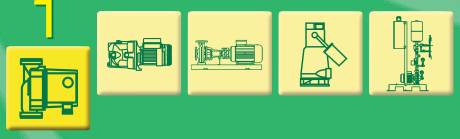
WET ROTOR CIRCULATORS AND IN-LINE PUMPS



DAB

PUMP PERFORMANCE

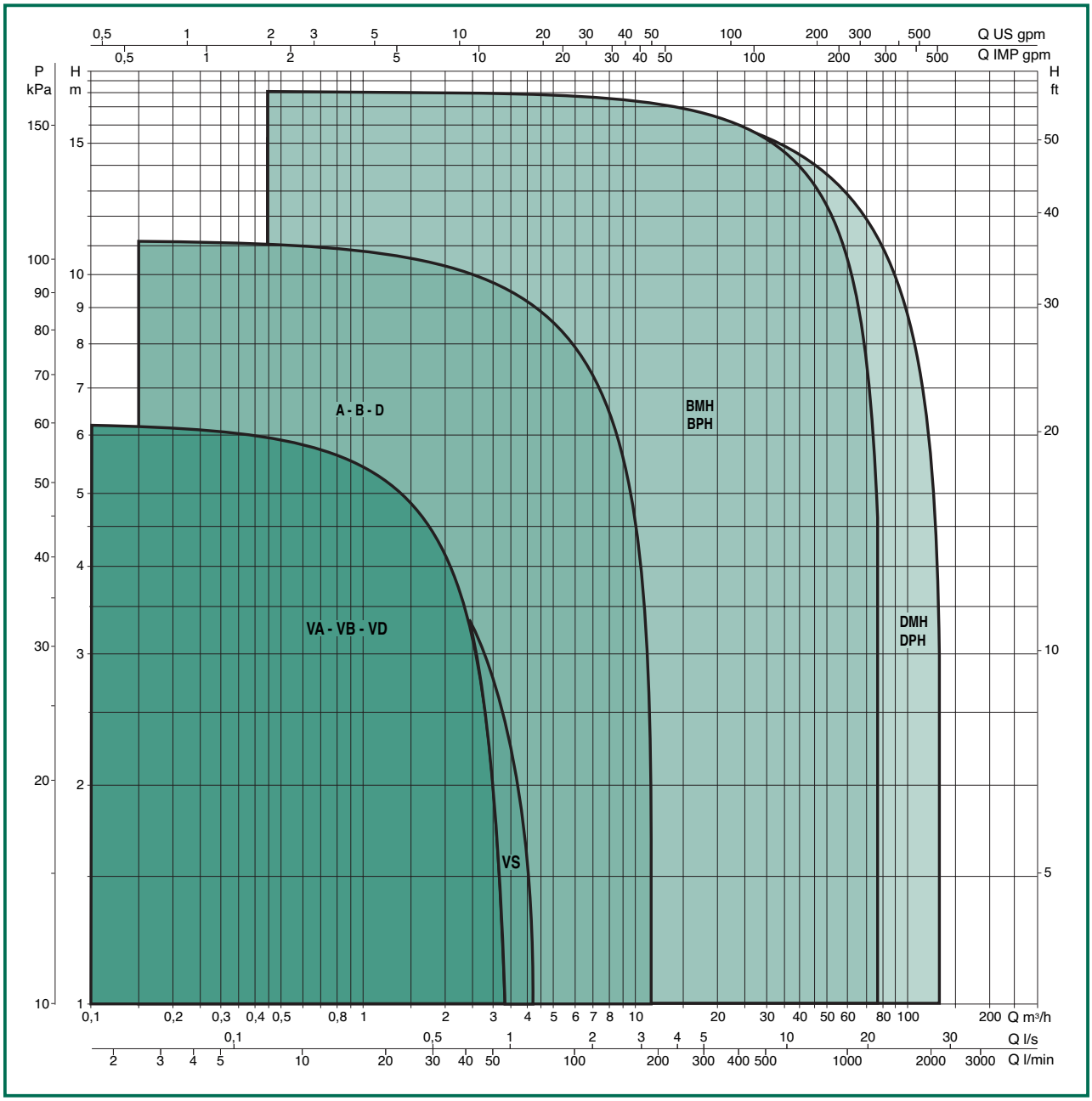
TECHNICAL CATALOGUE SECTIONS:

INDEX

PERFORMANCE RANGE

Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

GRAPHIC SELECTION TABLE



DAB PUMP PERFORMANCE

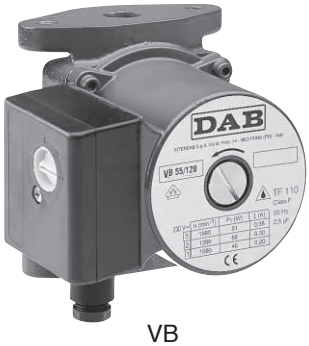
PERFORMANCE RANGE

NUMERICAL SELECTION TABLE

SINGLE Single Phase - Three Phase	TWIN Single Phase - Three Phase	P1 Max W	Q m^3/h l/min	0 0	0,6 10	1,2 20	1,8 30	2,4 40	3 50	4,2 70	5,4 90	7,2 120	9,6 160	12 200	14,4 240	18 300	24 400	30 500	36 600	42 700	54 900	72 1200	80 1333	120 2000
VA 25	**-**	57		2,71	2,45	2,15	1,75	1,2	0,6															
VA 35	**-**	71		4,3	3,9	3,4	2,8	2,15	1,4															
VA 55	**VD 55/220.32**	82		5,4	4,7	4,5	3,3	2,6	1,75	0,85														
VA 65	**-**	102	H (m)	6,3	5,8	5,3	4,3	3,4	2,4															
VB 35/120	**-**	71		4,3	3,9	3,4	2,8	2,15	1,4															
VB 55/120	**-**	82		5,4	4,7	4	3,3	2,5	1,75	0,85														
VB 65/120	**VD 65/220.32**	102		6,3	5,8	5,3	4,3	3,4	2,4															
VA 50/130-1/2" A	**-**	80	H (m)	5,2	4,5	3,5	2,4	0,8																
VA 60/130-1/2" A	**-**	99		5,8	5	3,9	2,6	1,1																
VS 8/150	**-**	40		0,83	0,75	0,52	0,22																	
VS 16/150	**-**	54	H (m)	1,82	1,75	1,65	1,44	1,07	0,6															
VS 35/150	**-**	71		4,1	3,7	3,3	2,82	2,2	1,6	1,05														
VS 65/150	**-**	103		6	5,55	5,05	4,25	3,4	2,6	1,8	1,05													
A 50/180 M - XM B 50/250.40 M	**D 50/250.40 M**	184		5,7	5,6	5,4	5,3	5,1	4,8	4,2		2,6												
A 56/180 M - XM B 56/250.40 M	**D 56/250.40 M**	271		6,35	6,3	6,2	6,18	6	5,9	5,5		4,2		1,2										
A 80/180 M - XM B 80/250.40 M	**D 80/250.40 M**	256		8,25	8	7,6	7,4	7,2	6,9	6,3		3,8												
A 110/180 XM B 110/250.40 M	**D 110/250.40 M**	410		11,3	11	10,8	10,5	10	9,8	9,2		7		1,6										
A 50/180 XT B 50/250.40 T	**D 50/250.40 T**	201	H (m)	5,9	5,85	5,8	5,6	5,5	5,2	4,6		2,9												
A 50/180 T	**-**	197		5,6	5,6	5,6	5,5	5,43	5,4	4,9		2,8												
A 56/180 XT B 56/250.40 T	**D 56/250.40 T**	291		6,4	6,3	6,2	6,1	6	5,9	5,7		4,4												
A 56/180 T	**-**	297		6,42	6,42	6,41	6,4	6,4	6,4	6,1		4,8												
A 80/180 XT B 80/250.40 T	**D 80/250.40 T**	272		8,2	7,9	7,6	7,3	7	6,8	6,1		3,7												
A 80/180 T	**-**	271		8,2	7,9	7,6	7,3	7	6,8	6,1		3,7												
A 110/180 XT B 110/250.40 T	**D 110/250.40 T**	403		11,3	11	10,8	10,5	10	9,8	9,2		7		1,6										
BPH 60/250.40 M	**DPH 60/250.40 M**	316		7,2			6,8	6,7	6,5	6,2	5,8	5	3,7	2										
BPH 120/250.40 M	**DPH 120/250.40 M**	510		11			10,3	10,1	9,8	9,2	8,6	7,65	6,2	4,35	2,4									
BPH 60/280.50 M	**DPH 60/280.50 M**	595		7,65			7,5	7,45	7,4	7,3	7,2	6,98	6,7	6,2	5,75	4,6	2,3							
BPH 60/340.65 M	**DPH 60/340.65 M**	735		6,8			6,79	6,75	6,7	6,6	6,57	6,5	6,35	6,2	5,95	5,5	4,35	2,85	1,2					
BMH 30/250.40 T	**DMH 30/250.40 T**	192		3,3			3,1	2,95	2,85	2,5	2,1	1,15												
BPH 60/250.40 T	**DPH 60/250.40 T**	348		7,65			7,4	7,3	7,2	6,8	6,4	5,45	3,9	2,25										
BPH 120/250.40 T	**DPH 120/250.40 T**	536		12				11	10,7	10,1	9,5	8,4	6,8	4,7	2,2									
BMH 30/280.50 T	**DMH 30/280.50 T**	255		3,15				3,02	3	2,93	2,85	2,65	2,3	1,75	1,2									
BMH 60/280.50 T	**DMH 60/280.50 T**	410		5,83				5,65	5,6	5,49	5,35	5,1	4,75	4,2	3,65	2,62								
BPH 60/280.50 T	**DPH 60/280.50 T**	589		7,95				7,75	7,7	7,6	7,5	7,35	6,92	6,45	5,85	4,65	2,4							
BPH 120/280.50 M	**DPH 120/280.50 M**	870		11,3						10,8	10,5	10,3	9,9	9,4	8,5	7,2	4,8	2,1						
BPH 120/280.50 T	**DPH 120/280.50 T**	898		11,7						11,3	11	10,75	10,25	9,6	8,9	7,75	5,4	2,6						
BPH 150/280.50 T	**DPH 150/280.50 T**	1130	H (m)	15						14,6	14,4	14	13,6	12,7	11,8	10,5	7,5							
BPH 180/280.50 T	**DPH 180/280.50 T**	1630		18,4								17,4	17	16,4	15,6	14,4	12	8,8	5,2					
BMH 30/340.65 T	**DMH 30/340.65 T**	270		3,15						3,09	3,02	2,98	2,85	2,55	2,25	1,65								
BMH 60/340.65 T	**DMH 60/340.65 T**	445		5,4						5,15	5,05	4,9	4,7	4,45	4,1	3,45	2,25							
BPH 60/340.65 T	**DPH 60/340.65 T**	756		7,4						7,35	7,3	7,24	7,1	6,9	6,65	6,15	4,9	3,3	1,4					
BPH 120/340.65 T	**DPH 120/340.65 T**	1275		10,9						10,75	10,68	10,6	10,5	10,38	10,2	9,8	8,7	7,15	5,2	3				
BPH 150/340.65 T	**DPH 150/340.65 T**	2800		14,9						14,88	14,83	14,75	14,65	14,55	14,3	13,88	12,65	11	9,35	7,15				
BPH 180/340.65 T	**DPH 180/340.65 T**	2760		17,9								17,8	17,7	17,5	17,3	16,8	15,7	14,1	12,1	10				
BMH 30/360.80 T	**DMH 30/360.80 T**	484		3,9								3,85	3,8	3,75	3,65	3,48	3,1	2,45	1,75					
BMH 60/360.80 T	**DMH 30/360.80 T**	763		5,7								5,66	5,61	5,59	5,5	5,4	5	4,55	3,9	3,1				
BPH 120/360.80 T	**DPH 120/360.80 T**	1820		11,8								11,65	11,58	11,5	11,4	11,25	10,75	10,2	9,39	8,37	5,65			
BPH 150/360.80 T	**DPH 150/360.80 T**	2710		15,3								15,1	15,06	14,99	14,92	14,75	14,5	14	13,4	12,4	10,3	6		
BPH 180/360.80 T	**DPH 180/360.80 T**	2310		17,5								17,4	17,25	17,1	16,8	16,25	15	13,7	12	10,1	5,5			

Hydraulic values refer to maximum speed and single models.

CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS



VB

VD

VA

CE

GENERAL DATA

Applications

Pump for circulating hot water in closed and pressurised or open tank centralised home heating systems.
Also suitable for solar power systems.

Construction characteristics

Single body comprising cast iron hydraulic unit and wet rotor motor
Die-cast aluminium motor casing.
Technopolymer impeller. Tempered stainless steel driving shaft mounted on graphite brushings lubricated by the pumped liquid.
Stainless steel protective rotor sleeve, stator sleeve and closing flange.
Ceramic thrust bearing, E.P.D.M. O-rings and brass air outlet cap.
Two-pole asynchronous motor with squirrel cage rotor designed to work at three speeds, by means of a special selector located on the terminal board, in order to adapt the operation of the circulator to the characteristics of the system.
An automatic clapet type valve is incorporated into the delivery mouth of the twin version in order to prevent water from recirculating while the unit is not working.
Motor self-protected against resistance.
No overload protection required.
Protection level: IP 44
Insulating class: F
Cable grommet: PG 11
Rated voltage: single-phase 230 V / 50 Hz
This product complies with EN 60335-2-51 European standard

– Denomination index: (example) VA 55 / 180 X

VA = circulator with threaded mouths
VB = circulator with DN 25 oval flanges
VD = twin circulator

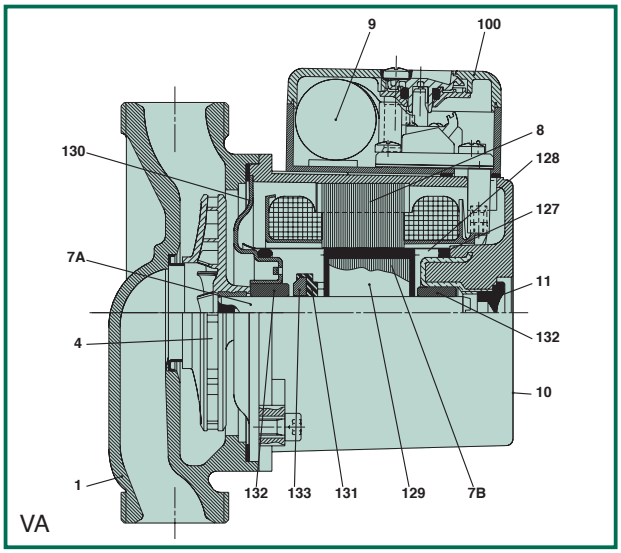
maximum head (dm)

centre distance (mm)

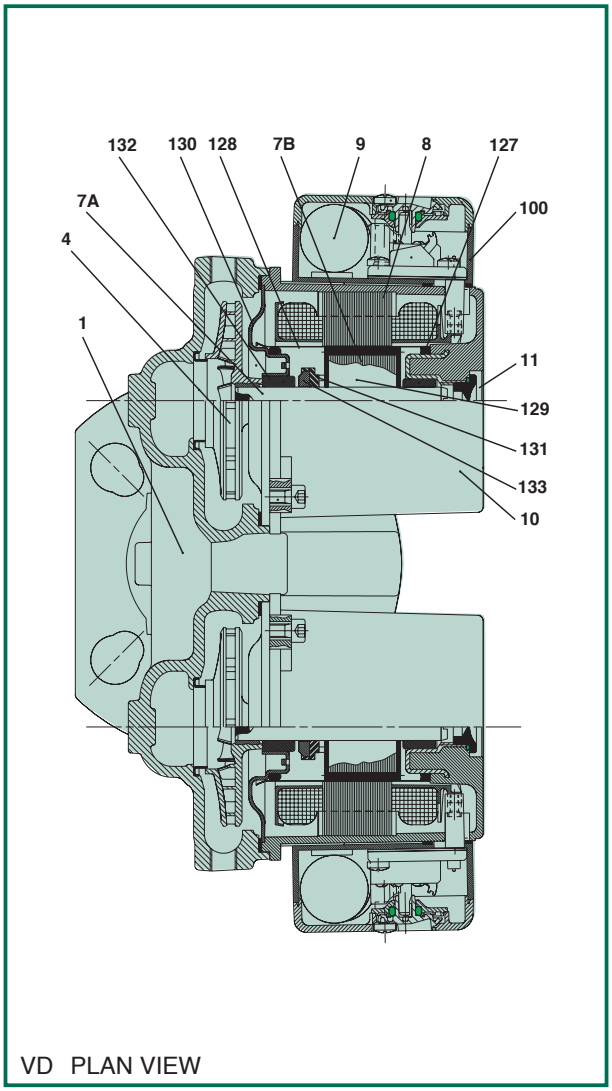
Standard (no ref.) = threaded mouths measuring 1” 1/2
1/2” = threaded mouths measuring 1”
X = threaded mouths 2”
32 = flanged mouths DN32/PN6/10

TECHNICAL DATA

N.	PARTS	MATERIALS
1	PUMP BODY	CAST IRON
4	IMPELLER	TECHNOPOLYMER
7A	DRIVE SHAFT	STAINLESS STEEL
7B	ROTOR	–
8	STATOR	–
9	CAPACITOR	–
10	MOTOR CASING	DIE CAST ALUMINIUM
11	AIR OUTLET CAP	BRASS
100	TERMINAL BOARD BOX	–
127	O-RING	E.P.D.M
128	STATOR SLEEVE	STAINLESS STEEL
129	ROTOR SLEEVE	STAINLESS STEEL
130	CLOSING FLANGE	STAINLESS STEEL
131	THRUST BOX SUPPORT	E.P.D.M
132	BRUSHINGS	GRAPHITE
133	THRUST BOX	CERAMICS



VA



VD PLAN VIEW

Operating range:	from 0,5 to 4 m^3/h with head up to 6,3 metres.
Liquid temperature range:	from -10°C to +110°C. To prevent condensation from forming inside the motor, the pumped liquid temperature must always be over the room temperature.
Characteristics of pumped liquid:	clean, free from solids and mineral oils, non viscous, chemically neutral, close to the characteristics of water (max. glycol 30%).
Maximum operating pressure:	10 bar (1000 kPa).
Minimum head pressure:	values are shown in the relative tables.
Installation:	with MOTOR AXIS HORIZONTAL on the delivery or return piping, with intake port as near as possible to the expansion tank, higher than the maximum level of the boiler and as far away as possible from bends, elbows and unions, in order to prevent water turbulence and consequent noisiness.
Special versions on request:	other voltages and/or frequencies.
Accessories on request:	unions measuring 3/4"F - 1"F - 1 1/4"F - 1 1/4"M oval counter flanges measuring DN20-DN25-DN32 round counter flanges measuring DN32/PN6

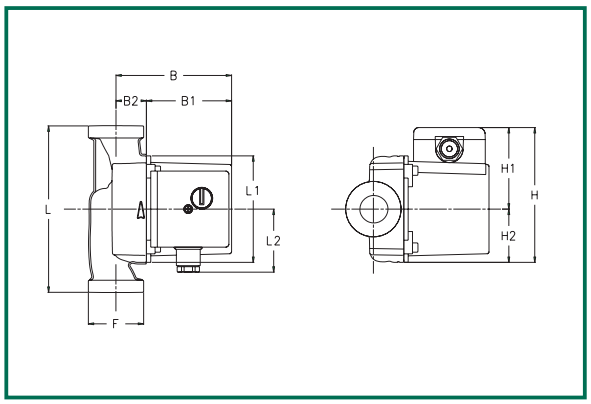
Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

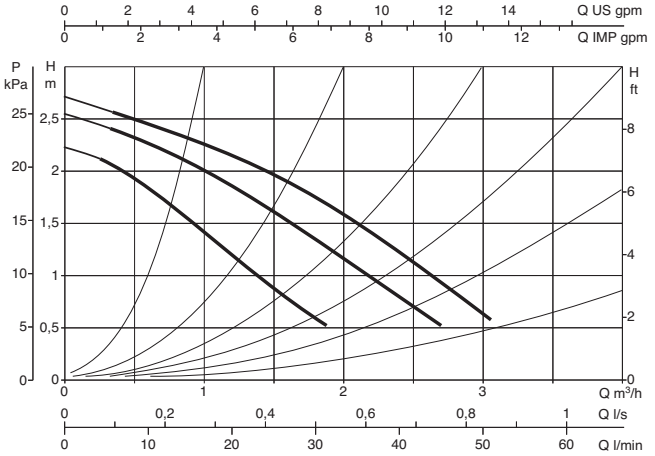
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

VA 25/130

SINGLE WITH UNIONS



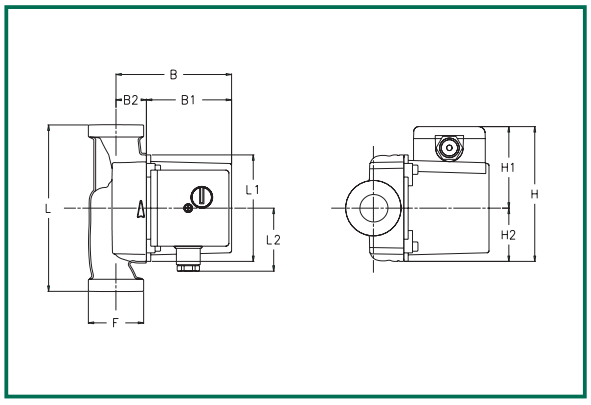


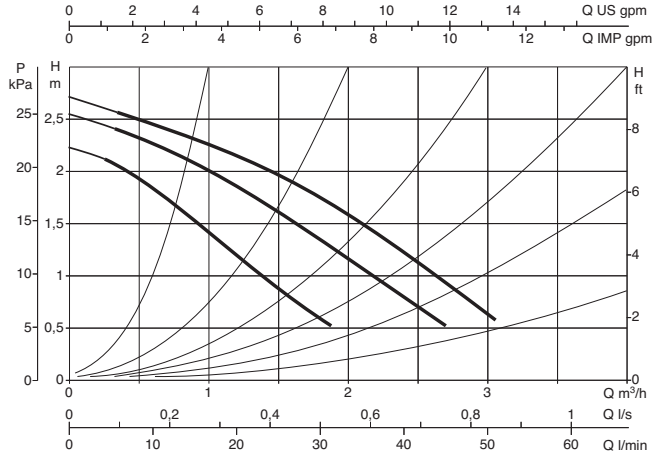
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
130	98	60	104	78	26	124	75	49	1 ½" G	138	140	135	0,0026	2,65

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
VA 25/130	1x230 V ~	130	1" F	¾" F - 1 ¼" M	3 2 1	2590 2320 1895	57 50 38	0,26 0,24 0,18	1,5	450	t° +90°C mt. 1,5

VA 25/180

SINGLE WITH UNIONS





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
180	98	60	104	78	26	124	75	49	1 ½" G	138	140	135	0,0036	2,8

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
VA 25/180	1x230 V ~	180	1" F	¾" F - 1 ¼" M	3 2 1	2590 2320 1895	57 50 38	0,26 0,24 0,18	1,5	450	t° +90°C mt. 1,5

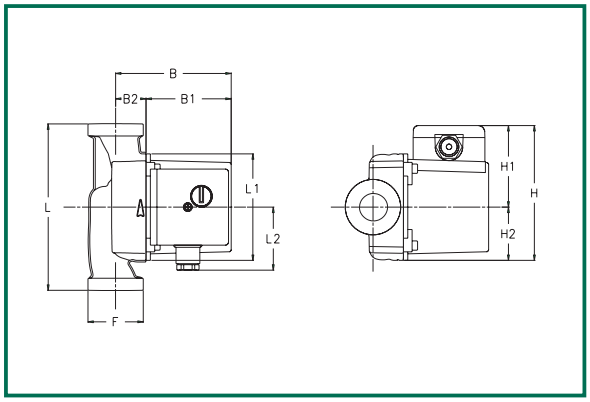
Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

