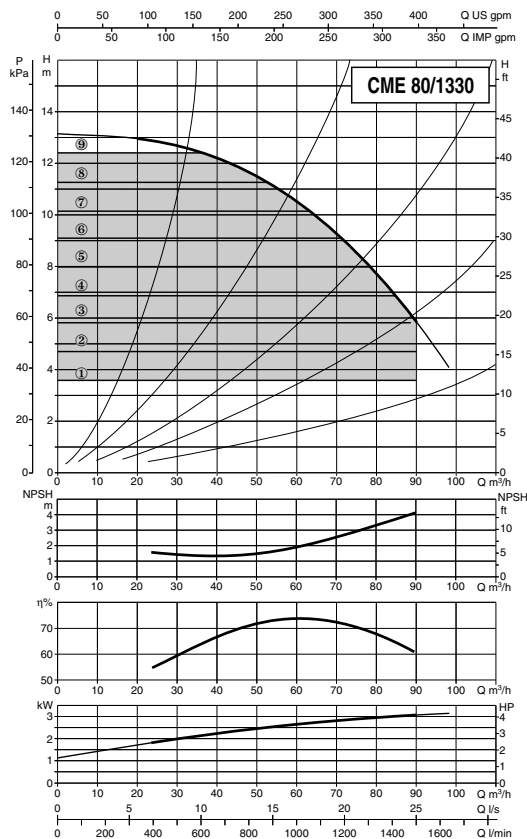
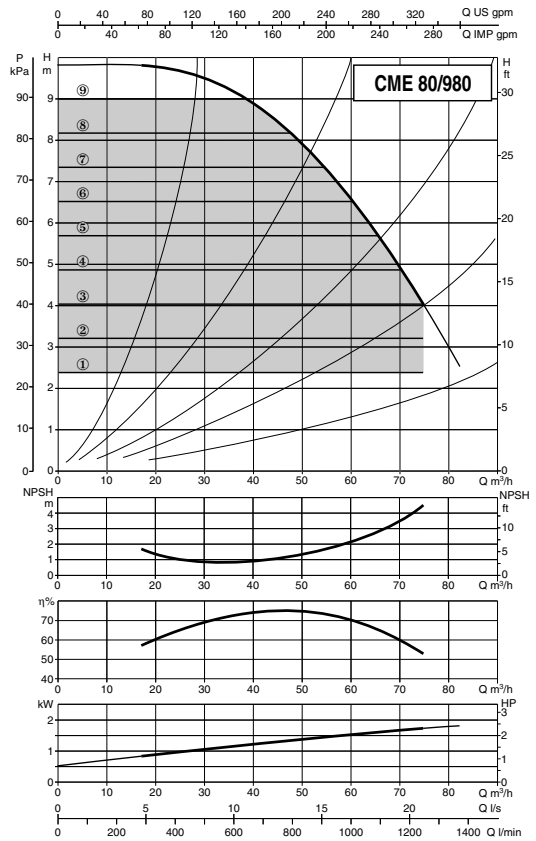
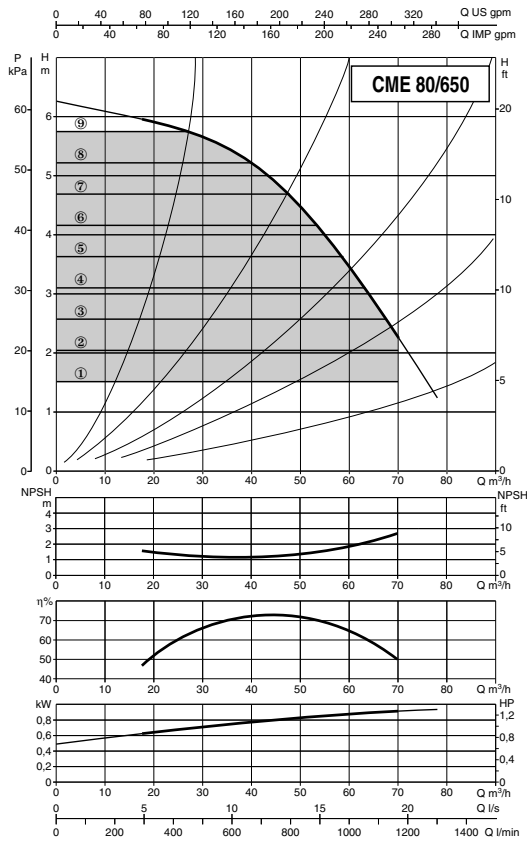
MODEL	L	L1	L2	B	B1	B2	C	H	H1	D	D1	D2	D3	D4	M
CME 80/650 M	525	262,5	262,5	273	152	121	148	454	125	80	138	200	160	4 HOLES Ø 18	16
CME 80/980 T	525	262,5	262,5	320	173	147	148	545	125	80	138	200	160		16
CME 80/1330 T	525	262,5	262,5	320	173	147	148	545	125	80	138	200	160		16