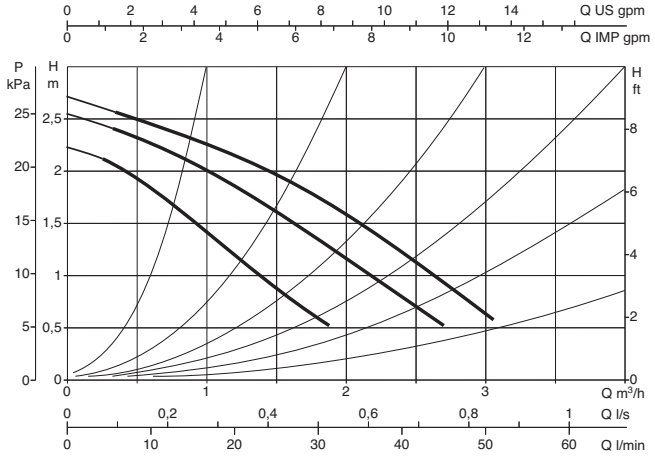
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

VA 25/180X

SINGLE WITH UNIONS



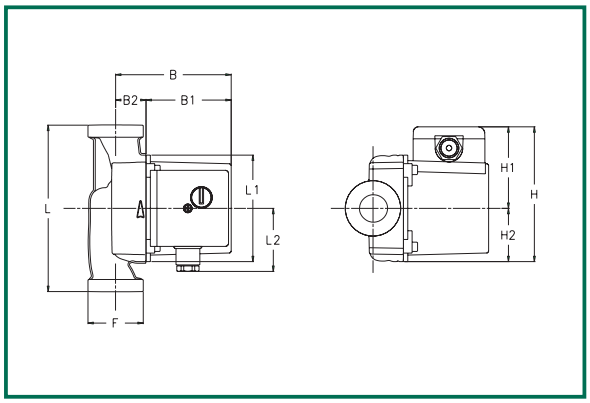


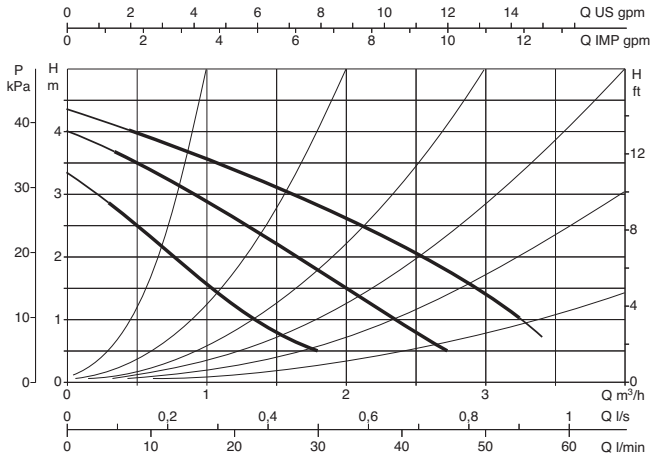
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
180	98	60	104	78	26	124	75	49	2" G	138	190	140	0,0036	2,8

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
VA 25/180X	1x230 V ~	180	1" 1/4 F	3 2 1	2590 2320 1895	57 50 38	0,26 0,24 0,18	1,5	450	t° +90°C mt. 1,5

VA 35/130

SINGLE WITH UNIONS





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
130	98	60	104	78	26	124	75	49	1 1/2" G	138	140	135	0,0026	2,65

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST STANDARD	UNIONS ON REQUEST SPECIAL	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
VA 35/130	1x230 V ~	130	1" F	3/4" F - 1 1/4" M	3 2 1	2370 1910 1440	71 60 44	0,31 0,28 0,2	2	450	t° +90°C mt. 1,5

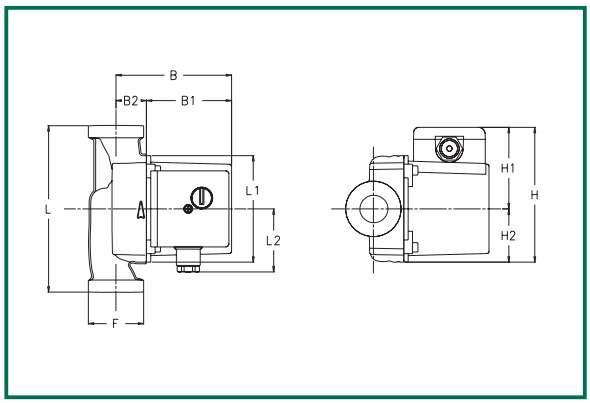
Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

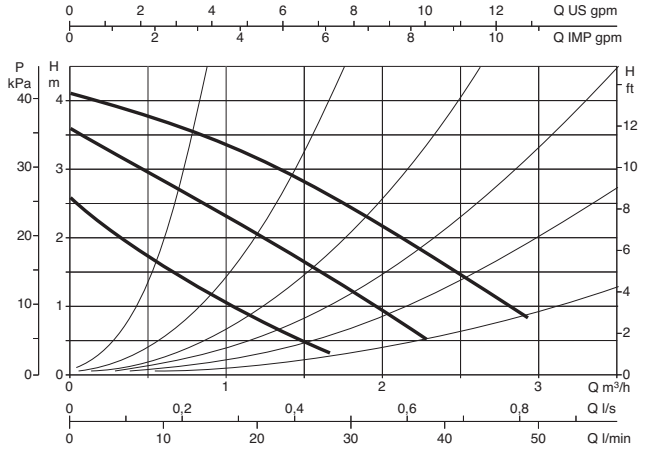
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

VA 35/130 - ½"

SINGLE WITH UNIONS



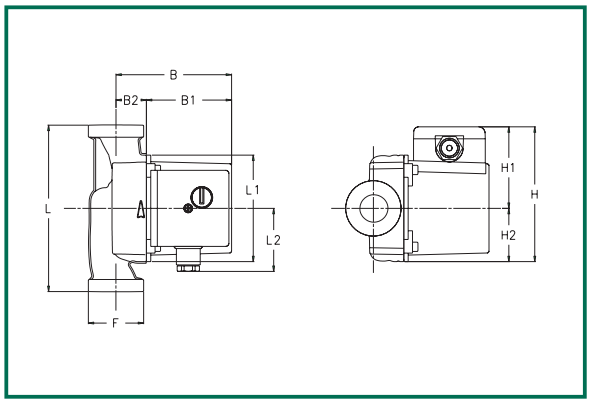


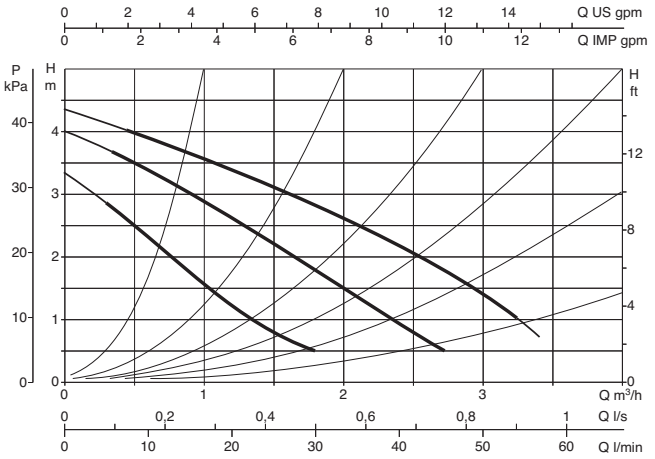
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
130	98	60	104	78	26	124	75	49	1" G	138	140	135	0,0026	2,65

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	
VA 35/130 ½"	1x230 V ~	130	–	–	3 2 1	2370 1910 1440	71 60 44	0,31 0,28 0,2	2	450	t° +90°C mt. 1,5

VA 35/180

SINGLE WITH UNIONS





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
180	98	60	104	78	26	124	75	49	1 ½" G	138	190	140	0,0036	2,8

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	
VA 35/180	1x230 V ~	180	1" F	¾" F - 1 ¼" M	3 2 1	2370 1910 1440	71 60 44	0,31 0,28 0,2	2	450	t° +90°C mt. 1,5

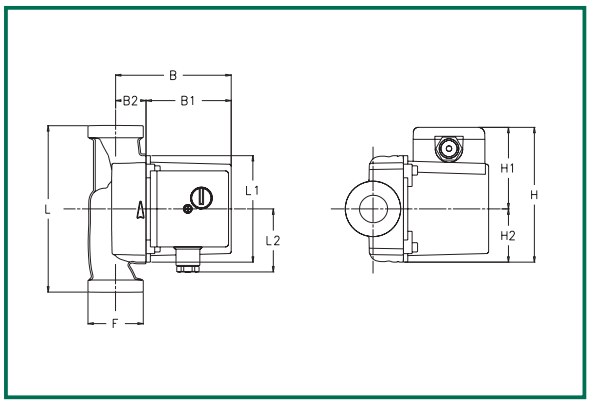
Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

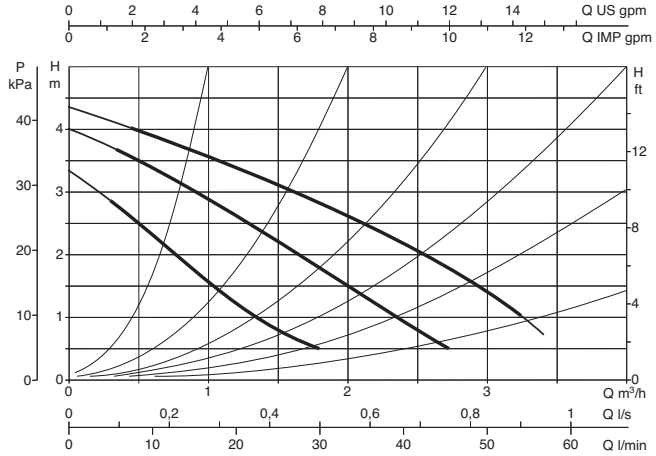
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

VA 35/180X

SINGLE WITH UNIONS



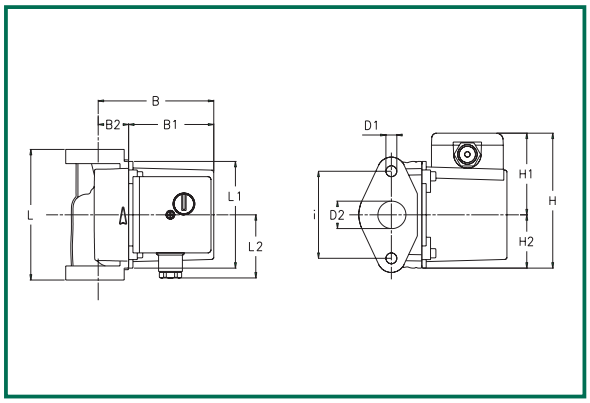


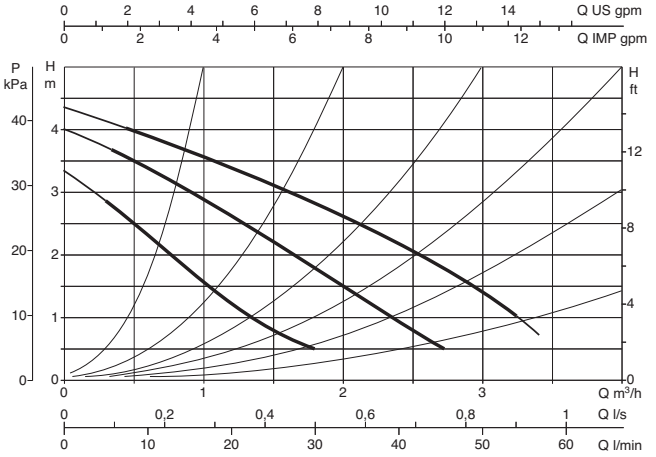
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
180	98	60	104	78	26	124	75	49	2" G	138	190	140	0,0036	2,8

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM HEAD PRESSURE
				SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
VA 35/180X	1x230 V ~	180	1 1/4" F	3 2 1	2370 1910 1440	71 60 44	0,31 0,28 0,2	2	450	t° +90°C mt. 1,5

VB 35/120

SINGLE WITH OVAL FLANGES





L	L1	L2	B	B1	B2	H	H1	H2	D2	D1	I	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
120	98	60	104	78	26	124	75	49	25	M10	78	138	130	145	0,0026	3,15

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	OVAL FLANGES ON REQUEST		ELECTRICAL DATA						MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
VB 35/120	1x230 V ~	120	DN 25	DN 20 DN 32	3 2 1	2370 1910 1440	71 60 44	0,31 0,28 0,2	2	450	t° +90°C mt. 1,5

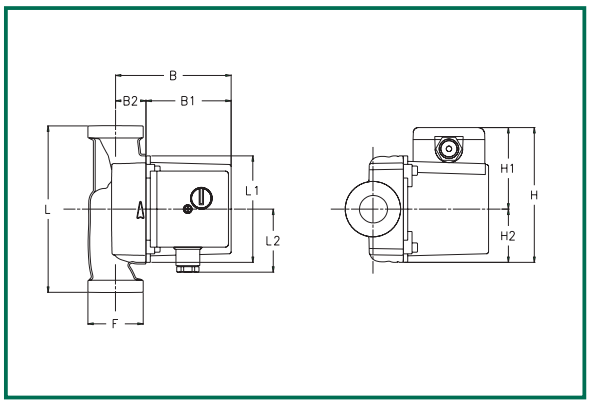
Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

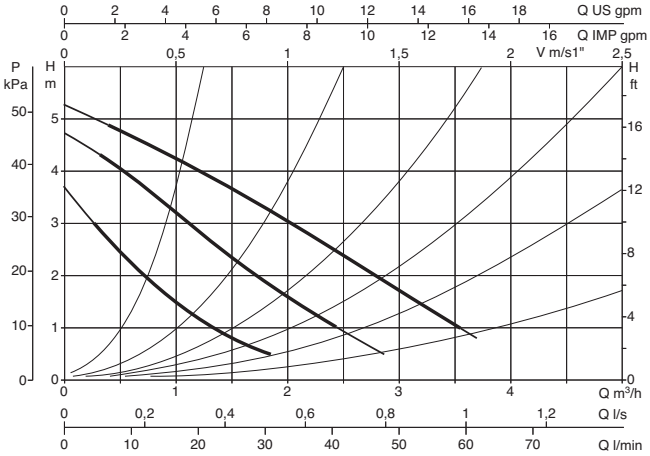
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

VA 55/130

SINGLE WITH UNIONS



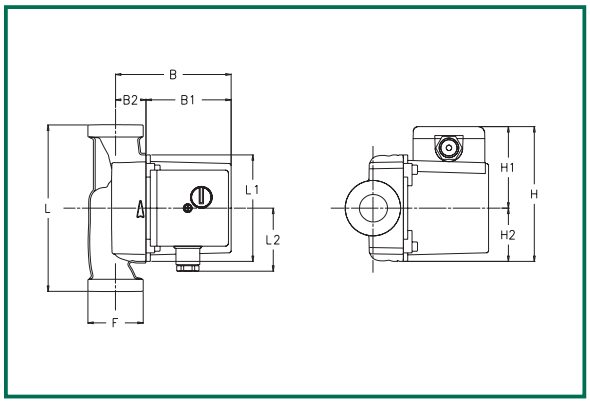


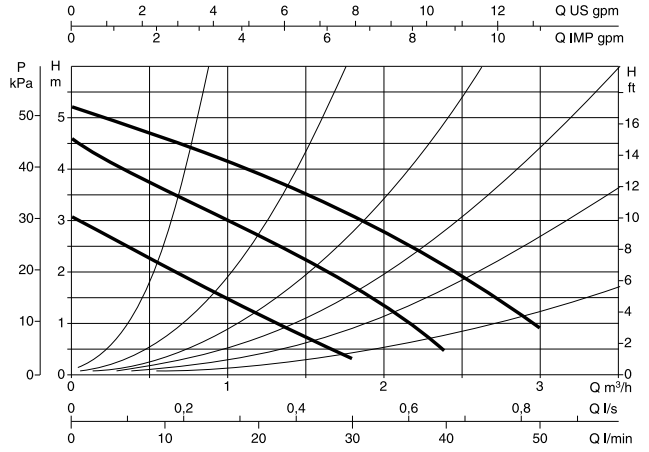
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
130	98	60	104	78	26	124	75	49	1 ½" G	138	140	135	0,0026	2,65

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST STANDARD	UNIONS ON REQUEST SPECIAL	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
VA 55/130	1x230 V ~	130	1" F	¾" F - 1 ¼" M	3 2 1	2330 1815 1330	82 64 45	0,36 0,29 0,2	2,5	450	t° +90°C mt. 1,5

VA 55/130 - ½"

SINGLE WITH UNIONS





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
130	98	60	104	78	26	124	75	49	1" G	138	140	135	0,0026	2,65

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST STANDARD	UNIONS ON REQUEST SPECIAL	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
VA 55/130 ½"	1x230 V ~	130	–	–	3 2 1	2330 1815 1330	82 64 45	0,36 0,29 0,2	2,5	450	t° +90°C mt. 1,5

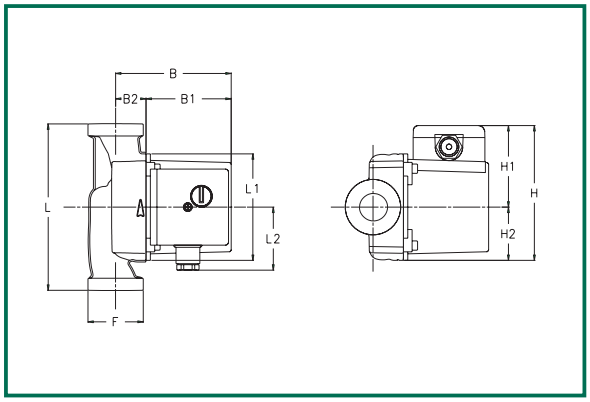
Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

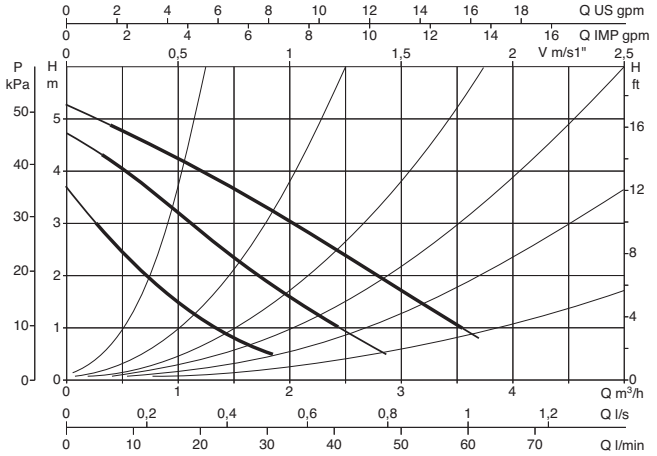
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

VA 55/180

SINGLE WITH UNIONS



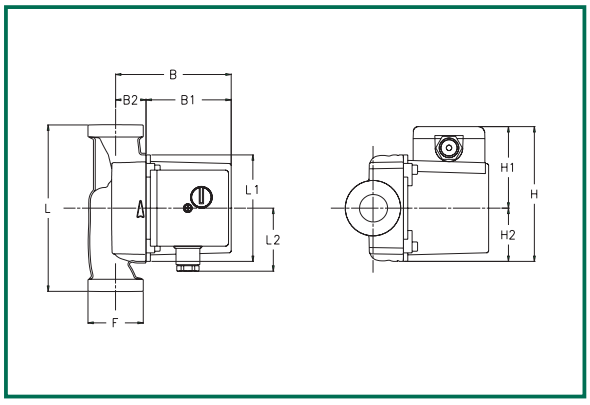


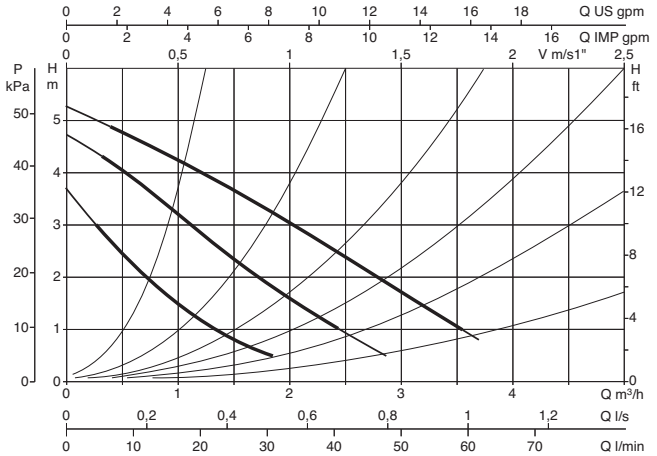
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
180	98	60	104	78	26	124	75	49	1 ½" G	138	190	140	0,0036	2,8

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	
VA 55/180	1x230 V ~	180	1" F	¾" F - 1 ¼" M	3 2 1	2330 1815 1330	82 64 45	0,36 0,29 0,2	2,5	450	t° +90°C mt. 1,5

VA 55/180X

SINGLE WITH UNIONS





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
180	98	60	104	78	26	124	75	49	2" G	138	190	140	0,0036	2,9

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM HEAD PRESSURE
				SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	
VA 55/180X	1x230 V ~	180	1"¼F	3 2 1	2330 1815 1330	82 64 45	0,36 0,29 0,2	2,5	450	t° +90°C mt. 1,5

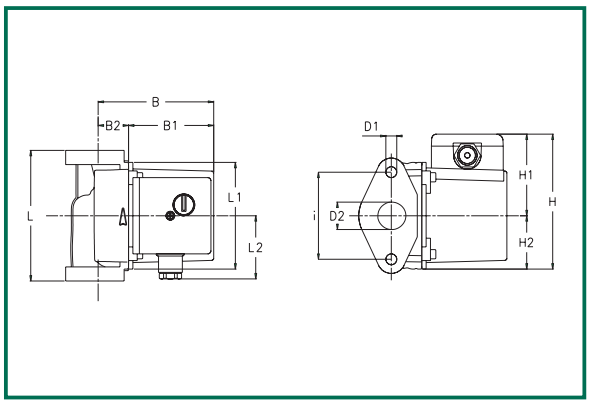
Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

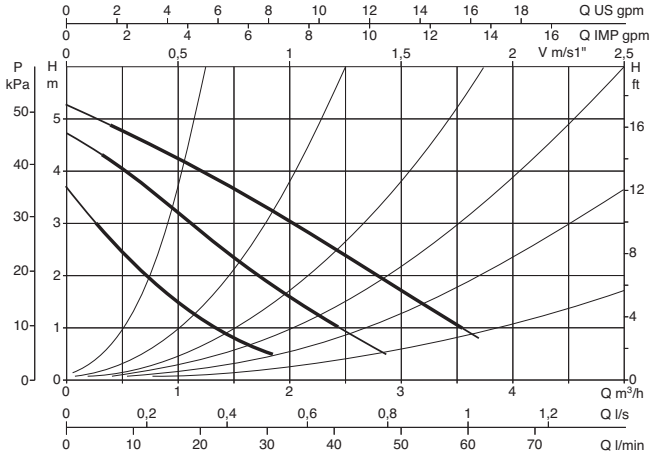
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

VB 55/120

SINGLE WITH OVAL FLANGES



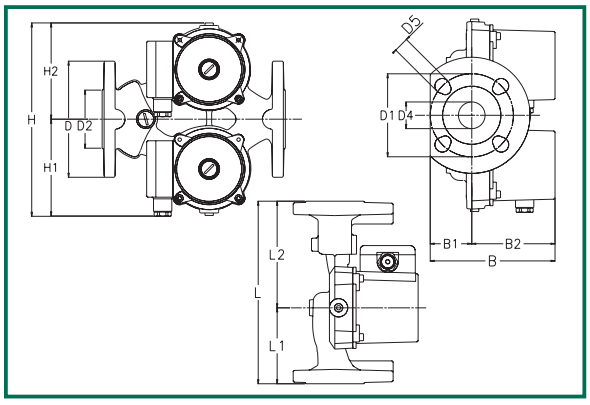


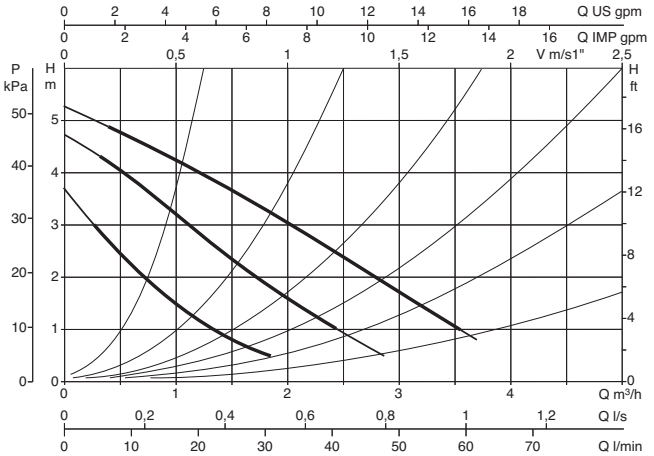
L	L1	L2	B	B1	B2	H	H1	H2	D2	D1	I	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
120	98	60	104	78	26	124	75	49	25	M10	80	138	130	145	0,0026	3,15

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	OVAL FLANGES ON REQUEST		ELECTRICAL DATA					MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	
VB 55/120	1x230 V ~	120	DN 25	DN 20 DN 32	3 2 1	2330 1815 1330	82 64 45	0,36 0,29 0,2	2,5	450	t° +90°C mt. 1,5

VD 55/220.32

TWIN FLANGED





L	L1	L2	B	B1	B2	D	D1 PN6	D1 PN10	D2	D4	D5 PN6	D5 PN10	H	H1	H2	PACKING DIMENSIONS B	L	H	VOLUME m³	WEIGHT Kg
220	91,5	128,5	150	50	100	140	90	100	70	32	14	18	230	115	115	254	161	240	0,0085	8,1

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	FLANGES ON REQUEST	ELECTRICAL DATA*						MINIMUM HEAD PRESSURE
				SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	
VD 55/220.32	1x230 V ~	220	DN 32 / PN 6 / PN 10	3 2 1	2330 1815 1330	82 64 45	0,36 0,29 0,2	2,5	450	t° +90°C mt. 1,5

* Electrical data are related to only one motor in operation.