MODEL	ELECTRICAL DATA							PACKING DIMENSIONS			VOLUME m ³	WEIGHT Kg
	VOLTAGE 50-60 Hz	MOTOR TYPE	R.P.M. n. 1/min.	P1 MAX kW	P2 NOMINAL		In A	L/A	L/B	H		
CME 80/650 M	1x208-240 V ~	4 POLE	1430	1,13	1,1	1,5	7,1-8,2	670	390	710	0,18	65
CME 80/980 T	3x380-480 V ~	4 POLE	1400	1,96	2,2	3	4,7-5,9	670	390	710	0,18	89
CME 80/1330 T	3x380-480 V ~	4 POLE	1400	3,4	3	4	7,2	670	390	710	0,18	99

Performance curves are based on kinematic viscosity values equal to $1\text{m}^2/\text{s}$ at a density equal to $1000\text{ kg}/\text{m}^3$. Curve tolerance in accordance with ISO 9906.

CME 80

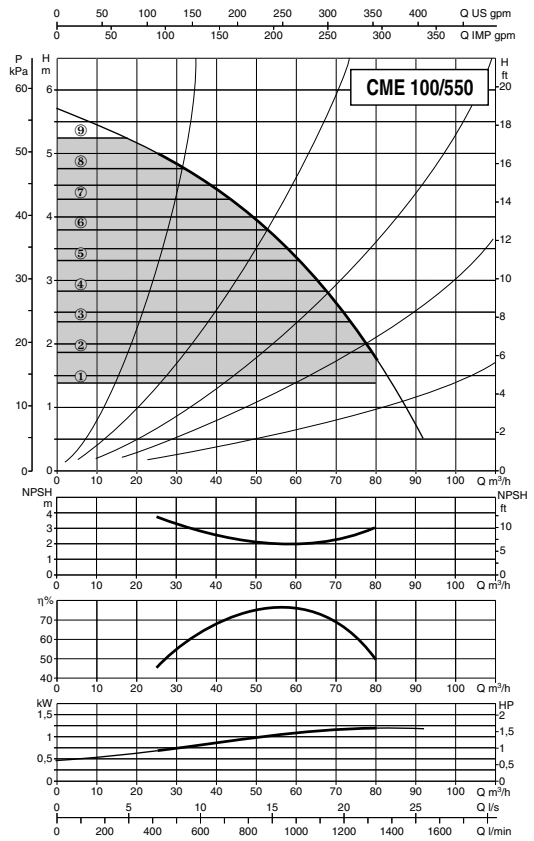
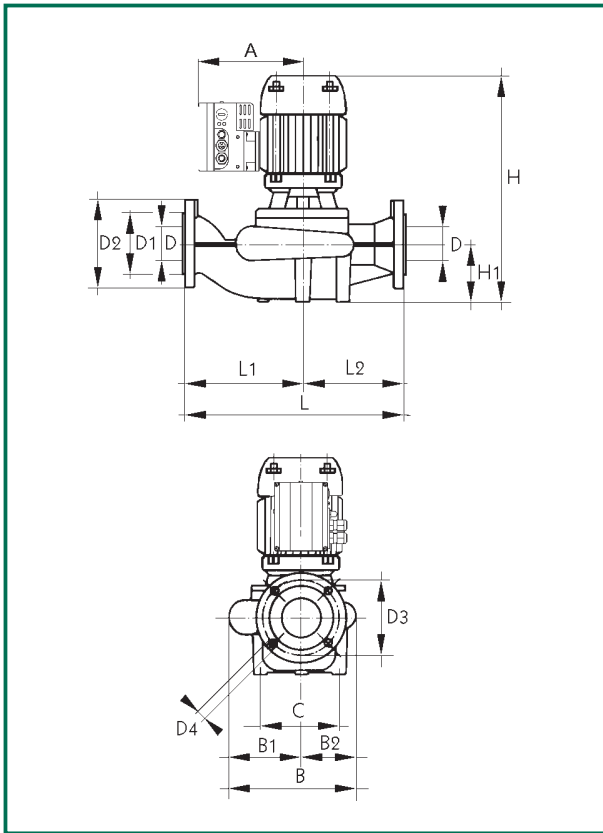
Liquid temperature range: from -15°C to $+120^\circ\text{C}$
 Maximum temperature operating: $+40^\circ\text{C}$