DAB PUMP PERFORMANCE

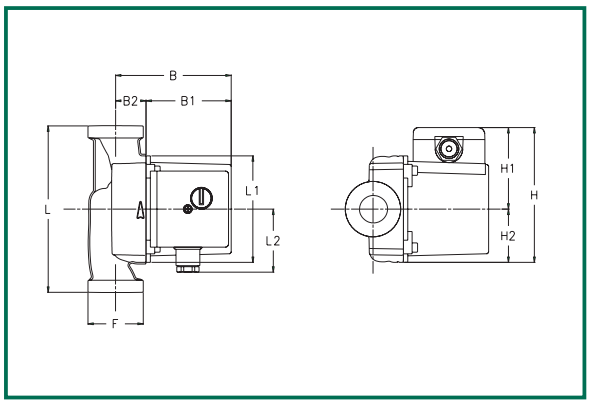
Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

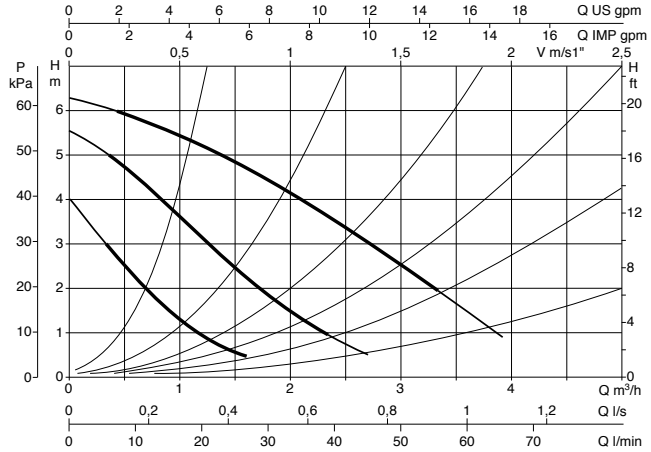
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

VA 65/130

SINGLE WITH UNIONS



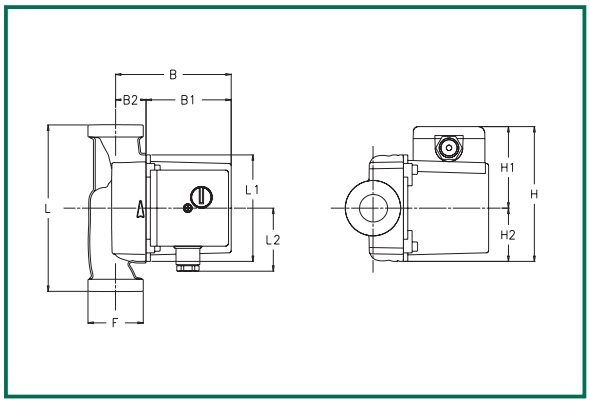


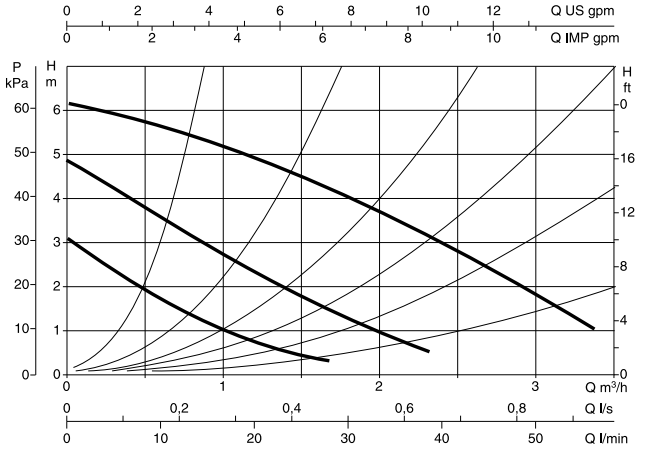
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
130	98	60	104	78	26	124	75	49	1 ½" G	138	190	140	0,0036	2,65

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
VA 65/130	1x230 V ~	130	1" F	¾" F - 1 ¼" M	3 2 1	2100 1460 1050	102 78 51	0,45 0,35 0,24	2,5	450	t° +90°C mt. 2,5

VA 65/130 ½"

SINGLE WITH UNIONS





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
130	98	60	104	78	26	124	75	49	1" G	138	190	140	0,0036	2,65

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
VA 65/130 ½"	1x230 V ~	130	–	–	3 2 1	2100 1460 1050	102 78 51	0,45 0,35 0,24	2,5	450	t° +90°C mt. 2,5

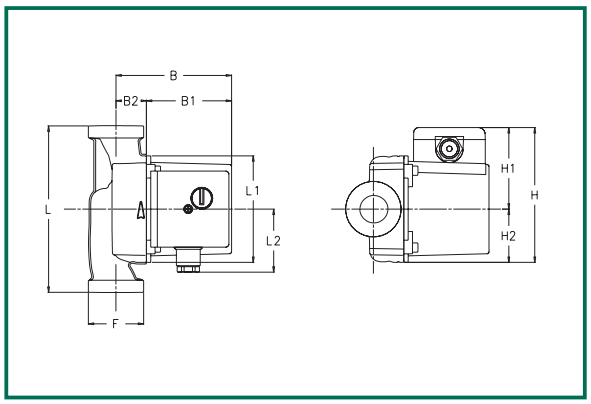
Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

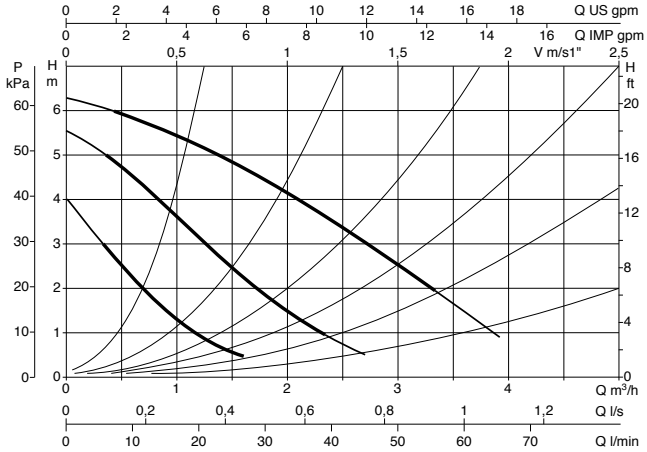
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

VA 65/180

SINGLE WITH UNIONS



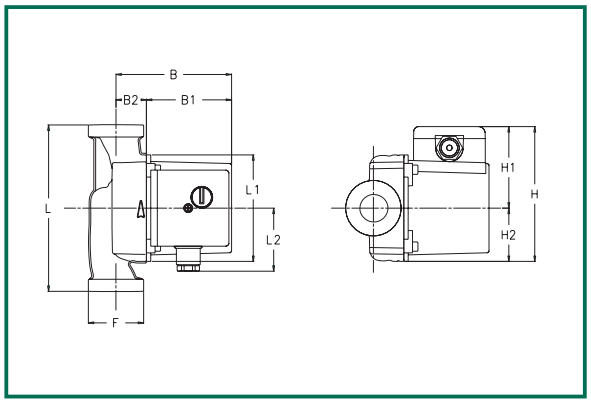


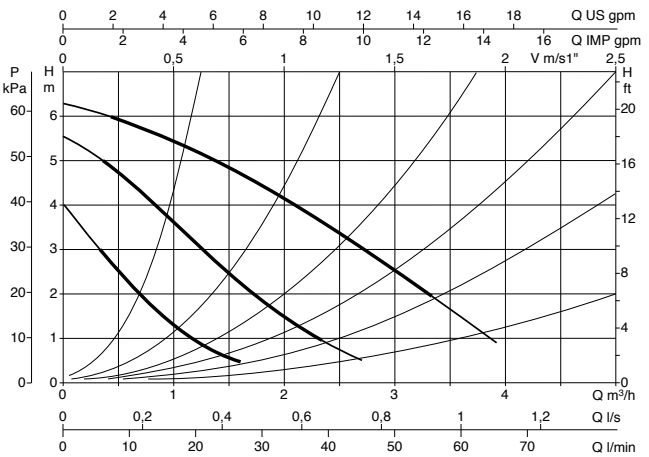
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
180	98	60	104	78	26	124	75	49	1 ½" G	185	150	150	0,0036	3,15

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST STANDARD	UNIONS ON REQUEST SPECIAL	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
VA 65/180	1x230 V ~	180	1" F	¾" F - 1 ¼" M	3 2 1	2100 1460 1050	102 78 51	0,45 0,35 0,24	2,5	450	t° +90°C mt. 2,5

VA 65/180X

SINGLE WITH UNIONS





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
180	98	60	104	78	26	124	75	49	2" G	185	150	150	0,0036	3,15

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
VA 65/180X	1x230 V ~	180	1¼"F	3 2 1	2100 1460 1050	102 78 51	0,45 0,35 0,24	2,5	450	t° +90°C mt. 2,5

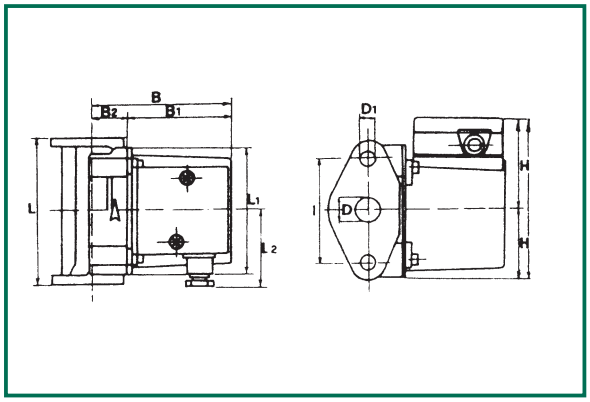
Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

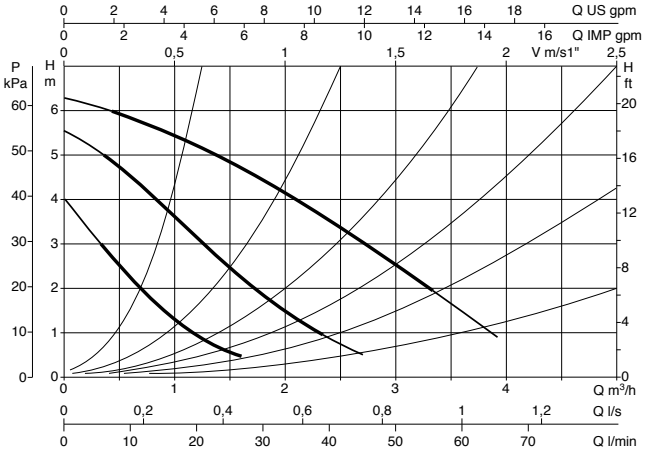
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

VB 65/120

SINGLE WITH OVAL FLANGES



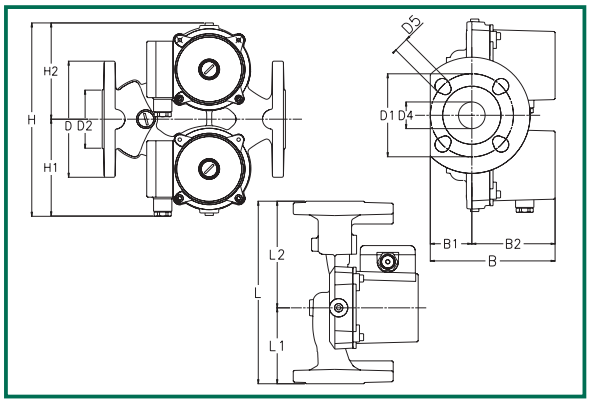


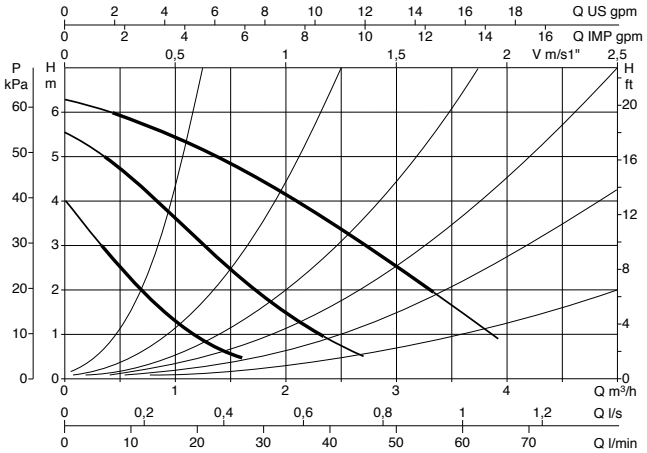
L	L1	L2	B	B1	B2	D2	D1	I	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
120	98	60	104	78	26	26	M10	80	124	75	49	156	126	150	0,0036	3,15

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	OVAL FLANGES ON REQUEST		ELECTRICAL DATA						MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	
VB 65/120	1x230 V ~	120	DN 25	DN 20 DN 32	3 2 1	2100 1460 1050	102 78 51	0,45 0,35 0,24	2,5	450	t° +90°C mt. 2,5

VD 65/220.32

TWIN FLANGED





L	L1	L2	B	B1	B2	D	D1 PN6	D1 PN10	D2	D4	D5 PN6	D5 PN10	H	H1	H2	PACKING DIMENSIONS B	L	H	VOLUME m³	WEIGHT Kg
220	91,5	128,5	150	50	100	140	90	100	70	32	14	18	230	115	115	254	161	240	0,0036	9

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	FLANGES ON REQUEST	ELECTRICAL DATA*						MINIMUM HEAD PRESSURE
				SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	
VD 65/220.32	1x230 V ~	220	DN 32 / PN 6 / PN 10	3 2 1	2100 1460 1050	102 78 51	0,45 0,35 0,24	2,5	450	t° +90°C mt. 2,5

* Electrical data are related to only one motor in operation.

DAB PUMP PERFORMANCE

CIRCULATOR WITH AIR SEPARATOR FOR HEATING AND AIR-CONDITIONING SYSTEMS

CE

GENERAL DATA

Applications

Pump for circulating hot water in centralised domestic heating and air-conditioning systems of the closed and pressurised or open tank type. Also suitable for solar power installations. The pumps combines a traditional circulator with an air separator.
The system removes the air from the centre of the pump body in order to allow the air separator to work in ideal operating conditions. The air contained in the pumped liquid is guided by the flow to the separation chamber where the size of the chamber and the internal pressure difference separates it from the liquid. It is then automatically expelled through the relief valve. The air separator is only available with an ascending flow.

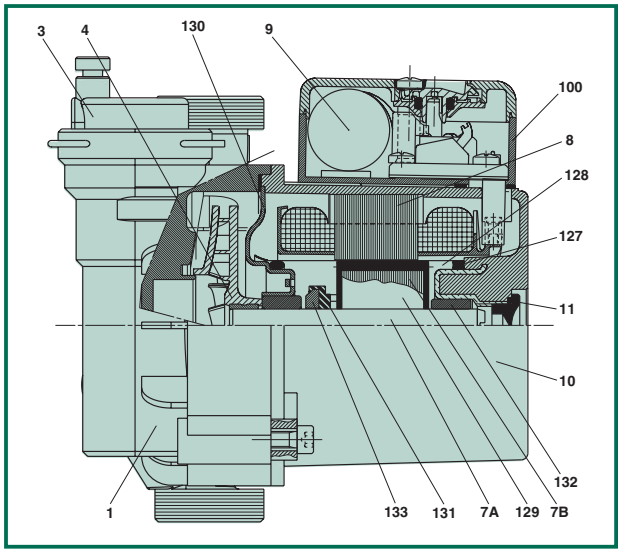
Constructional Characteristics

Single body comprising a technopolymer hydraulic unit and a wet rotor motor. Bronze air separator. Motor casing in die-cast aluminium. Impeller in technopolymer, tempered stainless steel driving shaft mounted on graphite brushings lubricated by the pumped liquid.
Stainless steel protective rotor sleeve, stator sleeve and closing flange. Ceramic thrust bearing, E.P.D.M. "O" rings and brass air outlet cap.
Two-pole asynchronous motor with squirrel cage rotor designed for three-speed operation by means of a special switch on the terminal board which adapts performance in relation to system requirements.
Motor self-protected for resistance. No overload protection required.
Protection level: IP 44
Insulation class: F
Cable grommet: PG 11
Standard voltage: single-phase 230V/50Hz
This product complies with EN 60335-2-51 European Standard

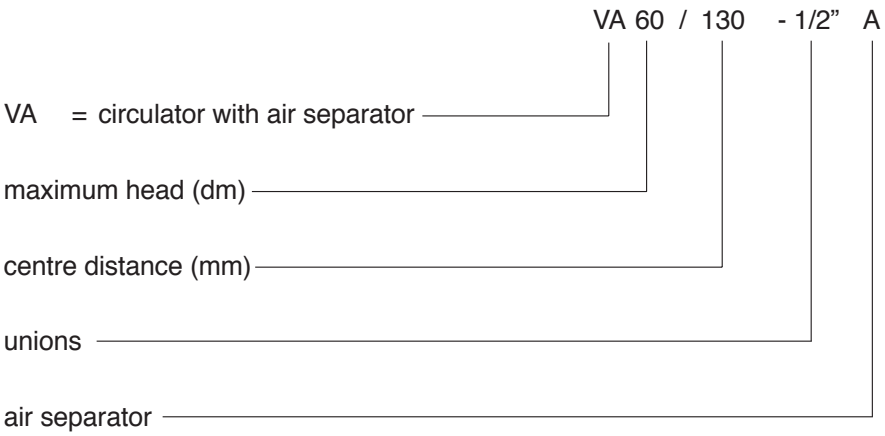
CIRCULATOR WITH AIR SEPARATOR FOR HEATING AND AIR-CONDITIONING SYSTEMS

TECHNICAL DATA

N.	PARTS	MATERIALS
1	PUMP BODY	TECHNOPOLYMER
3	PUMP BODY WITH AIR SEPARATOR	BRASS
4	IMPELLER	TECHNOPOLYMER
7A	DRIVE SHAFT	STAINLESS STEEL
7B	ROTOR	–
8	STATOR	–
9	CAPACITOR	–
10	MOTOR CASING	DIE CAST ALUMINIUM
11	AIR OUTLET CAP	BRASS
100	TERMINAL BOARD BOX	–
127	O-RING	E.P.D.M
128	STATOR SLEEVE	STAINLESS STEEL
129	ROTOR SLEEVE	STAINLESS STEEL
130	CLOSING FLANGE	STAINLESS STEEL
131	THRUST BOX SUPPORT	E.P.D.M
132	BRUSHINGS	GRAPHITE
133	THRUST BOX	CERAMICS



– Denomination index:



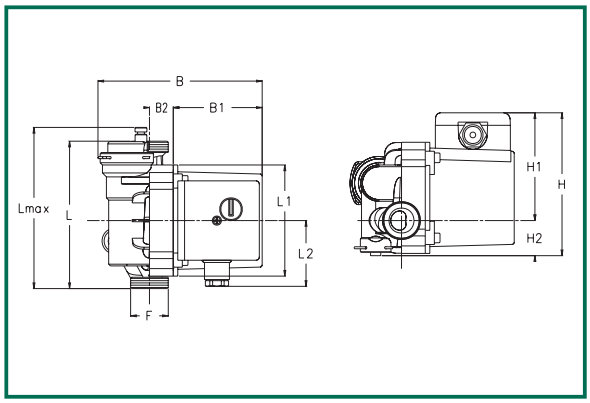
Operating range:	from 0,5 to 2,6 m^3/h with head up to 5,8 metres.
Liquid temperature range:	from -10°C to +110°C
Characteristics of pumped liquid:	clean, free from solids and mineral oils, not viscous, chemically neutral and close to the characteristics of water (glycol max. 30 %).
Maximum operating pressure:	6 bar (600 kPa); 3 bar (300 kPa) at 110°C.
Minimum head pressure:	2,5 wcm at +90°C.
Installation:	with MOTOR AXIS HORIZONTAL on the delivery or return piping, with the intake port as far away as possible from bends, elbows and deviations in order to prevent turbulence and relative noise.

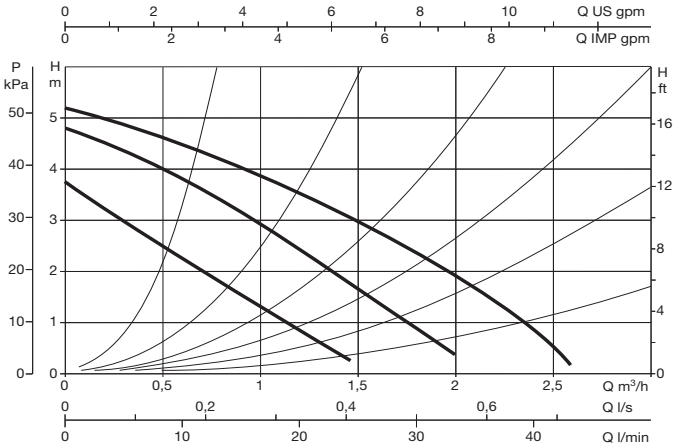
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO9906.