Performance curves are based on kinematic viscosity values equal to 1m²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CME 100

Liquid temperature range: from -15°C to +120°C
 Maximum temperature operating: +40°C



MODEL	L	L1	L2	B	B1	B2	C	H	H1	D	D1	D2	D3	D4	M
CME 100/550 M	550	300	250	320	175	145	202	479	140	100	158	220	180	8 HOLES Ø 18	16
CME 100/950 T	550	300	250	320	175	145	202	553	140	100	158	220	180		16
CME 100/1500 T	550	300	250	340	182	158	177	574	164	100	158	220	180		16
CME 100/1800 T	630	350	280	376	199	177	195	665	175	100	158	220	180		16
CME 100/2000 T	630	350	280	376	199	177	195	703	175	100	158	220	180		16

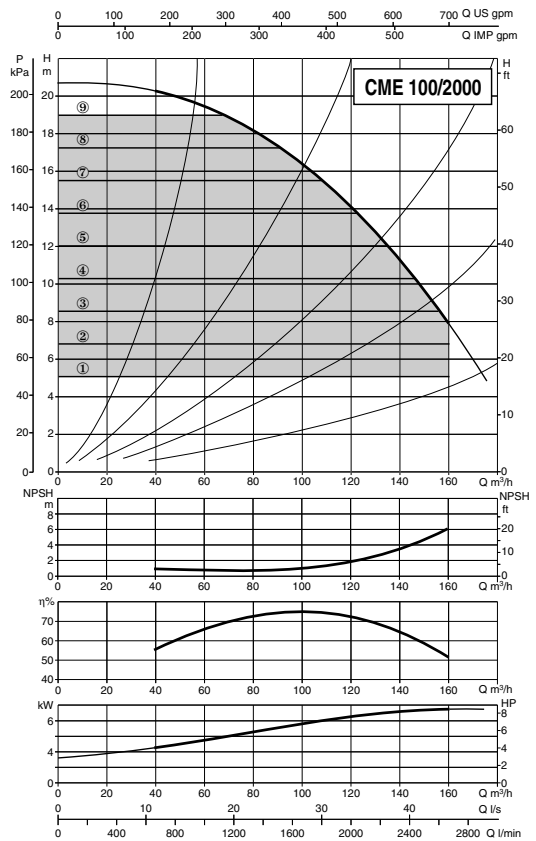
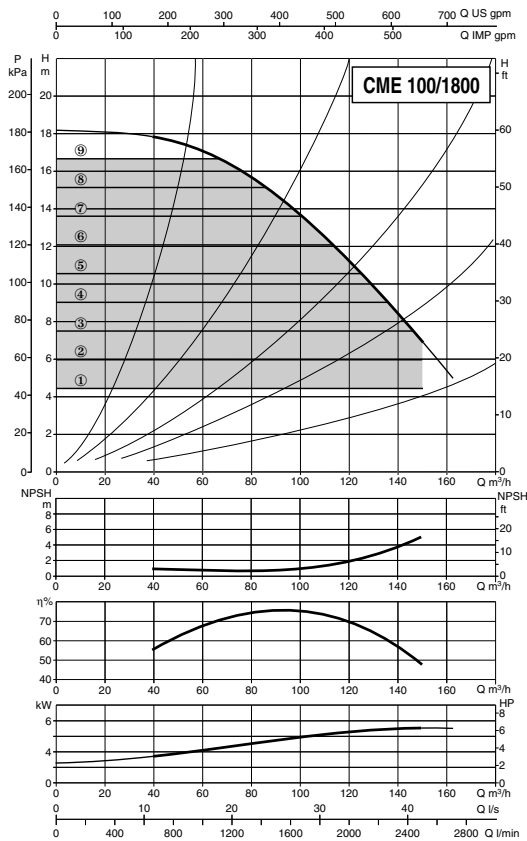
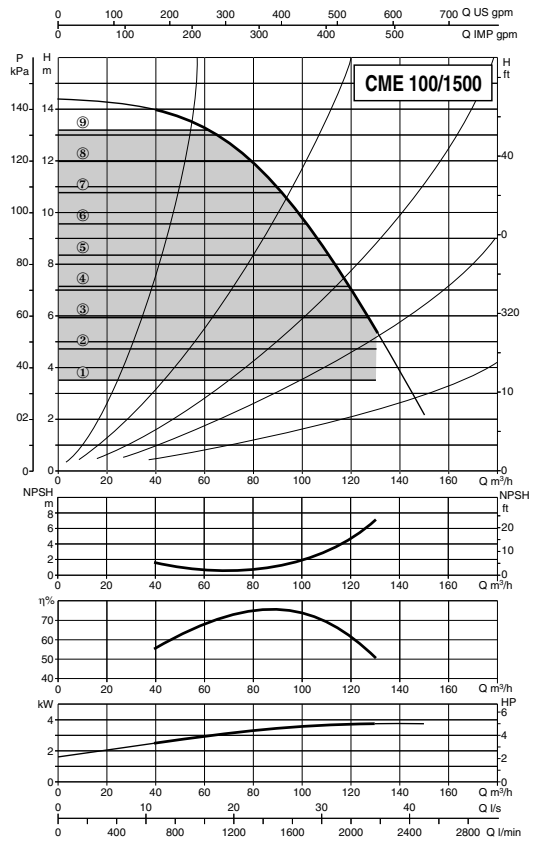
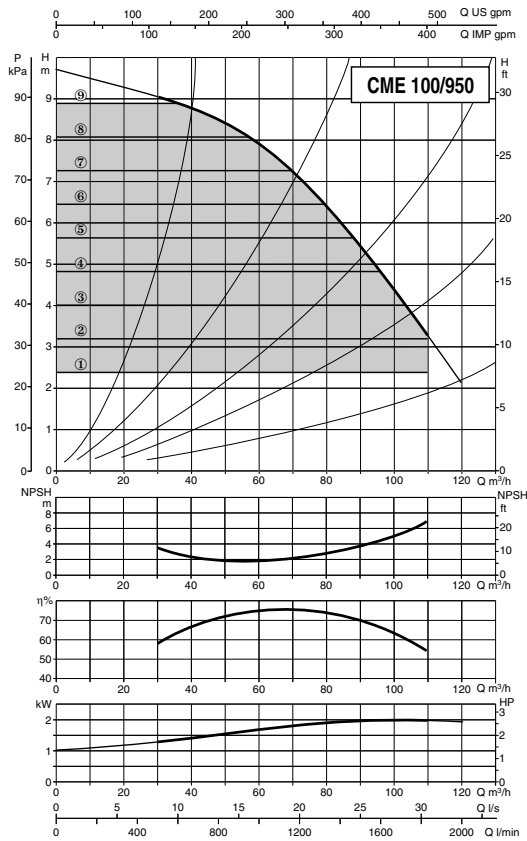
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	R.P.M. n. 1/min.	P1 MAX kW	P2 NOMINAL		In A
				kW	kW	HP	
CME 100/550 M	1x208-240 V ~	4 POLE	1430	1,08	1,1	1,5	7,1-8,2
CME 100/950 T	3x380-480 V ~	4 POLE	1425	2,42	2,2	3	3,7-4,7
CME 100/1500 T	3x380-480 V ~	4 POLE	1400	4,89	3,7	5	7,9-10
CME 100/1800 T	3x380-480 V ~	4 POLE	1450	6,7	5,5	7,5	9,66-12,2
CME 100/2000 T	3x380-480 V ~	4 POLE	1450	8,2	7,4	10	12,7-16

PACKING DIMENSIONS			VOLUME m ³	WEIGHT Kg
L/A	L/B	H		
670	390	710	0,18	80
670	390	710	0,18	98
670	390	710	0,18	102
780	440	860	0,29	147
780	440	860	0,29	157

Performance curves are based on kinematic viscosity values equal to $1\text{m}^2/\text{s}$ at a density equal to $1000\text{ kg}/\text{m}^3$. Curve tolerance in accordance with ISO 9906.