CIRCULATOR WITH AIR SEPARATOR FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 6 bar (600 kPa) a 20°C; 3 bar (300 kPa) a +110°C

VA 50/130 - 1/2" A

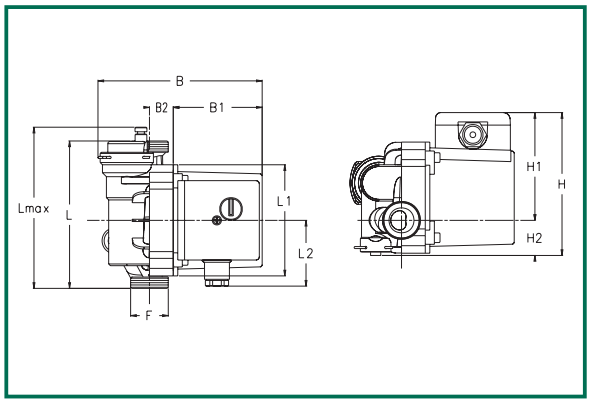


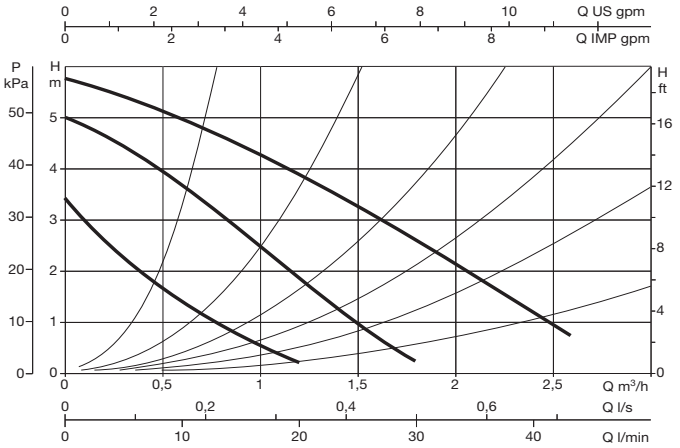


L max	L	L1	L2	B	B1	B2	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
143	130	98	60	145	78	21	1"	126	95	31	185	150	0,0036	1,95

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	ELECTRICAL DATA SPEED	n r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
VA 50/130-1/2" A	1x230 V ~	130	3 2 1	2371 1880 1352	80 65 46	0,34 0,28 0,20	2,5	450	t° +90°C mt. 2,5

VA 60/130 - 1/2" A

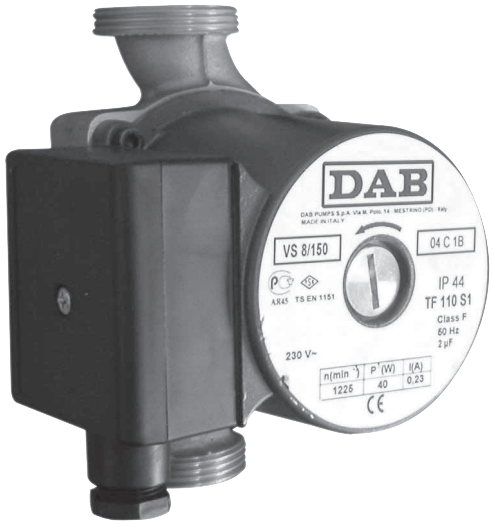




L max	L	L1	L2	B	B1	B2	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
143	130	98	60	145	78	21	1"	126	95	31	185	150	0,0036	1,95

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	ELECTRICAL DATA SPEED	n r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
VA 60/130-1/2" A	1x230 V ~	130	3 2 1	2090 1480 1002	99 77 51	0,43 0,34 0,23	2,5	450	t° +90°C mt. 2,5

CIRCULATORS FOR HOT WATER SYSTEMS



CE

GENERAL DATA

Applications

Pump for circulating hot domestic water in closed and pressurised or open tank systems.
Also suitable for solar power systems.

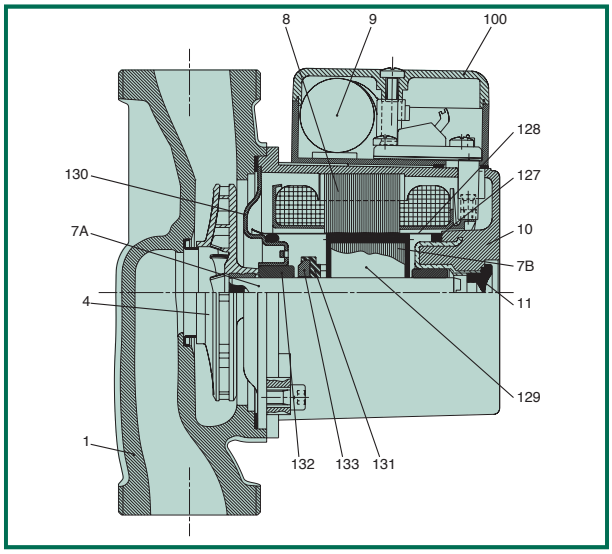
Construction characteristics

Single body comprising bronze hydraulic unit and wet rotor motor
Die-cast aluminium motor casing.
Technopolymer impeller. Ceramic driving shaft mounted on graphite brushings lubricated by the pumped liquid.
Stainless steel protective rotor sleeve, stator sleeve and closing flange.
Ceramic thrust bearing, E.P.D.M. O-rings and brass air outlet cap.
Two or four pole asynchronous motor with squirrel cage rotor.
Motor self-protected against resistance.
No overload protection required.
Protection level: IP 44
Insulating class: F
Cable grommet: PG 11
Rated voltage: single-phase 230 V / 50 Hz
This product complies with EN 60335-2-51 European standard

CIRCULATORS FOR HOT WATER SYSTEMS

TECHNICAL DATA

N.	PARTS	MATERIALS
1	PUMP BODY	BRONZE
4	IMPELLER	TECHNOPOLYMER
7A	DRIVE SHAFT	CERAMICS
7B	ROTOR	–
8	STATOR	–
9	CAPACITOR	–
10	MOTOR CASING	DIE CAST ALUMINIUM
11	AIR OUTLET CAP	BRASS
100	TERMINAL BOARD BOX	–
127	O-RING	E.P.D.M
128	STATOR SLEEVE	STAINLESS STEEL
129	ROTOR SLEEVE	STAINLESS STEEL
130	CLOSING FLANGE	STAINLESS STEEL
131	THRUST BOX SUPPORT	E.P.D.M
132	BRUSHINGS	GRAPHITE
133	THRUST BOX	CERAMICS



– Denomination index:
(example)

VS 8 / 150

VS = hot water circulator

maximum head (dm)

centre distance (mm)

Operating range:	from 0,6 to 4,2 m^3/h with head up to 6,3 metres.
Liquid temperature range:	from -10°C to +85°C for sanitary system from +110°C for other use To prevent condensation from forming inside the motor, the pumped liquid temperature must always be over the room temperature. To prevent scale from forming, the pumped liquid should not exceed 65°C and an anti-scale system should be fitted if the water is harder than 15 French degrees.
Characteristics of pumped liquid:	clean, free from solids and mineral oils, non viscous, chemically neutral, close to the characteristics of water (max. glycol 30%).
Maximum operating pressure:	10 bar (1000 kPa).
Minimum head pressure:	values are shown in the relative tables.
Installation:	with MOTOR AXIS HORIZONTAL.
Special versions on request:	other voltages and/or frequencies.
Accessories on request:	unions measuring ½"F - ¾"F - 1"F unions for copper pipes for welding: Ø 22 mm Ø 28 mm

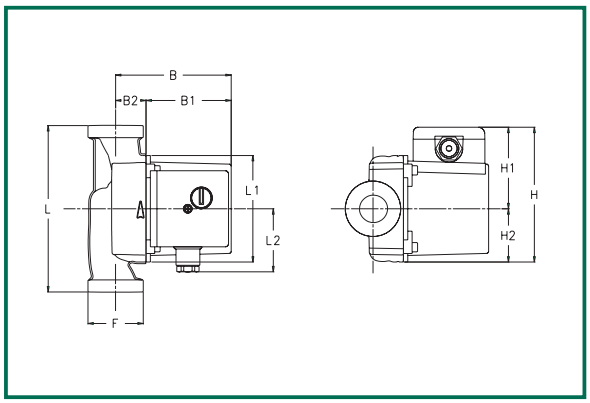
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO9906.

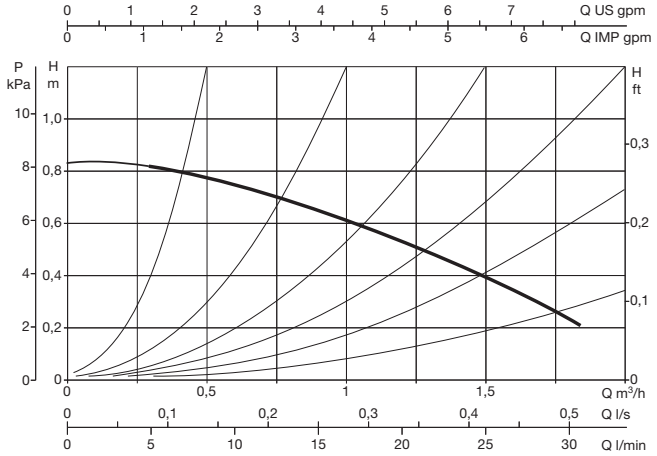
CIRCULATORS FOR HOT WATER SYSTEMS

Liquid temperature range: from -10°C to +85°C
Maximum operating pressure: 10 bar (1000 kPa)

VS 8/150

SINGLE WITH UNIONS



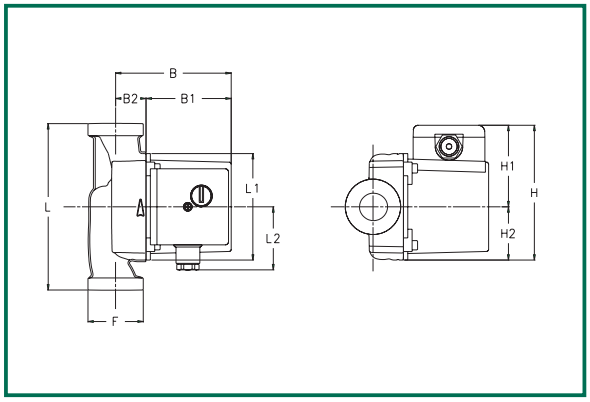


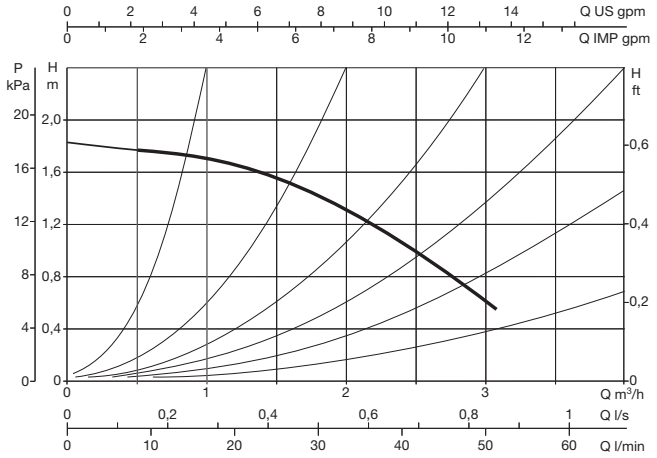
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
150	98	60	104	78	26	124	75	49	1 ½" G	130	185	135	0,0032	2,6

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
VS 8/150	1x230 V ~	150	BRASS: ½"F - ¾"F - 1"F COPPER: Ø 22 - Ø 28	1225	40	0,23	2	450	t° +60°C mt. 1,5

VS 16/150

SINGLE WITH UNIONS





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
150	98	60	104	78	26	124	75	49	1 ½" G	130	185	135	0,0032	2,6

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
VS 16/150	1x230 V ~	150	BRASS: ½"F - ¾"F - 1"F COPPER: Ø 22 - Ø 28	2680	54	0,25	1,5	450	t° +60°C mt. 1,5

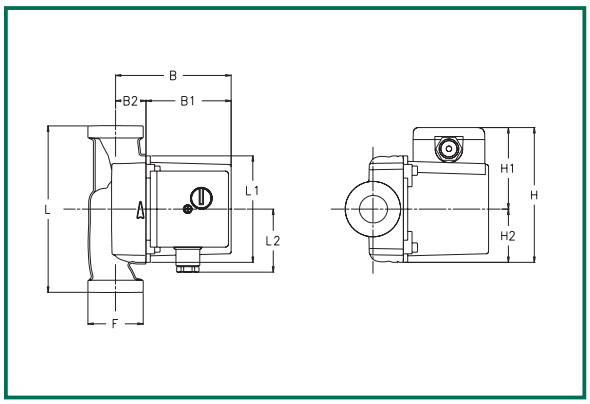
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO9906.

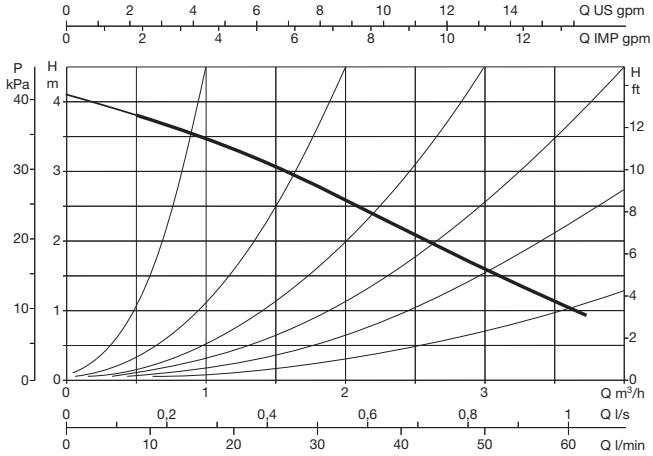
CIRCULATORS FOR HOT WATER SYSTEMS

Liquid temperature range: from -10°C to +85°C
Maximum operating pressure: 10 bar (1000 kPa)

VS 35/150

SINGLE WITH UNIONS



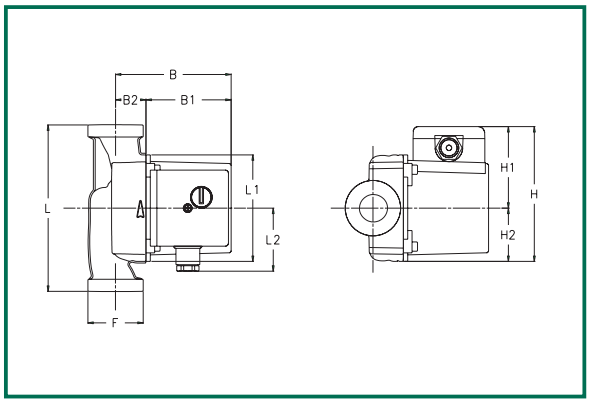


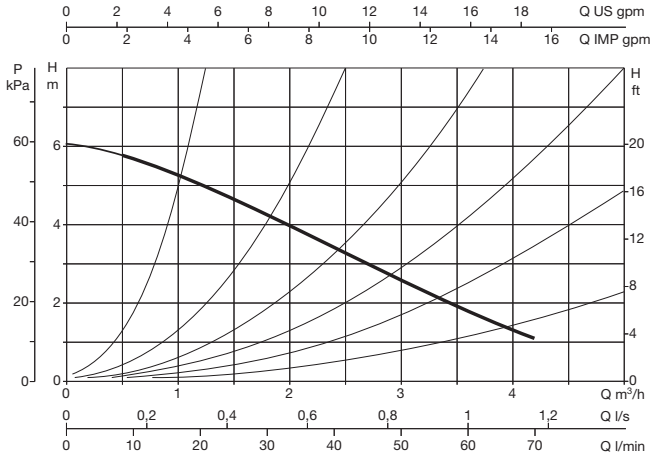
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
150	98	60	104	78	26	124	75	49	1 ½" G	130	185	135	0,0032	2,6

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
VS 35/150	1x230 V ~	150	BRASS: ½"F - ¾"F - 1"F COPPER: Ø 22 - Ø 28	2360	71	0,32	2	450	t° +60°C mt. 1,5

VS 65/150

SINGLE WITH UNIONS





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
150	98	60	104	78	26	124	75	49	1 ½" G	130	185	135	0,0032	2,6

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
VS 65/150	1x230 V ~	150	BRASS: ½"F - ¾"F - 1"F COPPER: Ø 22 - Ø 28	2105	103	0,45	2,5	450	t° +60°C mt. 1,5

A

D

B

CE

GENERAL DATA

Applications

Pump for circulating cold or hot water in small closed and pressurised or open tank civil and industrial community heating and air-conditioning systems.

Construction characteristics

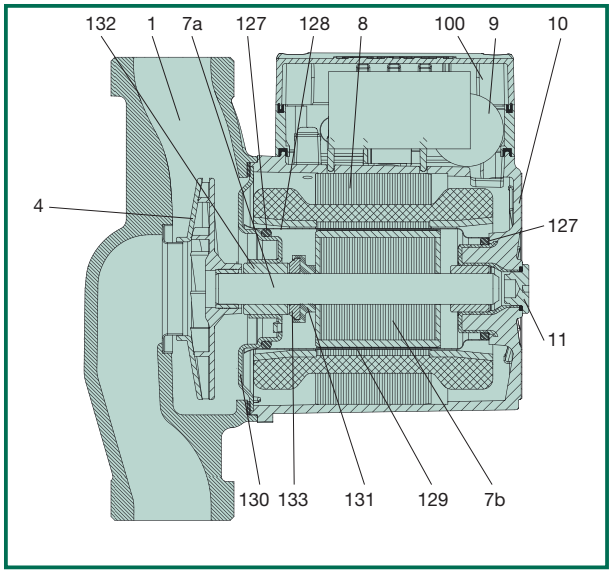
Pump body in cast iron and motor casing in die-cast aluminium.
Technopolymer impeller and tempered stainless steel driving shaft mounted on graphite brushings lubricated by the pumped liquid itself. Flanged vents, (threaded series A), provided with threaded connectors for controlling gauges. Stainless steel protective rotor sleeve, stator sleeve and closing flange. Ceramic thrust bearing, E.P.D.M. “O” rings and brass air outlet cap. The two-pole asynchronous motor with wet rotors designed for three-speed operation, single-phase version, for two-speed operation, for three-phase version. Thermal overload protection incorporated in the single phase version.
In the twin version an automatic clapet type valve and blank flange are provided.

Protection level:	IP 44
Insulating class:	F
Cable grommet:	PG 11
Installation:	with motor axis horizontal
Rated voltage:	single-phase 230 V / 50 Hz
	three-phase 400 V / 50 Hz

This product complies with EN 60335-2-51 European standard

TECHNICAL DATA

N.	PARTS	MATERIALS
1	PUMP BODY	CAST IRON
4	IMPELLER	TECHNOPOLYMER
7A	DRIVE SHAFT	STAINLESS STEEL
7B	ROTOR	–
8	STATOR	–
9	CAPACITOR	–
10	MOTOR CASING	DIE CAST ALUMINIUM
11	AIR OUTLET CAP	BRASS
100	TERMINAL BOARD BOX	–
127	O-RING	E.P.D.M
128	STATOR SLEEVE	STAINLESS STEEL
129	ROTOR SLEEVE	STAINLESS STEEL
130	CLOSING FLANGE	STAINLESS STEEL
131	THRUST BOX SUPPORT	E.P.D.M
132	BRUSHINGS	GRAPHITE
133	THRUST BOX	CERAMICS



– Denomination index:
(example)

D 50 / 250(.40) M

A = circulator with threaded mouths
B = flanged circulator
D = twin circulator

Maximum head (dm)

Centre distance (mm)

( ) = threaded mouths 1" 1/2
(X) = threaded mouths 2"
(.40) = flanged mouths DN40/PN10

M = single-phase motor
T = three-phase motor

Operating range:	from 1 to 12 m^3/h with head up to 11 metres.
Liquid temperature range:	from -10°C to +110°C.
	Characteristics of pumped liquid: clean, free from solids and mineral oils, non viscous, chemically neutral, close to the characteristics of water (max. glycol 30%).
Maximum operating pressure:	10 bar (1000 kPa).
Minimum head pressure:	values are shown in the relative tables.
Installation:	with MOTOR AXIS HORIZONTAL on the delivery or return piping, with intake port as near as possible to the expansion tank, higher than the maximum level of the boiler and as far away as possible from bends, elbows and unions, in order to prevent water turbulence and consequent noisiness.
Special versions on request:	other voltages and/or frequencies.
Accessories:	unions measuring 1/4" F - 3/4" F - 1" F - 11/4"F - 11/4"M counter flanges DN40/PN10

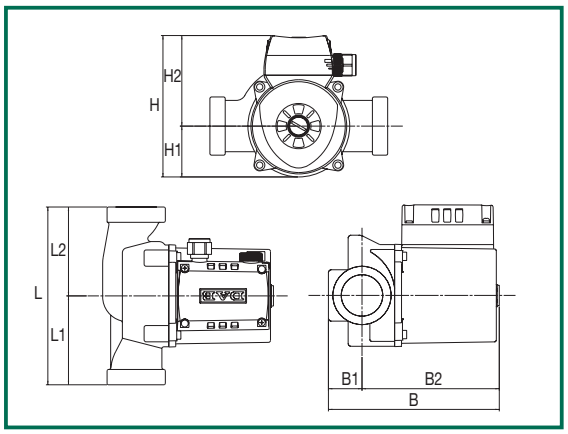
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO9906.

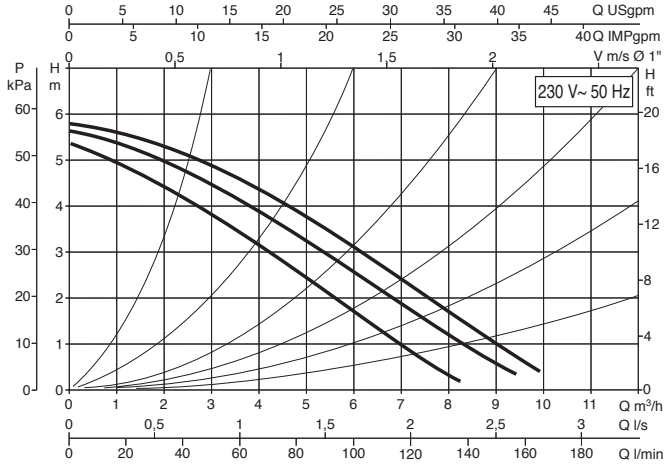
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

A 50/180 XM

SINGLE WITH UNIONS - SINGLE-PHASE



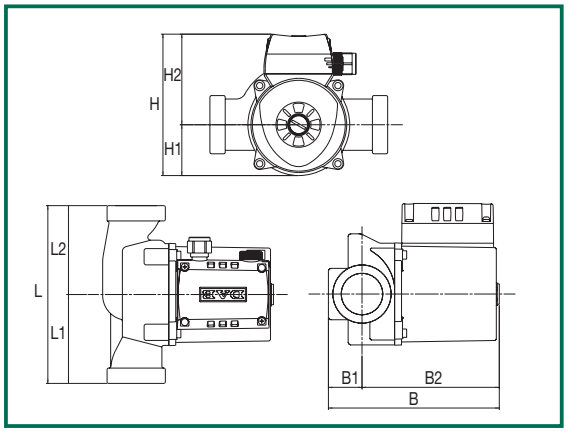


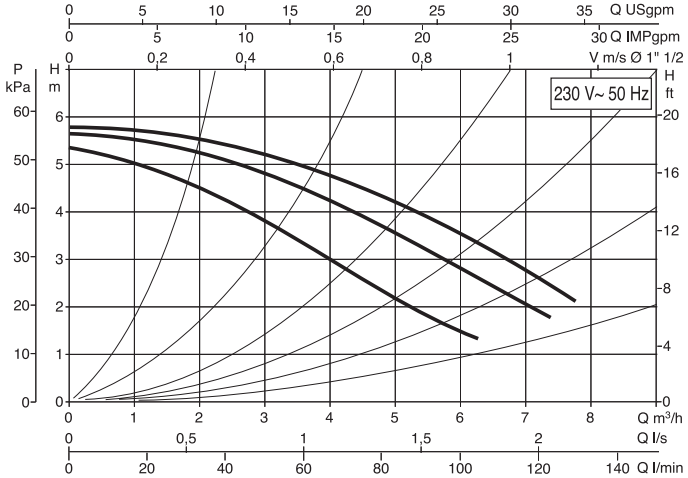
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	90	90	173	34	139	143	52	92	2" G	206	170	180	0,066	5,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 50/180 XM	1x230 V ~	180	2" G	3 2 1	2791 2651 2297	184 189 168	0,92 0,92 0,80	4	400	t° +90°C mt. 1,5

A 50/180 M

SINGLE WITH UNIONS - SINGLE-PHASE





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	90	90	173	34	139	143	52	92	1" 1/2	206	170	180	0,066	5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 50/180 M	1x230 V ~	180	1" 1/2	3 2 1	2766 2616 2215	195 194 180	0,95 0,95 0,85	4	400	t° +90°C mt. 1,5

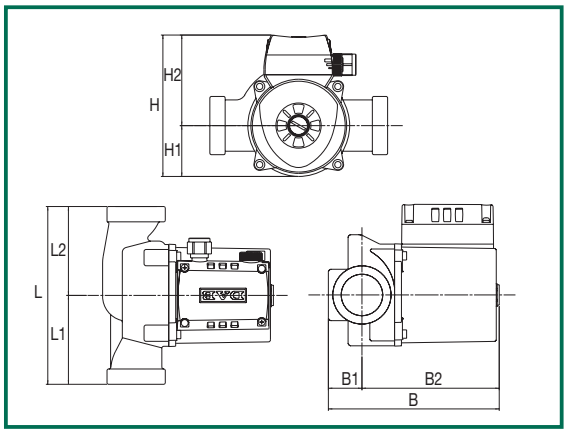
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO9906.