CME 100

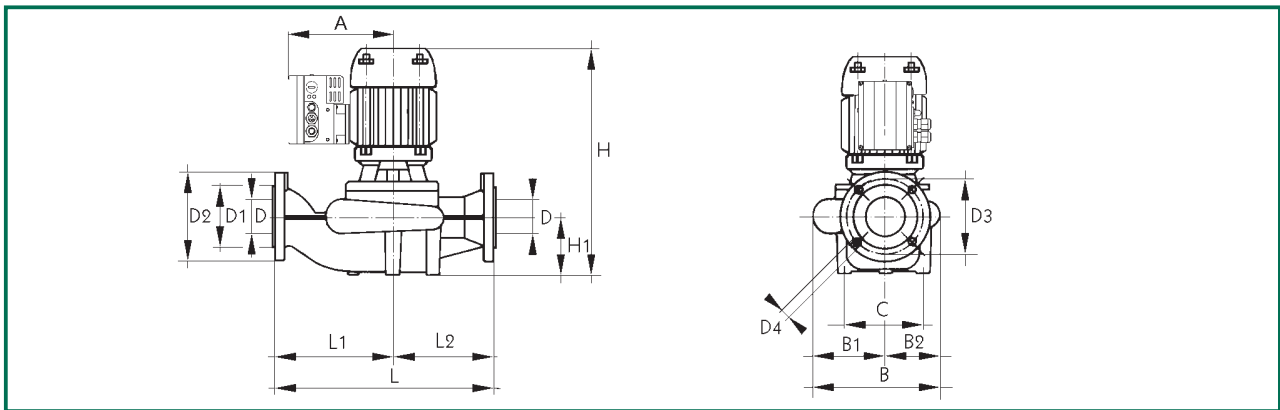
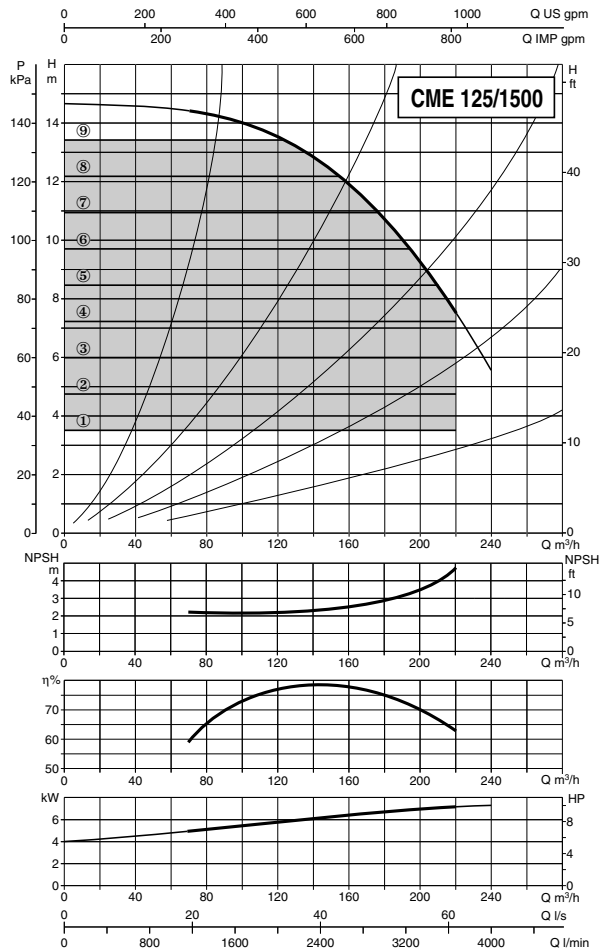
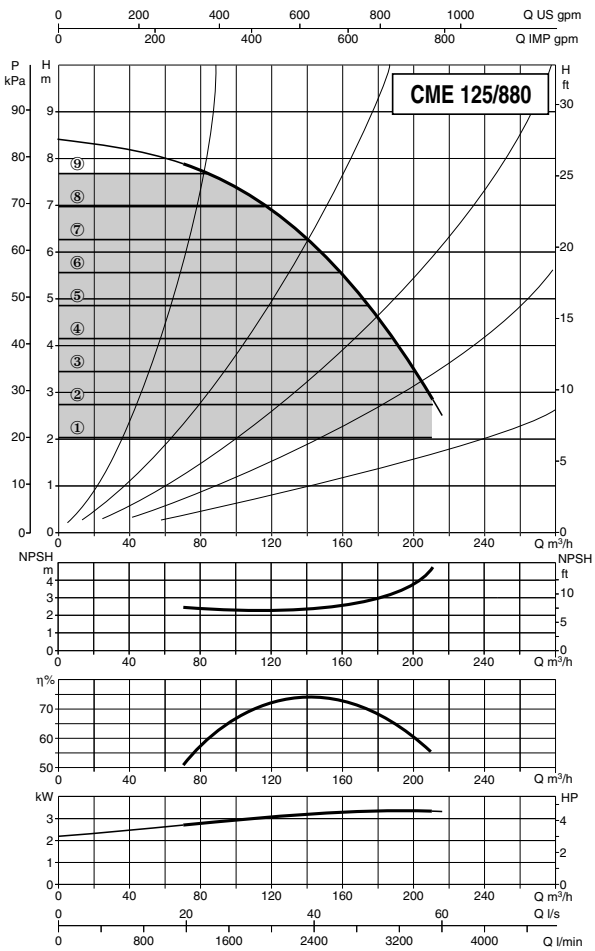
Liquid temperature range: from -15°C to $+120^\circ\text{C}$
 Maximum temperature operating: $+40^\circ\text{C}$