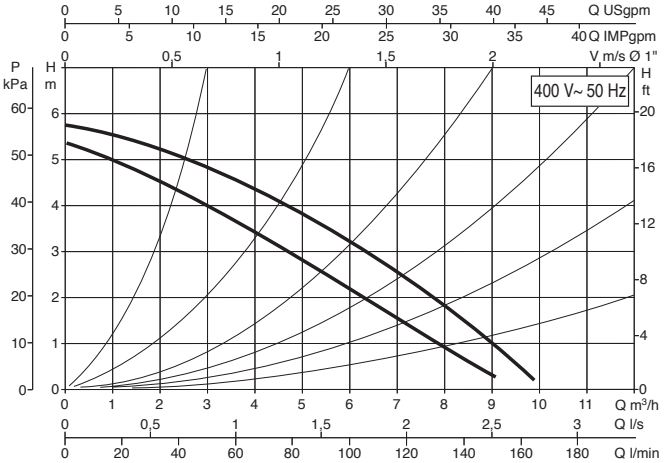
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

A 50/180 XT

SINGLE WITH UNIONS - THREE-PHASE



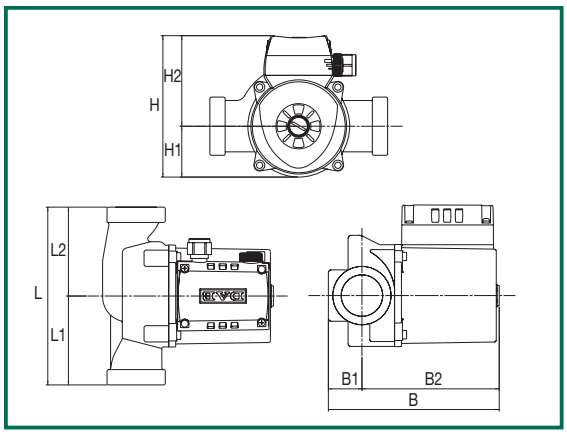


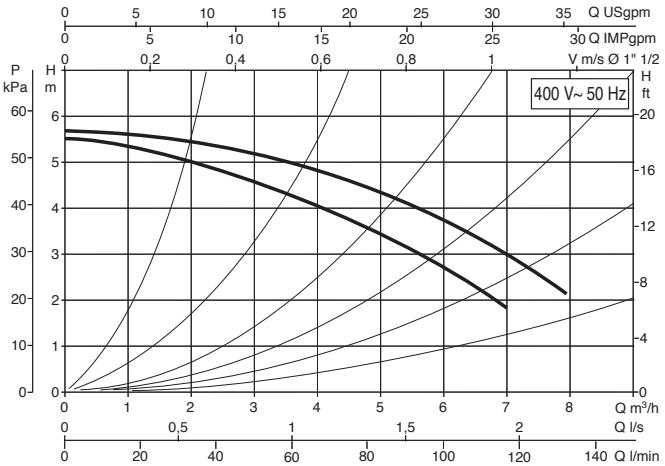
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	90	90	173	34	139	143	52	92	2" G	206	170	180	0,066	5,2

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 50/180 XT	3x400 V ~	180	2" G	2 1	2838 2520	201 129	0,50 0,23	-	-	t° +90°C mt. 1,5

A 50/180 T

SINGLE WITH UNIONS - THREE-PHASE





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	90	90	173	34	139	143	52	92	1" 1/2	206	170	180	0,066	5,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 50/180 T	3x400 V ~	180	1" 1/2	2 1	2827 2502	197 139	0,52 0,25	-	-	t° +90°C mt. 1,5

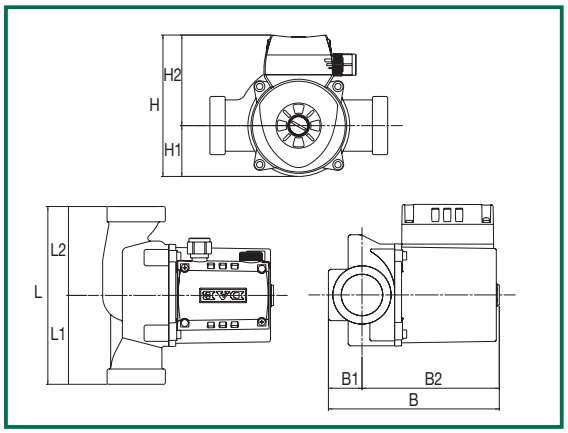
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO9906.

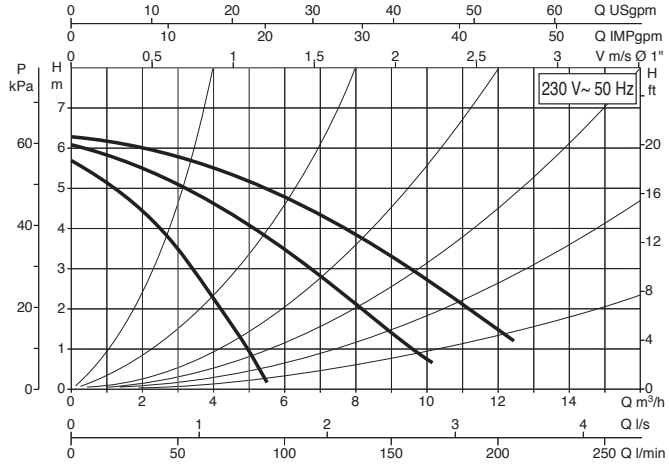
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

A 56/180 XM

SINGLE WITH UNIONS - SINGLE-PHASE



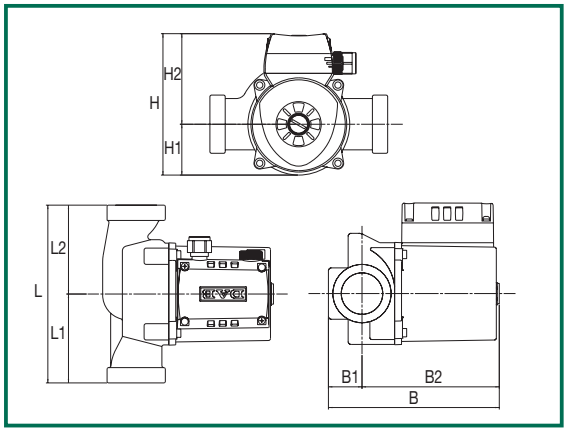


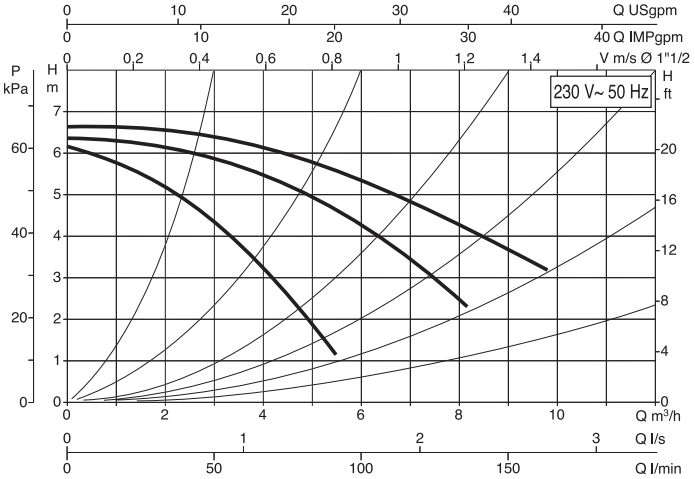
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	90	90	173	34	139	143	52	92	2" G	206	170	180	0,066	5,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 56/180 XM	1x230 V ~	180	2" G	3 2 1	2658 2117 1394	271 294 224	1,18 1,32 1,00	7	400	t° +90°C mt. 1,5

A 56/180 M

SINGLE WITH UNIONS - SINGLE-PHASE





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	90	90	173	34	139	143	52	92	1" $^1/_2$	206	170	180	0,066	5,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 56/180 M	1x230 V ~	180	1" $^1/_2$	3 2 1	2636 2226 1485	282 287 228	1,23 1,30 1,06	7	400	t° +90°C mt. 1,5

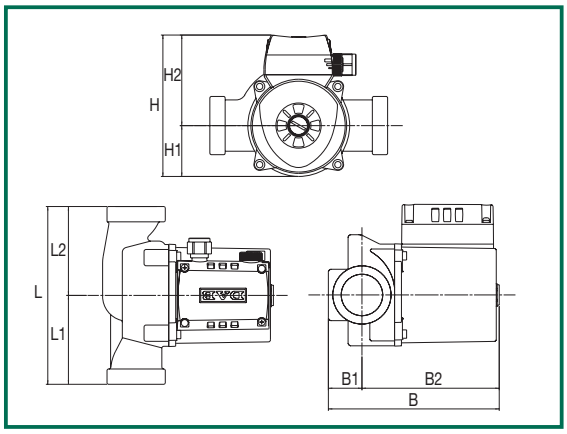
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO9906.

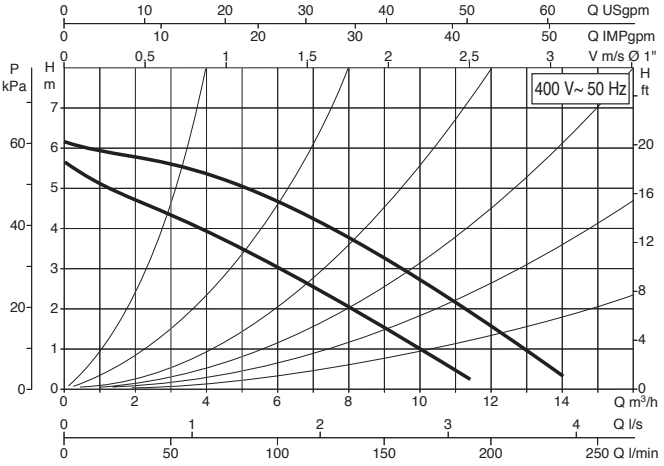
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

A 56/180 XT

SINGLE WITH UNIONS - THREE-PHASE



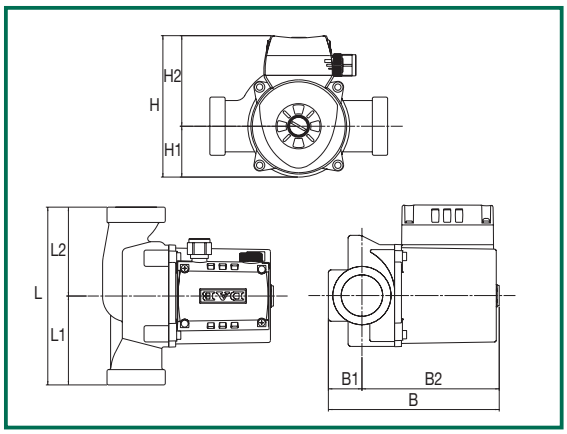


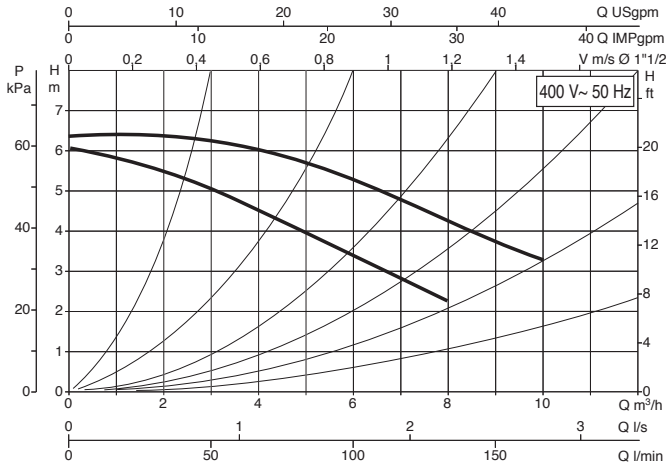
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	90	90	173	34	139	143	52	92	2" G	206	170	180	0,066	5,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 56/180 XT	3x400 V ~	180	2" G	2 1	2708 2178	291 200	0,60 0,32	-	-	t° +90°C mt. 1,5

A 56/180 T

SINGLE WITH UNIONS - THREE-PHASE





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	90	90	173	34	139	143	52	92	1" $^1/_2$	206	170	180	0,066	5,2

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 56/180 T	3x400 V ~	180	1" $^1/_2$	2 1	2704 2178	297 200	0,60 0,33	-	-	t° +90°C mt. 1,5

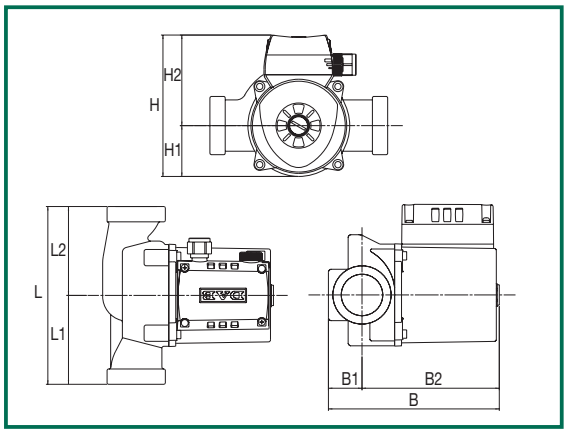
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO9906.

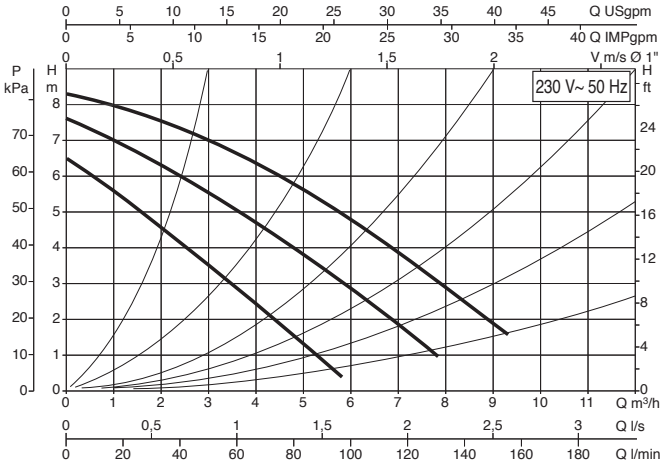
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

A 80/180 XM

SINGLE WITH UNIONS - SINGLE-PHASE



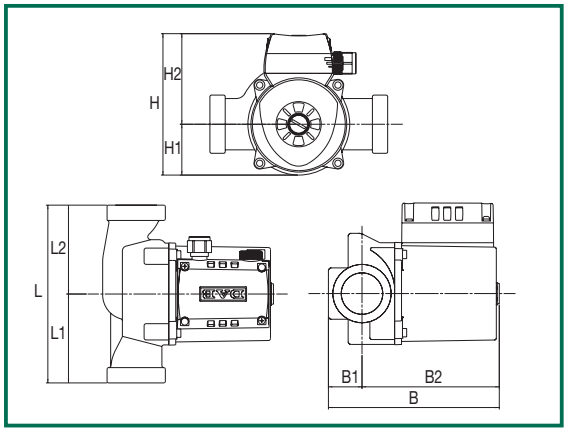


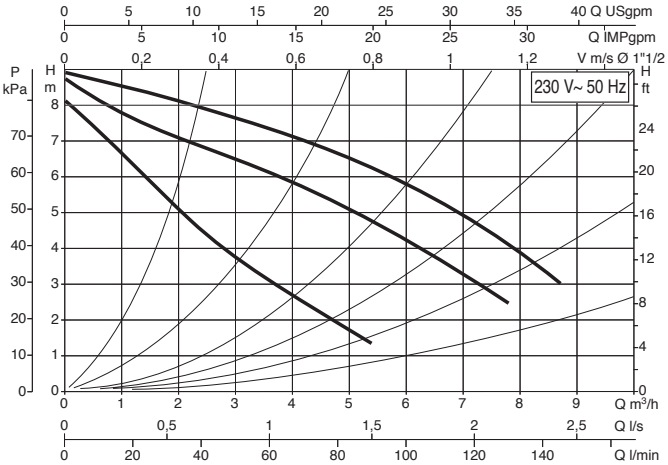
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	90	90	173	34	139	143	52	92	2" G	206	170	180	0,066	5,2

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 80/180 XM	1x230 V ~	180	2" G	3 2 1	2683 2374 1688	256 260 218	1,12 1,17 1,00	7	400	t° +90°C mt. 2,5

A 80/180 M

SINGLE WITH UNIONS - SINGLE-PHASE





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	90	90	173	34	139	143	52	92	1" $^1/_2$	206	170	180	0,066	5,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 80/180 M	1x230 V ~	180	1" $^1/_2$	3 2 1	2674 2356 1615	264 262 223	1,15 1,20 1,00	7	400	t° +90°C mt. 2,5

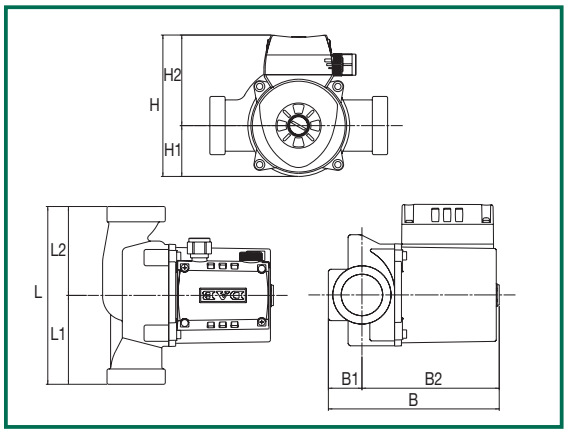
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO9906.

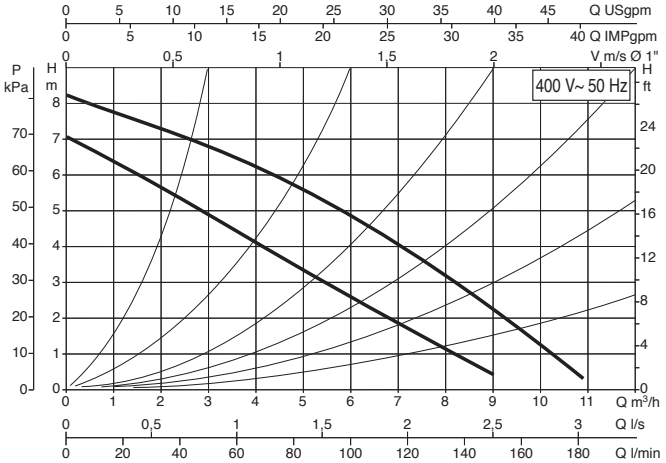
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

A 80/180 XT

SINGLE WITH UNIONS - THREE-PHASE



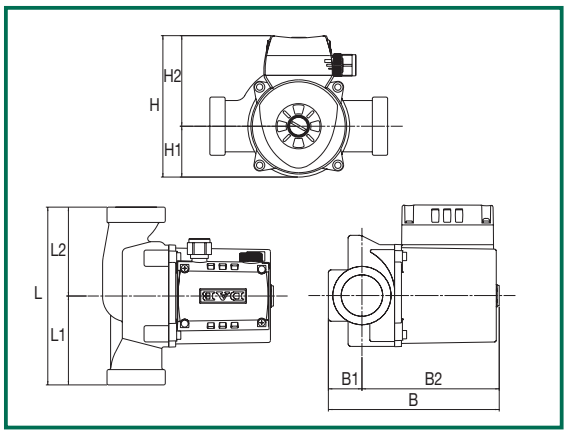


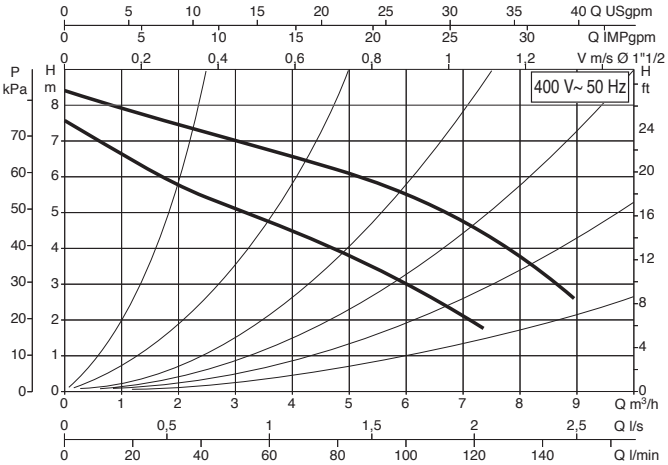
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	90	90	173	34	139	143	52	92	2" G	206	170	180	0,066	5,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 80/180 XT	3x400 V ~	180	2" G	2 1	2727 2227	272 186	0,57 0,30	-	-	t° +90°C mt. 2,5

A 80/180 T

SINGLE WITH UNIONS - THREE-PHASE





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	90	90	173	34	139	143	52	92	1" 1/2	206	170	180	0,066	5,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 80/180 T	3x400 V ~	180	1" 1/2	2 1	2724 2226	271 187	0,57 0,31	-	-	t° +90°C mt. 2,5

DAB PUMP PERFORMANCE

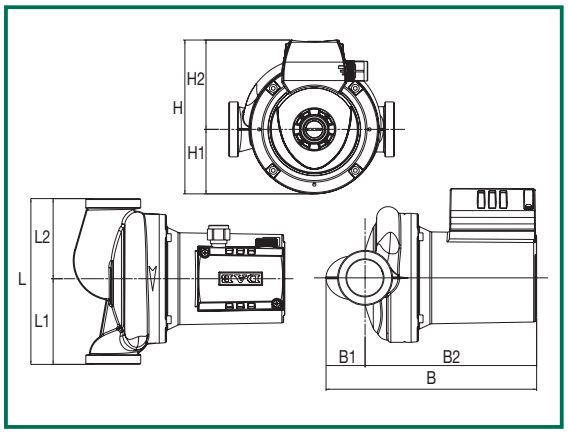
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO9906.

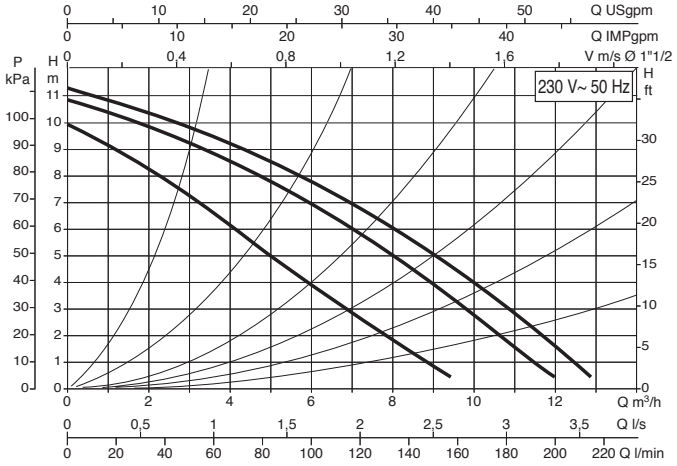
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

A 110/180 XM

SINGLE WITH UNIONS - SINGLE-PHASE



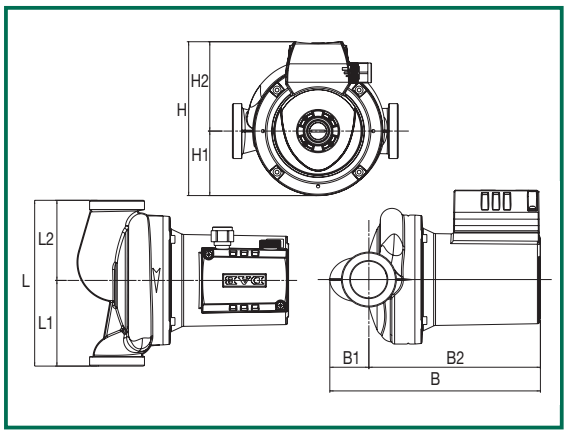


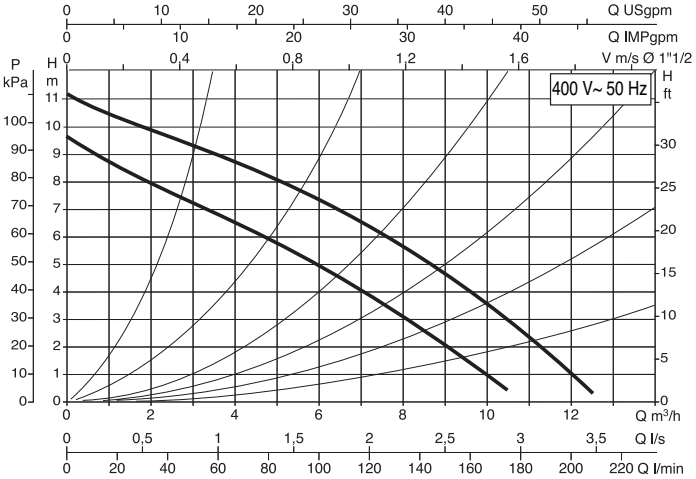
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	93	87	229	42	186	167	70	97	2" G	237	200	272	0,066	5,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 110/180 XM	1x230 V ~	180	2" G	3 2 1	2746 2552 2052	410 393 361	1,12 1,17 1,00	12	450	t° +90°C mt. 2,5

A 110/180 XT

SINGLE WITH UNIONS - THREE-PHASE





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m^3	WEIGHT Kg
180	93	87	229	186	42	163	70	93	2" G	237	200	272	0,066	5,2

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
A 110/180 XT	3x400 V ~	180	2" G	2 1	2759 2341	403 289	0,90 0,48	-	-	t° +90°C mt. 2,5

DAB PUMP PERFORMANCE

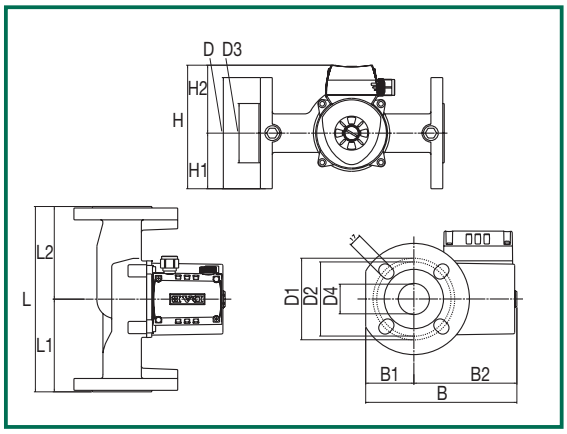
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

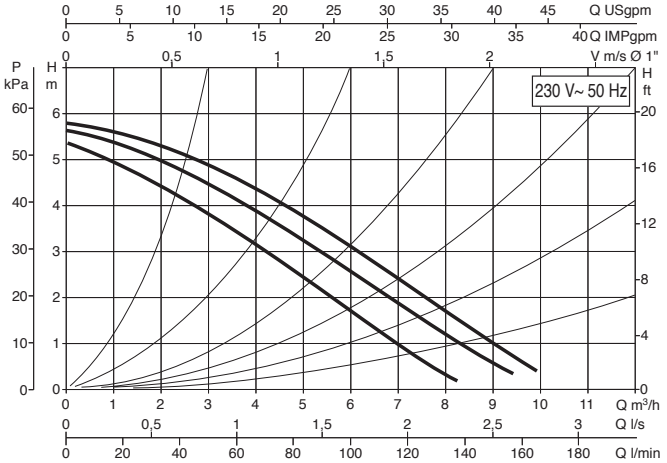
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

B 50/250.40 M

SINGLE FLANGED - SINGLE-PHASE



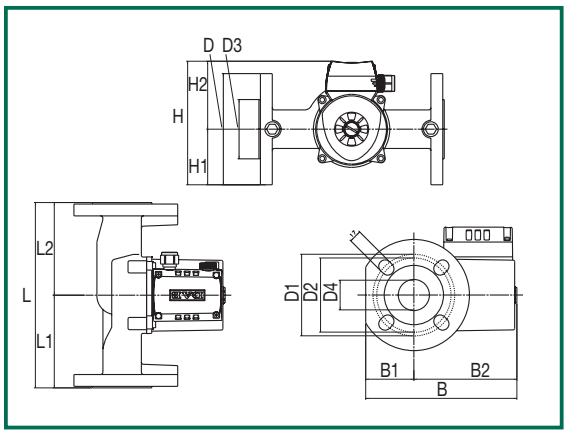


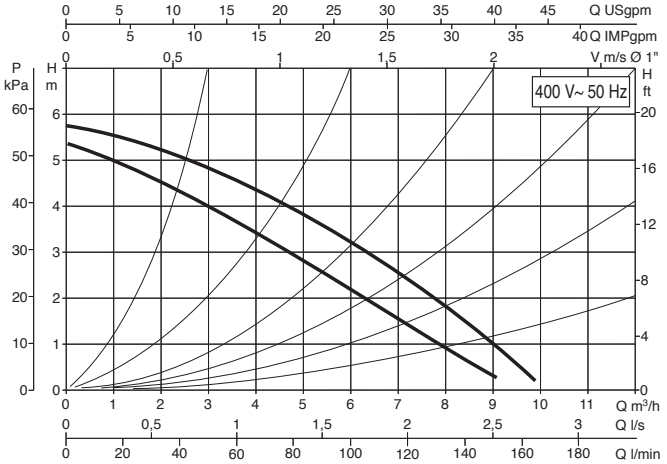
L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	125	125	204	65	139	150	110	100	80	40	167	75	92	DN40/PN10	302	202	283	0,013	9,1

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
B 50/250.40 M	1x230 V ~	250	DN 40	3 2 1	2766 2616 2215	195 194 180	0,95 0,95 0,85	2,5	400	t° +90°C mt. 1,5

B 50/250.40 T

SINGLE FLANGED - THREE-PHASE





L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	125	125	204	65	139	150	110	100	80	40	167	75	92	DN40/PN10	302	202	283	0,013	9,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
B 50/250.40 T	3x400 V ~	250	DN 40	2 1	2827 2502	197 139	0,52 0,25	-	-	t° +90°C mt. 1,5

DAB PUMP PERFORMANCE

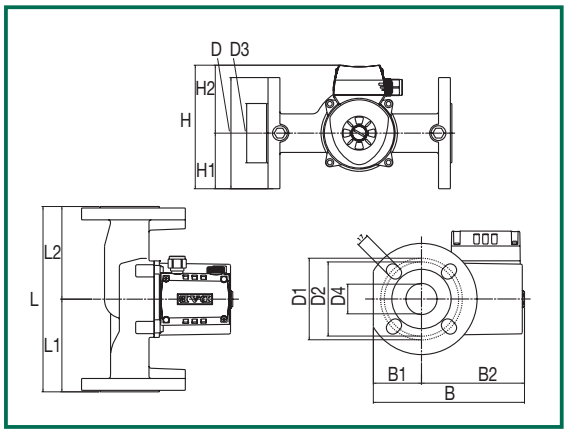
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO9906.

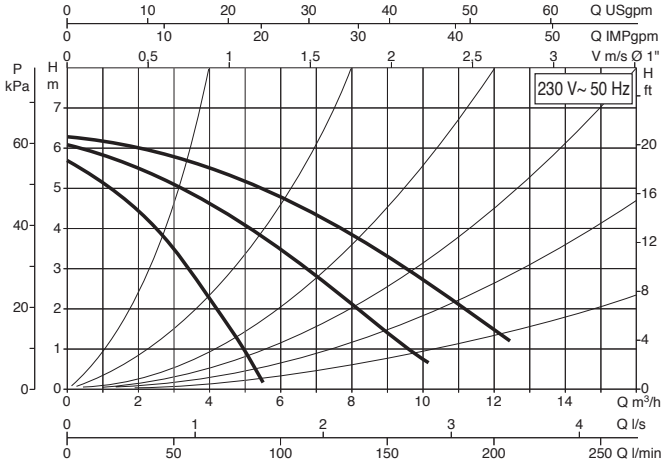
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

B 56/250.40 M

SINGLE FLANGED - SINGLE-PHASE



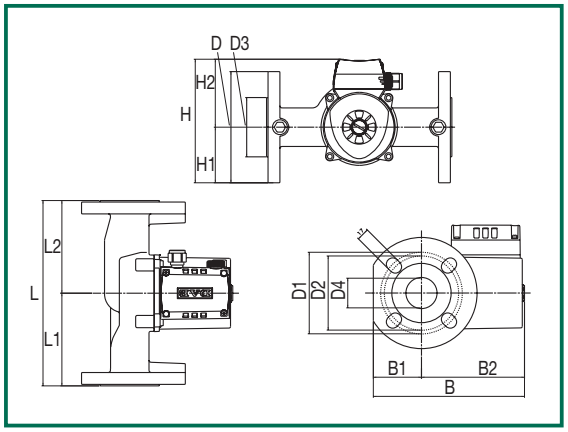


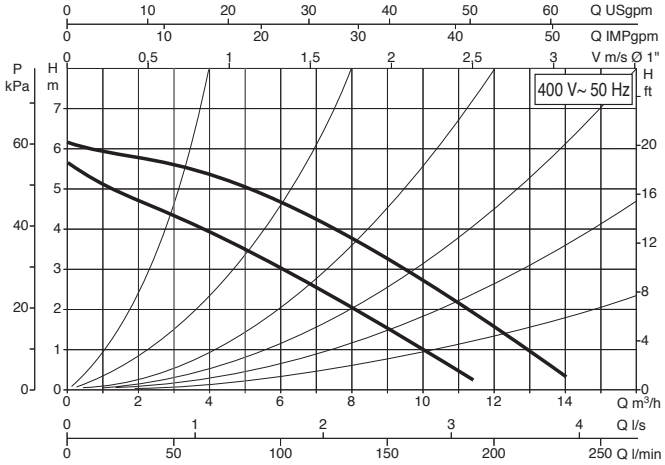
L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m^3	WEIGHT Kg
250	125	125	204	65	139	150	110	100	80	40	167	75	92	DN40/PN10	302	202	283	0,013	9,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
B 56/250.40 M	1x230 V ~	250	DN 40	3 2 1	2636 2226 1485	282 287 228	1,23 1,30 1,06	7	400	t° +90°C mt. 1,5

B 56/250.40 T

SINGLE FLANGED - THREE-PHASE





L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m^3	WEIGHT Kg
250	125	125	204	65	139	150	110	100	80	40	167	75	92	DN40/PN10	302	202	283	0,013	9,2

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
B 56/250.40 T	3x400 V ~	250	DN 40	2 1	2704 2178	297 200	0,60 0,33	-	-	t° +90°C mt. 1,5

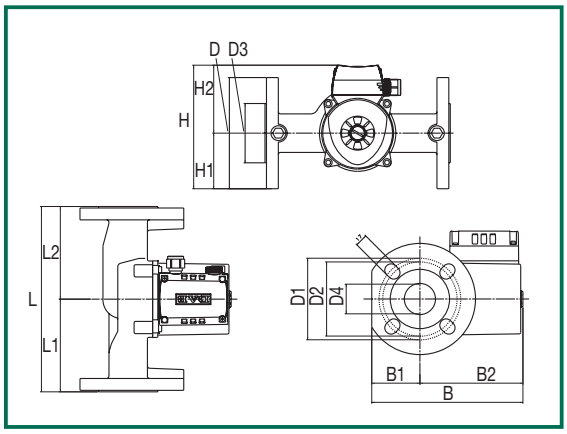
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

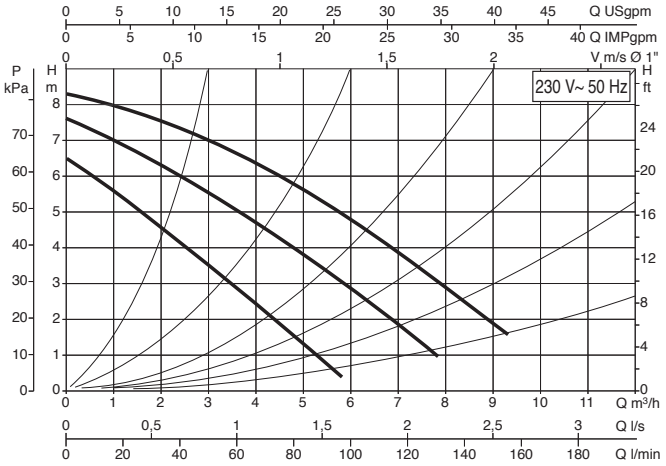
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

B 80/250.40 M

SINGLE FLANGED - SINGLE-PHASE



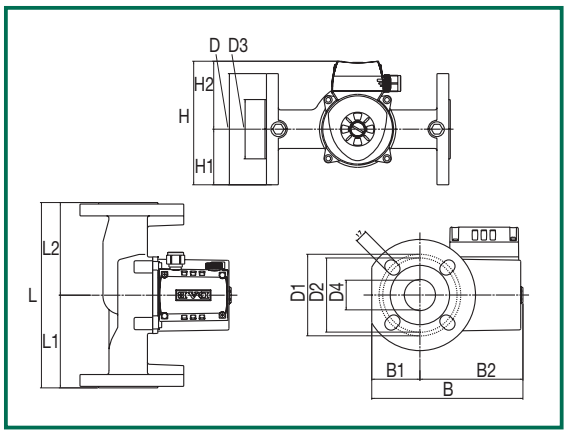


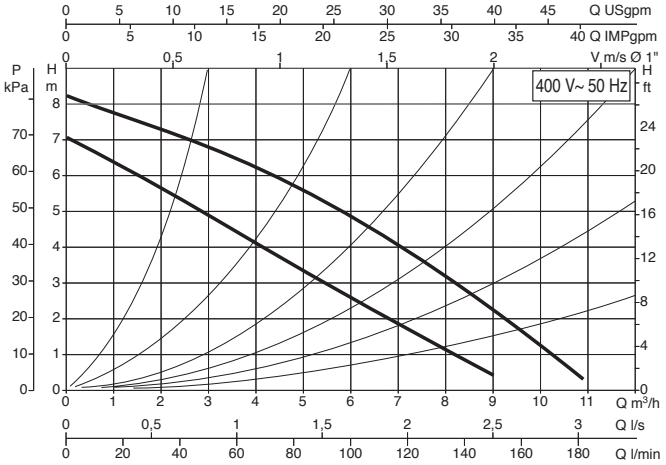
L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	125	125	204	65	139	150	110	100	80	40	167	75	92	DN40/PN10	302	202	283	0,013	9,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
B 80/250.40 M	1x230 V ~	250	DN 40	3 2 1	2674 2356 1615	264 262 223	1,15 1,20 1,00	7	400	t° +90°C mt. 2,5

B 80/250.40 T

SINGLE FLANGED - THREE-PHASE





L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	125	125	204	65	139	150	110	100	80	40	167	75	92	DN40/PN10	302	202	283	0,013	9,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
B 80/250.40 T	3x400 V ~	250	DN 40	2 1	2724 2226	271 187	0,57 0,31	-	-	t° +90°C mt. 2,5

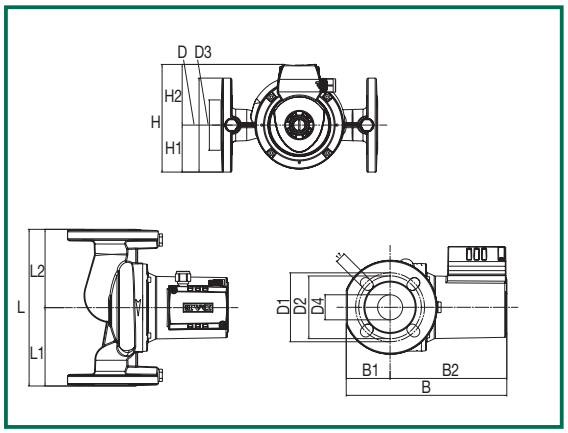
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

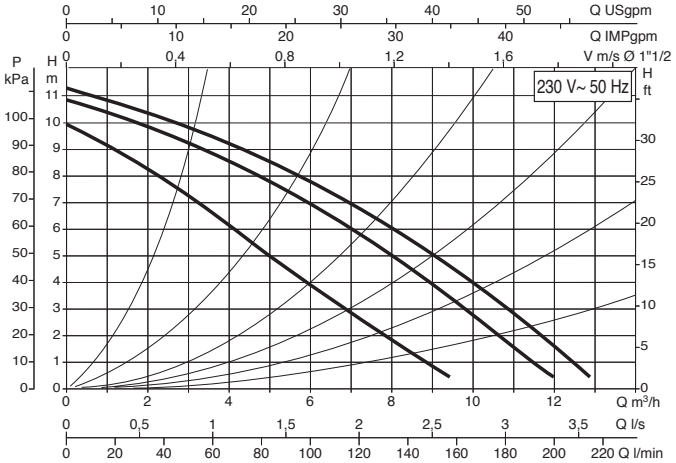
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

B 110/250.40 M

SINGLE FLANGED - SINGLE-PHASE



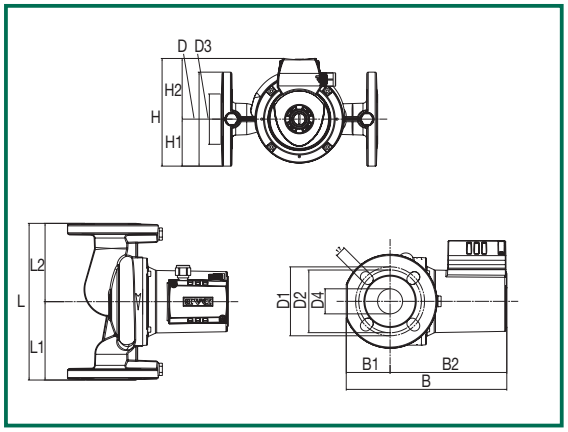


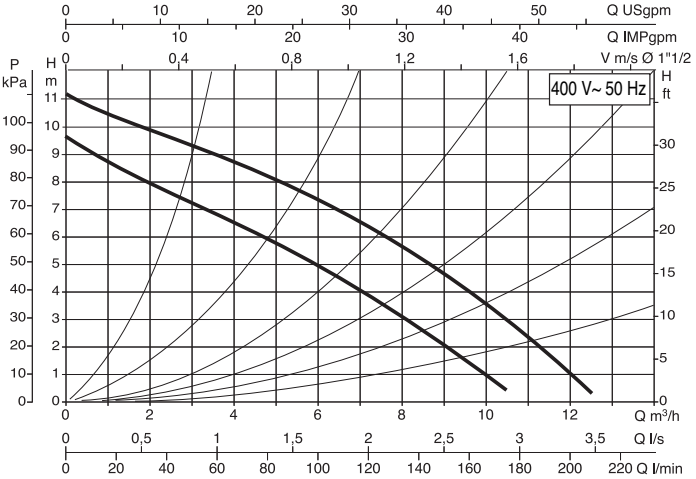
L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
250	125	125	256	70	186	150	110	100	80	40	172	75	97	DN40/PN10	302	202	283	0,013	9,2

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
B 110/250.40 M	1x230 V ~	250	DN 40	3 2 1	2746 2552 2052	410 393 361	1,77 1,78 1,64	12	450	t° +90°C mt. 2,5

B 110/250.40 T

SINGLE FLANGED - THREE-PHASE





L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
250	125	125	256	70	186	150	110	100	80	40	168	75	93	DN40/PN10	302	202	283	0,013	9,3

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
B 110/250.40 T	3x400 V ~	250	DN 40	2 1	2759 2341	403 289	0,90 0,48	-	-	t° +90°C mt. 2,5

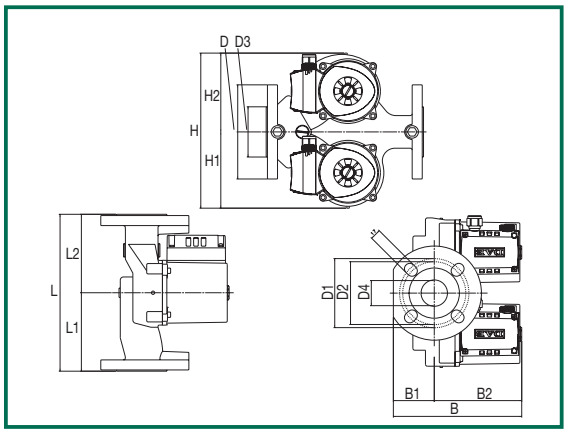
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

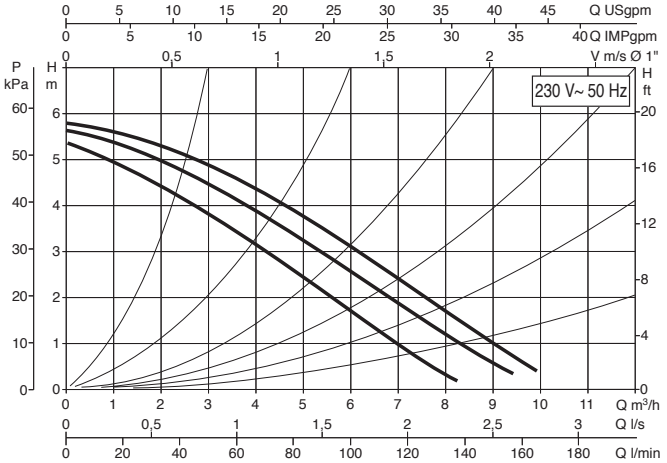
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

D 50/250.40 M

TWIN FLANGED - SINGLE-PHASE





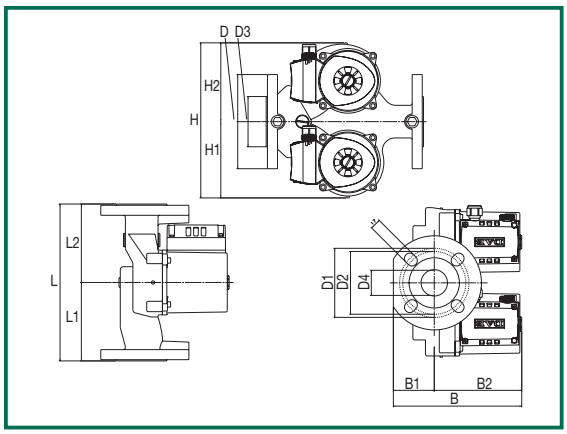
L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	125	125	204	65	139	150	110	100	80	40	247	122	126	DN40/PN10	355	298	283	0,018	15,3

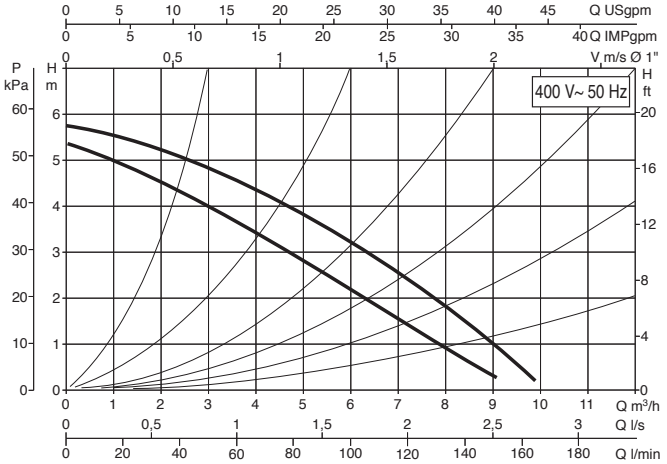
MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA* SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
D 50/250.40 M	1x230 V ~	250	DN 40 - PN 10	3 2 1	2766 2616 2215	195 194 180	0,95 0,95 0,85	2,5	400	t° +90°C mt. 1,5

* Electrical data are related to only one motor in operation.