Performance curves are based on kinematic viscosity values equal to 1m²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CME 125

Liquid temperature range: from -15°C to +120°C
 Maximum temperature operating: +40°C



MODEL	L	L1	L2	B	B1	B2	C	H	H1	D	D1	D2	D3	D4	M
CME 125/880 T	630	350	280	386	154	125	148	459	140	125	188	250	210	8 HOLES Ø 18	16
CME 125/1500 T	630	350	280	386	175	145	202	479	140	125	188	250	210		16

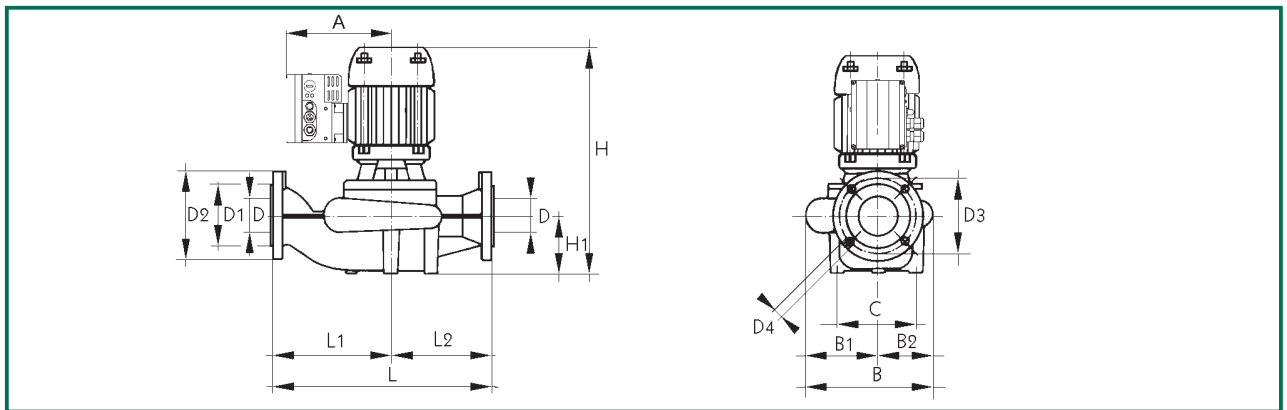
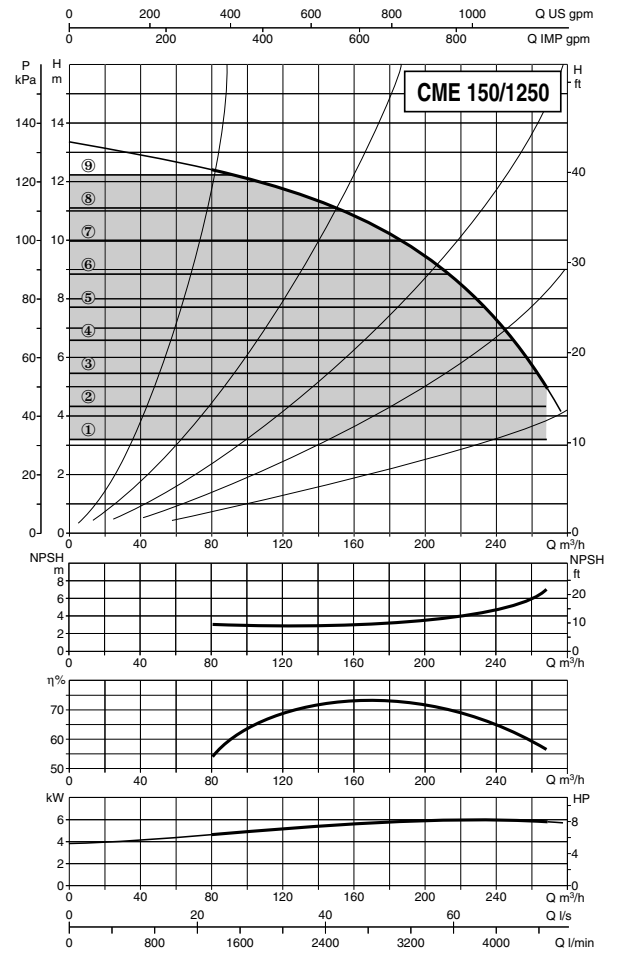
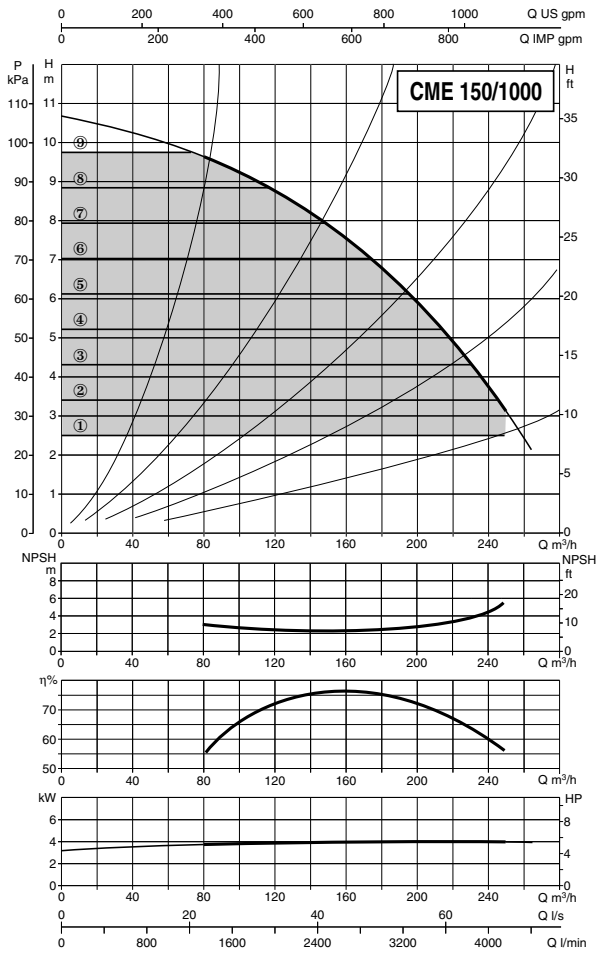
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	R.P.M. n. 1/min.	P1 MAX kW	P2 NOMINAL		In A
CME 125/880 T	3x380-480 V ~	4 POLE	1400	4,22	3,7	5	5-6,4
CME 125/1500 T	3x380-480 V ~	4 POLE	1450	8,6	7,5	10	12,7-16

PACKING DIMENSIONS			VOLUME m ³	WEIGHT Kg
L/A	L/B	H		
780	440	860	0,29	132
780	440	860	0,29	180

Performance curves are based on kinematic viscosity values equal to 1m²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CME 150

Liquid temperature range: from -15°C to +120°C
 Maximum temperature operating: +40°C



MODEL	L	L1	L2	B	B1	B2	C	H	H1	D	D1	D2	D3	D4	M
CME 150/1000 T	690	375	315	417	231	186	270	698	200	150	212	285	240	8 HOLES Ø 22	16
CME 150/1250 T	690	375	315	417	231	186	270	736	200	150	212	285	240		

MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	R.P.M. n. 1/min.	P1 MAX kW	P2 NOMINAL		In A
					kW	HP	
CME 150/1000 T	3x380-480 V ~	4 POLE	1460	5,15	5,5	7,5	9,7-12,2
CME 150/1250 T	3x380-480 V ~	4 POLE	1450	8	7,4	10	12,7-16

PACKING DIMENSIONS			VOLUME m ³	WEIGHT Kg
L/A	L/B	H		
860	500	940	0,40	197
780	440	860	0,29	214