D 50/250.40 T

TWIN FLANGED - THREE-PHASE





L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	125	125	204	65	139	150	110	100	80	40	247	122	126	DN40/PN10	355	298	283	0,018	15,8

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA* SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	Vc	MINIMUM HEAD PRESSURE
D 50/250.40 T	3x400 V ~	250	DN 40 - PN 10	2 1	2827 2502	197 139	0,52 0,25	-	-	t° +90°C mt. 1,5

* Electrical data are related to only one motor in operation.

DAB PUMP PERFORMANCE

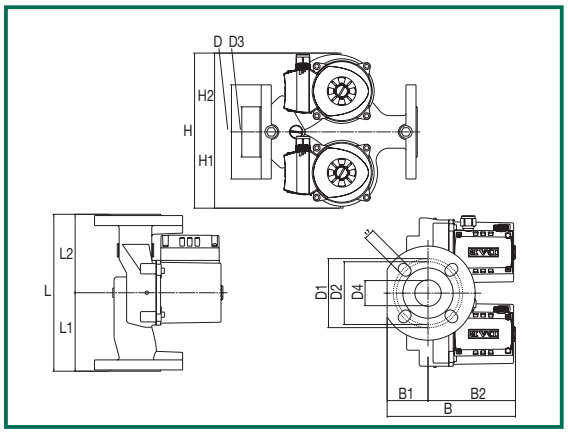
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

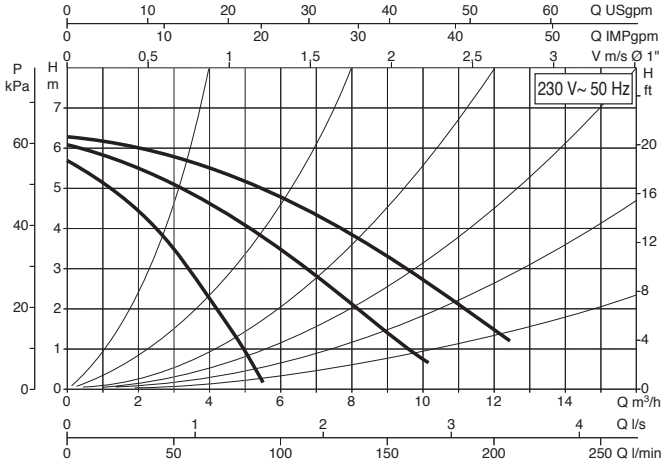
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

D 56/250.40 M

TWIN FLANGED - SINGLE-PHASE





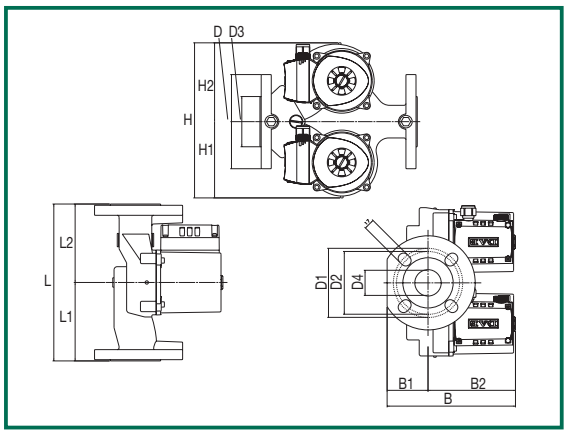
L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
250	125	125	204	65	139	150	110	100	80	40	247	122	126	DN40/PN10	355	298	283	0,018	15,8

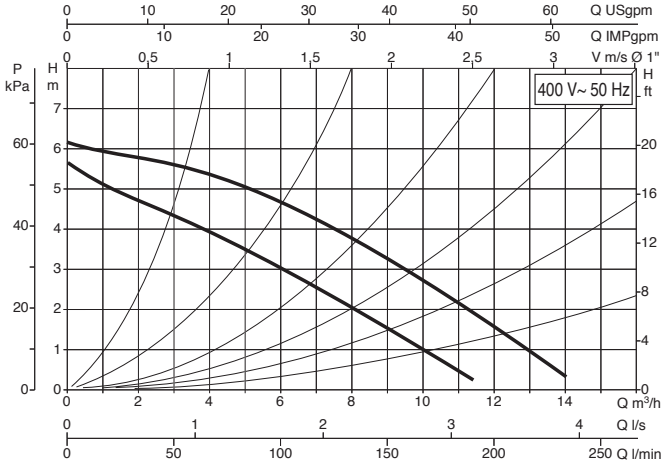
MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA* SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
D 56/250.40 M	1x230 V ~	250	DN 40 - PN 10	3 2 1	2636 2226 1485	282 287 228	1,23 1,30 1,06	7	400	t° +90°C mt. 1,5

* Electrical data are related to only one motor in operation.

D 56/250.40 T

TWIN FLANGED - THREE-PHASE





L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
250	125	125	204	65	139	150	110	100	80	40	247	122	126	DN40/PN10	355	298	283	0,018	15,4

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA* SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
D 56/250.40 T	3x400 V ~	250	DN 40 - PN 10	2 1	2704 2178	297 200	0,60 0,33	-	-	t° +90°C mt. 1,5

* Electrical data are related to only one motor in operation.

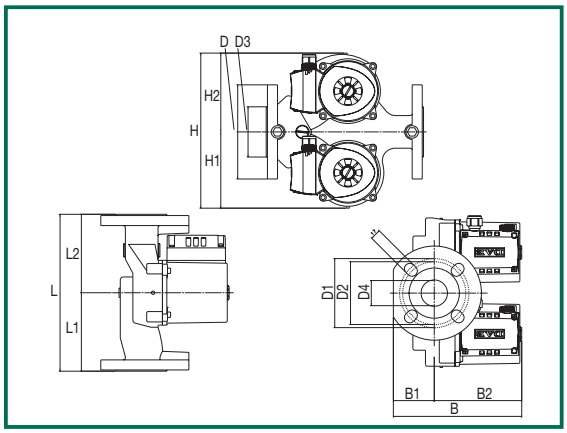
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

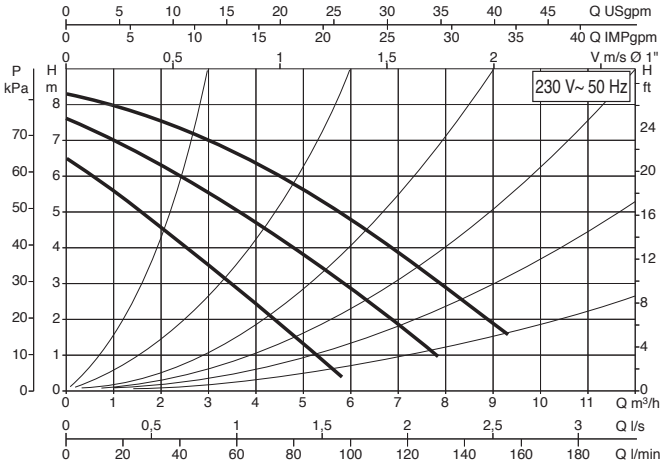
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

D 80/250.40 M

TWIN FLANGED - SINGLE-PHASE





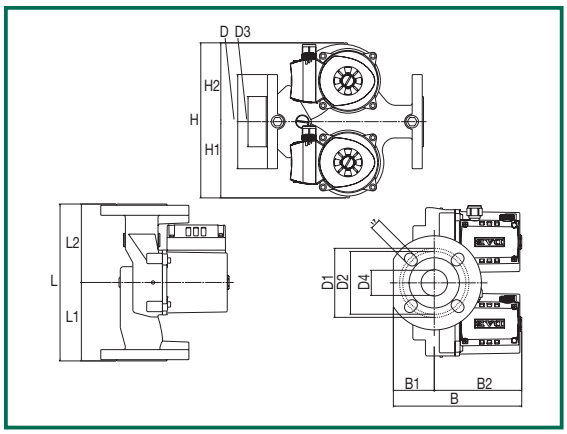
L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
250	125	125	204	65	139	150	110	100	80	40	247	122	126	DN40/PN10	355	298	283	0,018	15,8

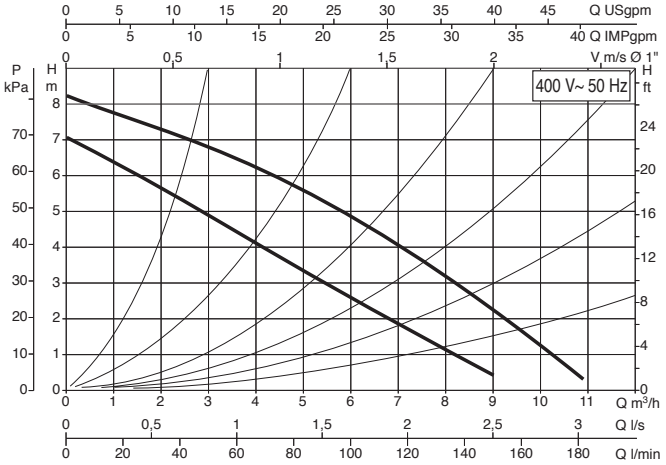
MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA* SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
D 80/250.40 M	1x230 V ~	250	DN 40 - PN 10	3 2 1	2674 2356 1615	264 262 223	1,15 1,20 1,00	7	400	t° +90°C mt. 2,5

* Electrical data are related to only one motor in operation.

D 80/250.40 T

TWIN FLANGED - THREE-PHASE





L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
250	125	125	204	65	139	150	110	100	80	40	247	122	126	DN40/PN10	355	298	283	0,018	15,8

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA* SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
D 80/250.40 T	3x400 V ~	250	DN 40 - PN 10	2 1	2724 2226	271 187	0,57 0,31	-	-	t° +90°C mt. 2,5

* Electrical data are related to only one motor in operation.

DAB PUMP PERFORMANCE

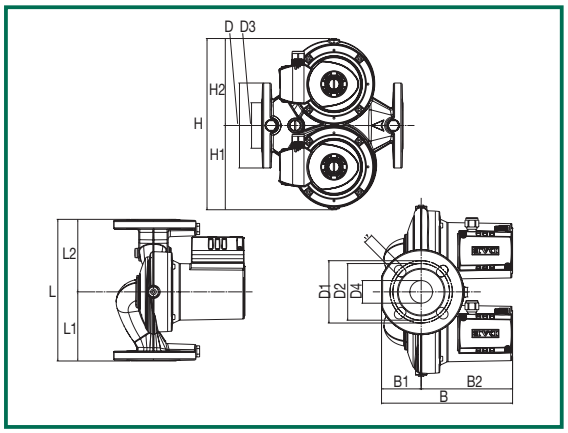
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO9906.

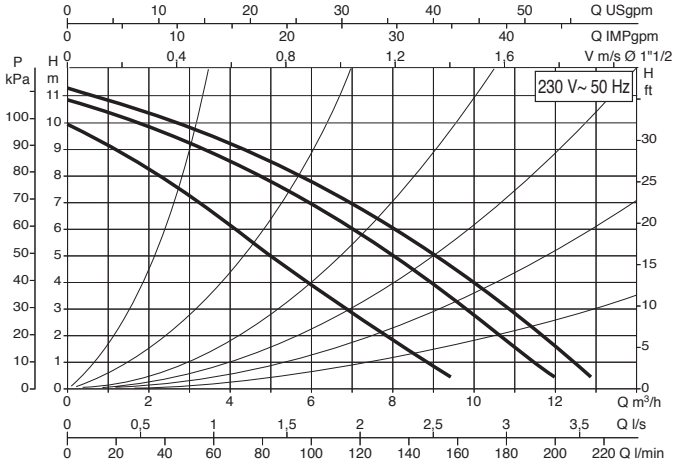
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C
Maximum operating pressure: 10 bar (1000 kPa)

D 110/250.40 M

TWIN FLANGED - SINGLE-PHASE





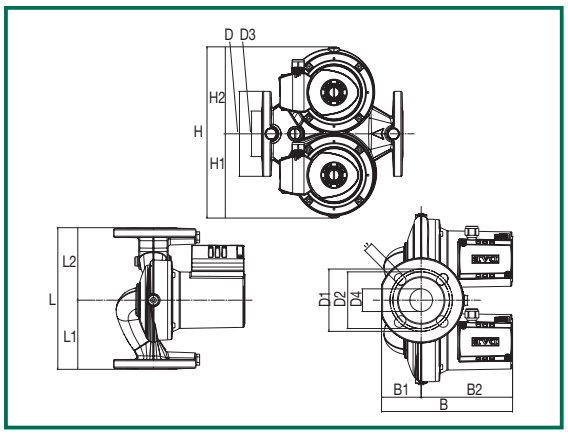
L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m^3	WEIGHT Kg
250	122	128	231	70	161	150	110	100	80	40	302	149	154	DN40/PN10	355	298	283	0,018	16

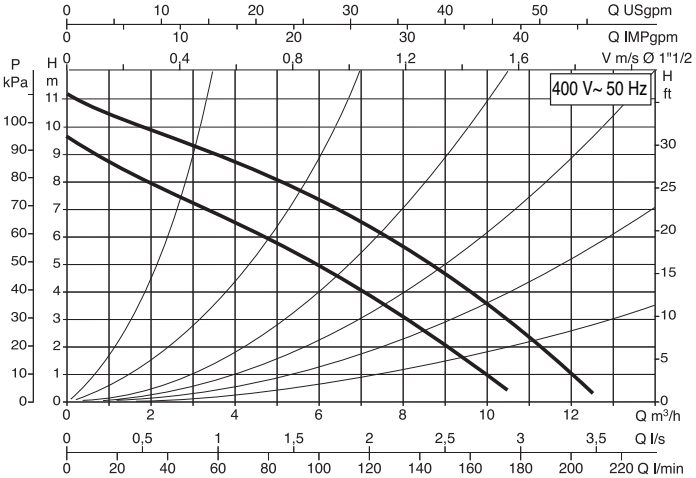
MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA* SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
D 110/250.40 M	1x230 V ~	250	DN 40 - PN 10	3 2 1	2746 2552 2052	410 393 361	1,77 1,78 1,64	12	450	t° +90°C mt. 2,5

* Electrical data are related to only one motor in operation.

D 110/250.40 T

TWIN FLANGED - THREE-PHASE



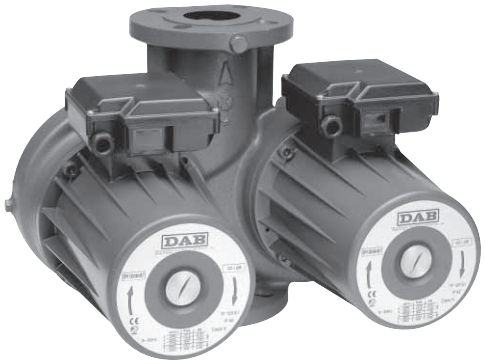


L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m^3	WEIGHT Kg
250	122	128	231	70	161	150	110	100	80	40	302	149	154	DN40/PN10	355	298	283	0,018	15,8

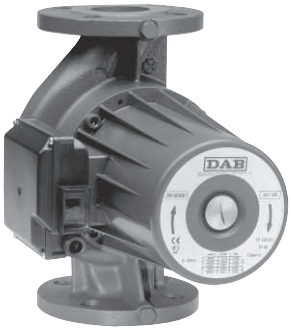
MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA* SPEED	N r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	MINIMUM HEAD PRESSURE
D 110/250.40 T	3x400 V ~	250	DN 40 - PN 10	2 1	2759 2341	403 289	0,90 0,48	-	-	t° +90°C mt. 2,5

* Electrical data are related to only one motor in operation.

CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS



DMH-DPH



BMH-BPH

GENERAL DATA

Applications

Pump for circulating water in civil and industrial community heating and air-conditioning systems. All models are available in both the single and twin versions.

Construction characteristics

Single body comprising cast iron hydraulic unit and wet rotor motor.
Aluminium motor casing. Intake ports flanged and fitted with threaded unions for pressure gauges. Technopolymer impeller. Tempered stainless steel driving shaft mounted on graphite brushings lubricated by the pumped liquid. Stainless steel protective rotor sleeve and stator sleeve. Ceramic thrust bearing, E.P.D.M. O-rings and brass air outlet cap. Four pole asynchronous motor for versions BMH and DMH, two pole asynchronous motor for BPH and DPH versions. The single-phase circulator has been designed to work at 3 speeds at 230 V, while the three-phase circulator has been designed to work at two speeds at 230 V and three speeds at 400 V. In both, the speed is adjusted by means of a special selector located on the terminal board, in order to adapt the operation of the circulator to the characteristics of the system.
Thermal overload protection incorporated in the single phase version. For the three-phase version the motor must be connected to the VOLTAGE supply through an external contactor. The contactor must be connected to the thermal overload protection incorporated in the motor so as to protect it against overloading at all speeds.
An automatic clapet type valve is incorporated into the delivery port of the twin version in order to prevent water from recirculating while the unit is not working; a blank flange is also supplied standard if one of the two motors must be maintained. The standard pump body is PN10 compatible with PN6 counter flanges in order to interchange the pumps in existing systems.
Circulator protection level: IP 44 both single-phase and three-phase
Insulating class: H - Cable grommet: PG 11

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

This product complies with EN 60335-2-51 European standard

– Denomination index: (example)

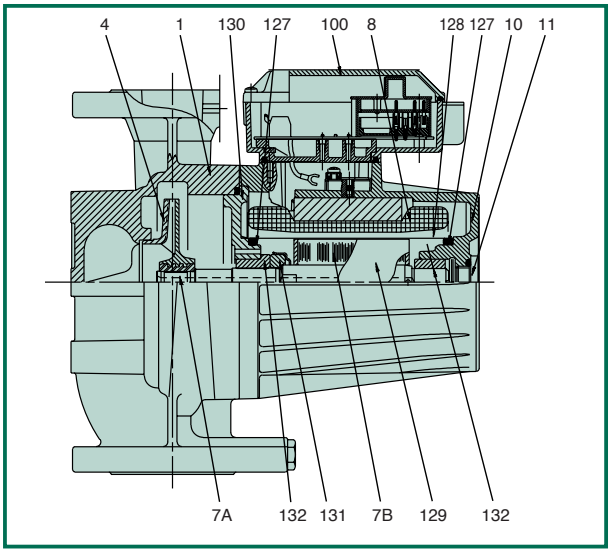
B P H 120 / 250 . 40 T

- B = single circulator
  D = twin circulator
- M = 4-pole motor
  P = 2-pole motor
- H = suitable both for conditioning and heating
- maximum head (dm)
- centre distance (mm)
- (DN) rated diameter of flanged ports
- M = single-phase motor
  T = three-phase motor

CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

TECHNICAL DATA

N.	PARTS	MATERIALS
1	PUMP BODY	CAST IRON 200 UNI ISO 185
4	IMPELLER	TECHNOPOLYMER B
7A	DRIVE SHAFT	STAINLESS STEEL AISI 420 C hard. and temp.
7B	ROTOR	–
8	STATOR	–
10	MOTOR CASING	DIE CAST ALUMINIUM
11	AIR OUTLET CAP	BRASS P Cu Zn 40 Pb2 UNI 5705
100	TERMINAL BOARD BOX	–
127	O-RING	E.P.D.M (EPDM)
128	STATOR SLEEVE	STAINLESS STEEL AISI 321 hard. and temp. – AISI 304
129	ROTOR SLEEVE	STAINLESS STEEL AISI 321 hard. and temp. – AISI 304
130	CLOSING FLANGE	CAST IRON 200 UNI ISO 185
131	THRUST BOX SUPPORT	STAINLESS STEEL AISI 304 L
132	BRUSHINGS	CARBON EC 941



Operating range: from 1.5 to 78 m^3/h with head up to 18 metres.

Liquid temperature range: For three-phase versions: from –10°C to + 120° C
For models BPH – DPH 150/340.65 T e BPH – DPH 150/360.80 T; BPH – DPH 150-180/280.50 T; BPH – DPH 180/340.65; BPH – DPH 180/360.80 T: from –10°C to +110°C
For model BPH 120/280.50 M: from –10°C to +90° C.
For single-phase versions: from –10°C to +110° C.

Characteristics of pumped liquid: clean, free from solids and mineral oils, non viscous, chemically neutral, close to the characteristics of water (max. glycol 30%).

Maximum operating pressure: 10 bar (1000 kPa)

Standard flanging: DN 40, DN 50, DN 65, DN 80 in PN 6 / PN 10 (4 slots)

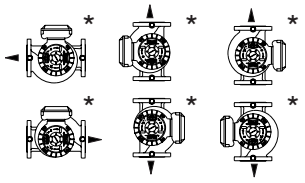
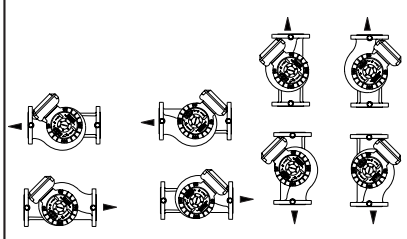
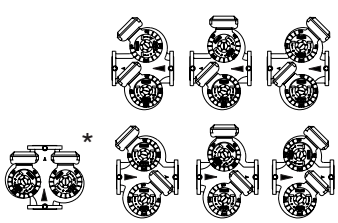
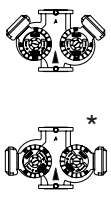
Minimum head pressure: values are shown in the relative tables.

Installation: with MOTOR AXIS HORIZONTAL on the delivery or return piping, with intake port as near as possible to the expansion tank, higher than the maximum level of the boiler and as far away as possible from bends, elbows and unions, in order to prevent water turbulence and consequent noisiness.

Special versions on request: other voltages and/or frequencies.
Flanging DN 80 in PN 10 / PN 16 (8 holes)

Accessories: threaded counter flanges in PN 10
measuring DN 40 - DN 50 - DN 65 - DN 80.

POSITION OF TERMINAL BOARD

Single		Twin versions	
DN 40-50-65-80	DN 65-80	DN 65-80	DN 40-50-65-80
			

* For installations in air-conditioning systems only use the circulator in the terminal board positions marked with the asterisk.

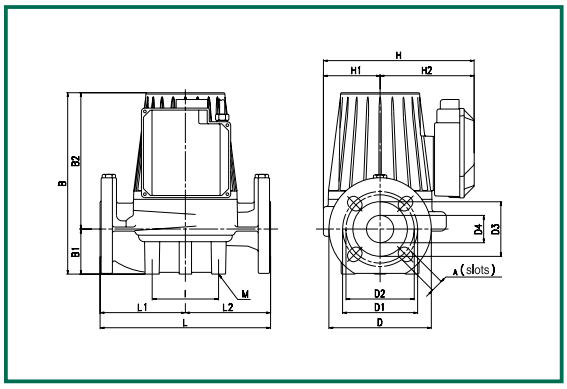
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

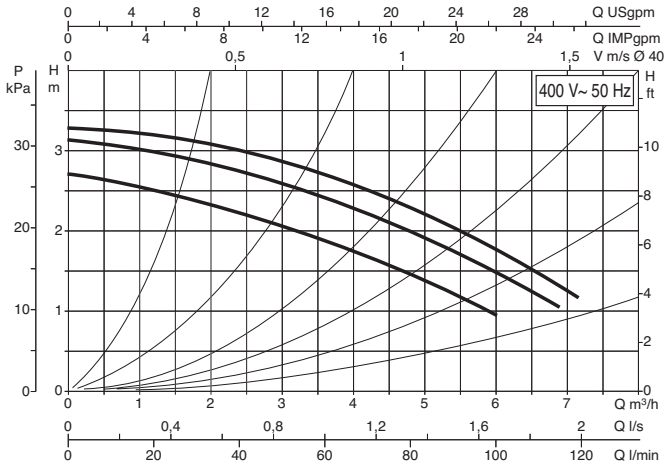
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BMH 30/250.40 T

SINGLE FLANGED - THREE-PHASE (1400 r.p.m.)





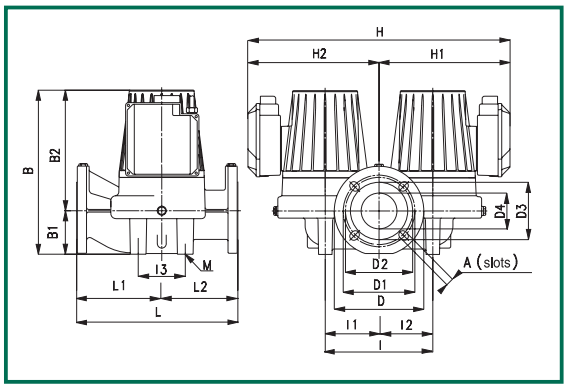
Hydraulic characteristics at 230V are shown from pages 67.

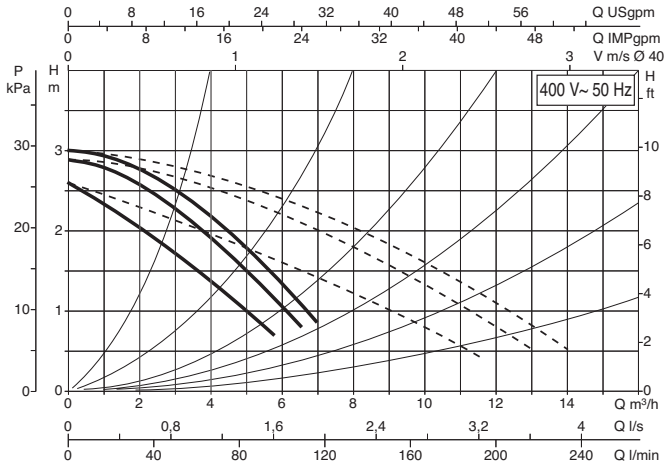
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	125	125	18	266	66	200	150	110	100	80	40	100	–	–	–	M10	221	83	138	360	295	320	0,033	17,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BMH 30/250.40 T	3x230 V ~	250	DN 40 - PN 10	2	1340	100	0.48	t°	75°	90°	110°	120°
				1	1260	88	0.39					
	3x400 V ~			3	1440	192	0.78	mt.	0.9	4	–	18
				2	1430	155	0.58					
				1	1260	88	0.23					

DMH 30/250.40 T

TWIN FLANGED - THREE-PHASE (1400 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	105	145	18	271	66	205	150	110	100	80	40	200	100	100	100	M12	476	238	238	520	300	295	0,046	32

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DMH 30/250.40 T	3x230 V ~	250	DN 40 - PN 10	2	1340	100	0.48	t°	75°	90°	110°	120°
				1	1260	88	0.39					
	3x400 V ~			3	1440	192	0.78	mt.	0.9	4	–	18
				2	1430	155	0.58					
				1	1260	88	0.23					

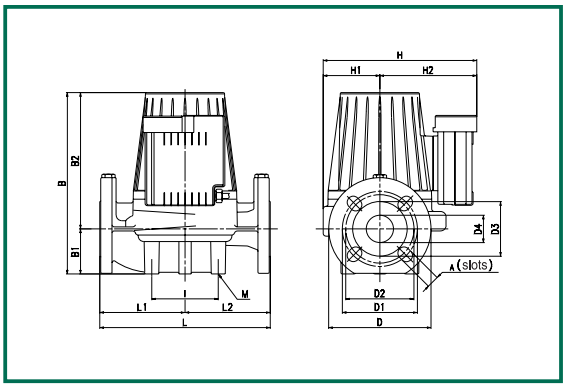
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

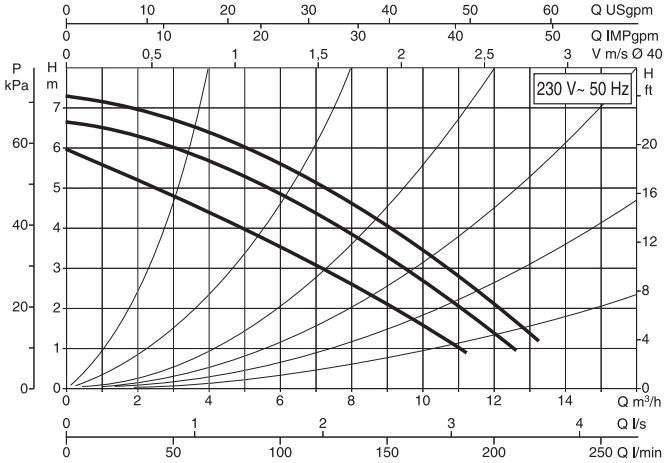
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 60/250.40 M

SINGLE FLANGED - SINGLE-PHASE (2800 r.p.m.)



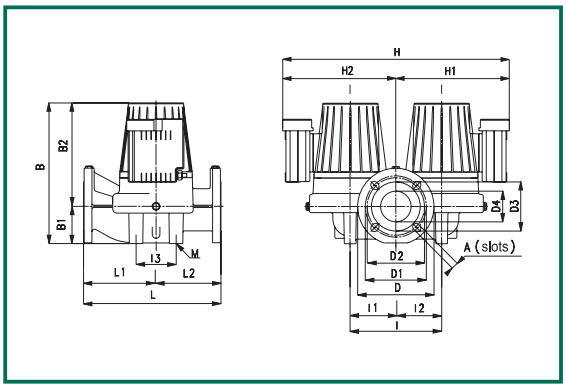


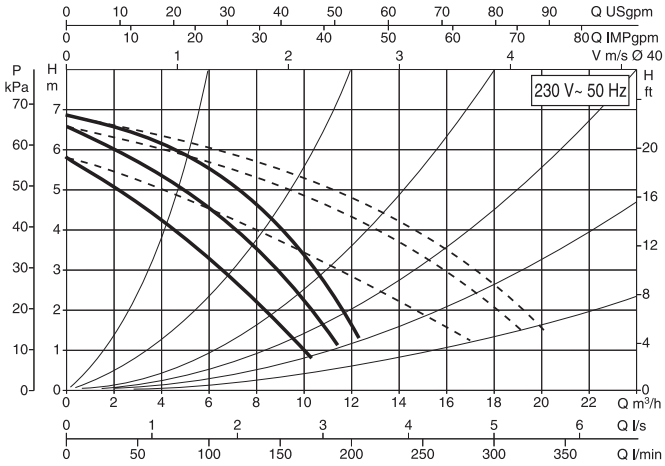
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	125	125	18	266	66	200	150	110	100	80	40	100	–	–	–	M10	221	83	138	360	295	320	0,033	17,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 60/250.40 M	–	250	DN 40 - PN 10	–	–	–	–	t°	75°	90°	110°	120°
	1x230 V ~			3	2830	316	1.43	mt.	1.6	4	14	–
				2	2750	309	1.53					
				1	2410	292	1.51					

DPH 60/250.40 M

TWIN FLANGED - SINGLE-PHASE (2800 r.p.m.)





L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	105	145	18	271	66	205	150	110	100	80	40	200	100	100	100	M12	476	238	238	520	300	295	0,046	32

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 60/250.40 M	–	250	DN 40 - PN 10	–	–	–	–	t°	75°	90°	110°	120°
	1x230 V ~			3	2830	316	1.43	mt.	1.6	4	14	–
				2	2750	309	1.53					
				1	2410	292	1.51					

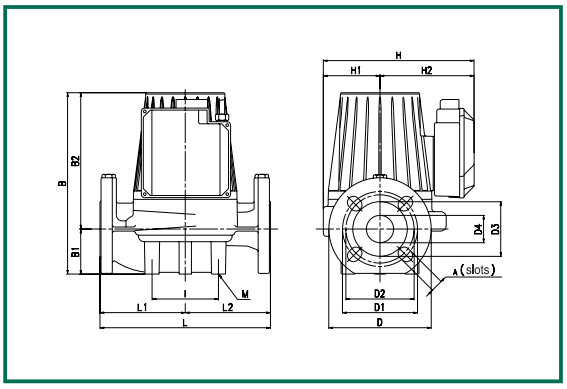
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

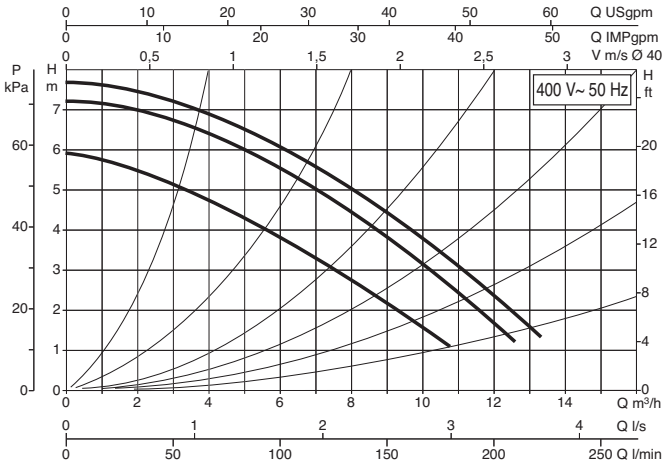
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 60/250.40 T

SINGLE FLANGED - THREE-PHASE (2800 r.p.m.)





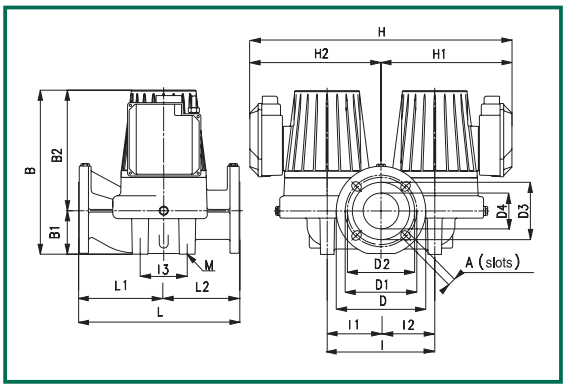
Hydraulic characteristics at 230V are shown from pages 67.

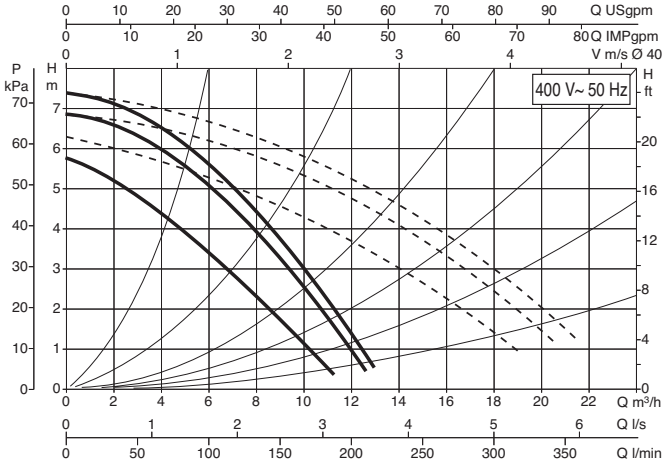
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	125	125	18	266	66	200	150	110	100	80	40	100	–	–	–	M10	221	83	138	360	295	320	0,033	17,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE
BPH 60/250.40 T	3x230 V ~	250	DN 40 - PN 10	2	2570	253	0.81	t° 75° 90° 110° 120°
				1	2420	229	0.72	
	3x400 V ~			3	2850	348	0.99	mt. 1.6 4 – 19
				2	2810	316	0.75	
				1	2430	232	0.42	

DPH 60/250.40 T

TWIN FLANGED - THREE-PHASE (2800 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	105	145	18	271	66	205	150	110	100	80	40	200	100	100	100	M12	476	238	238	520	300	295	0,046	32

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE
DPH 60/250.40 T	3x230 V ~	250	DN 40 - PN 10	2	2570	253	0.81	t° 75° 90° 110° 120°
				1	2420	229	0.72	
	3x400 V ~			3	2850	348	0.99	mt. 1.6 4 – 19
				2	2810	316	0.75	
				1	2430	232	0.42	

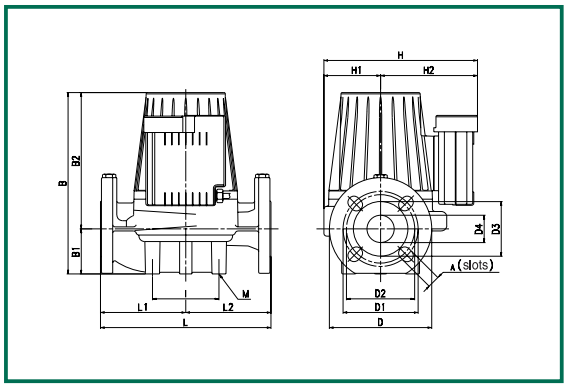
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

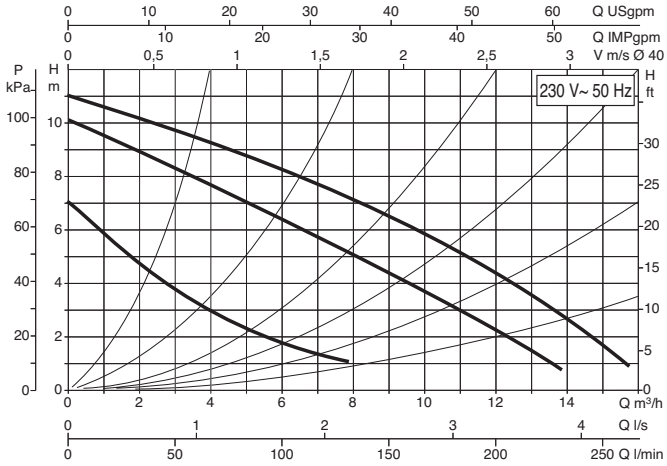
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 120/250.40 M

SINGLE FLANGED - SINGLE-PHASE (2800 r.p.m.)



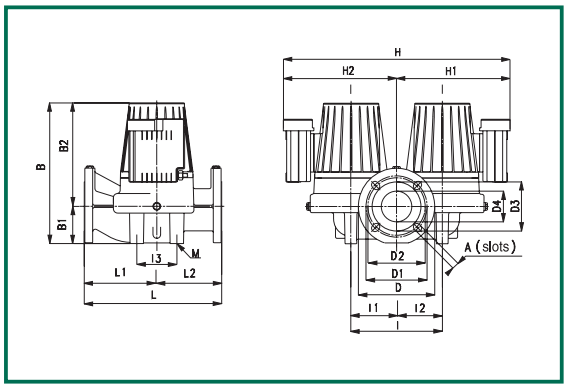


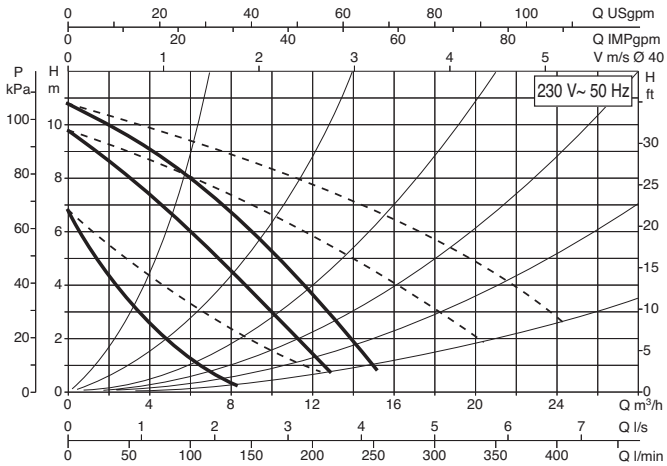
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	125	125	18	266	66	200	150	110	100	80	40	100	–	–	–	M10	221	83	138	360	295	320	0,033	17,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	FLANGES ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 120/250.40 M	–	250	DN 40 - PN 10	–	–	–	–	t°	75°	90°	110°	120°
	1x230 V ~			3	2650	510	2.24					
				2	2320	498	2.35	mt.	6	9	18	–
				1	1520	376	1.96					

DPH 120/250.40 M

TWIN FLANGED - SINGLE-PHASE (2800 r.p.m.)





L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	105	145	18	271	66	205	150	110	100	80	40	200	100	100	100	M12	476	238	238	520	300	295	0,046	32

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 120/250.40 M	–	250	DN 40 - PN 10	–	–	–	–	t°	75°	90°	110°	120°
	1x230 V ~			3	2650	510	2.24					
				2	2320	498	2.35	mt.	6	9	18	–
				1	1520	376	1.96					

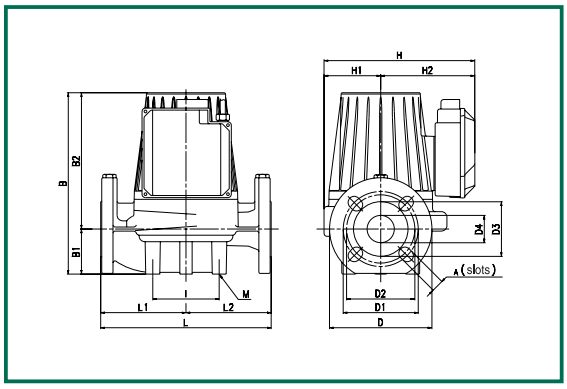
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

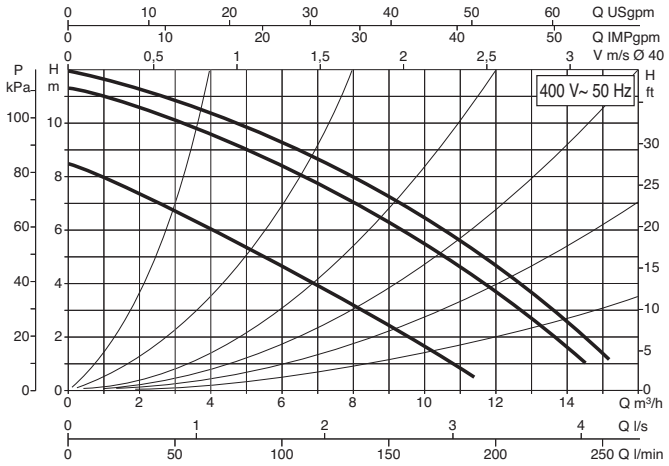
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 120/250.40 T

SINGLE FLANGED - THREE-PHASE (2800 r.p.m.)





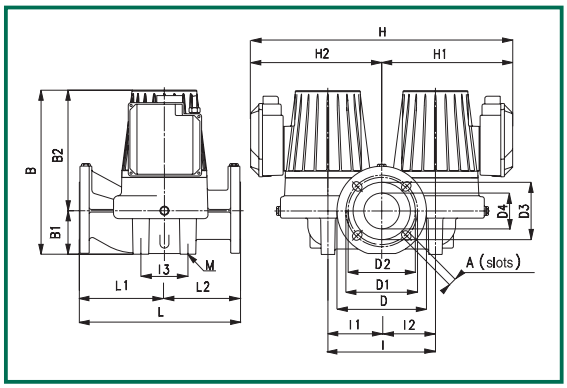
Hydraulic characteristics at 230V are shown from pages 67.

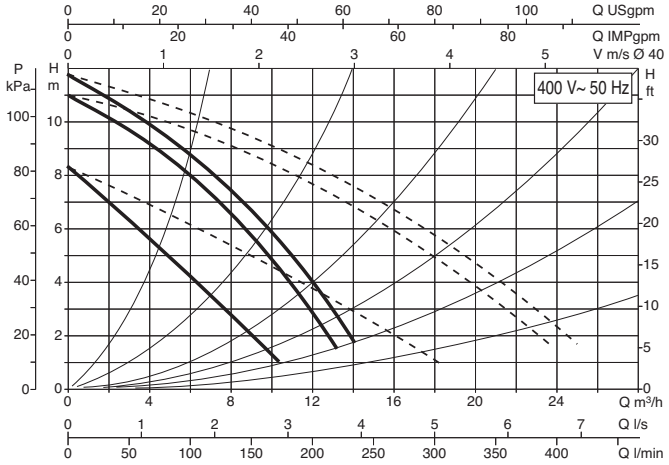
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	125	125	18	266	66	200	150	110	100	80	40	100	–	–	–	M10	221	83	138	360	295	320	0,033	17,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 120/250.40 T	3x230 V ~	250	DN 40 - PN 10	2	2300	395	1.2	t°	75°	90°	110°	120°
				1	2070	340	1.07					
	3x400 V ~			3	2780	536	1.16	mt.	6	9	–	23
				2	2710	499	0.98					
				1	2080	339	0.62					

DPH 120/250.40 T

TWIN FLANGED - THREE-PHASE (2800 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
250	105	145	18	271	66	205	150	110	100	80	40	200	100	100	100	M12	476	238	238	520	300	295	0,046	32

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 120/250.40 T	3x230 V ~	250	DN 40 - PN 10	2	2300	395	1.2	t°	75°	90°	110°	120°
				1	2070	340	1.07					
	3x400 V ~			3	2780	536	1.16	mt.	6	9	–	23
				2	2710	499	0.98					
				1	2080	339	0.62					

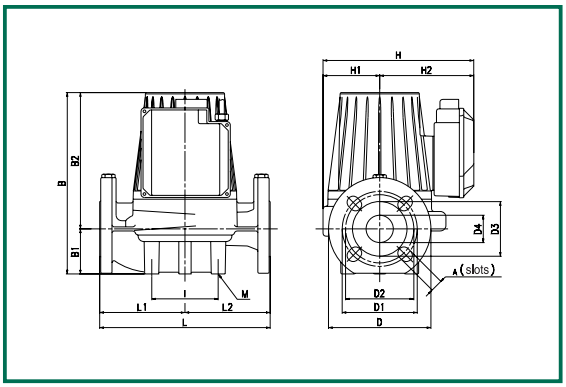
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

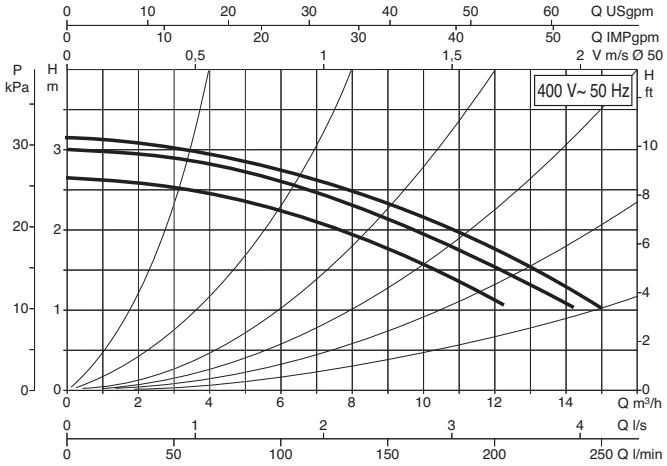
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BMH 30/280.50 T

SINGLE FLANGED - THREE-PHASE (1400 r.p.m.)





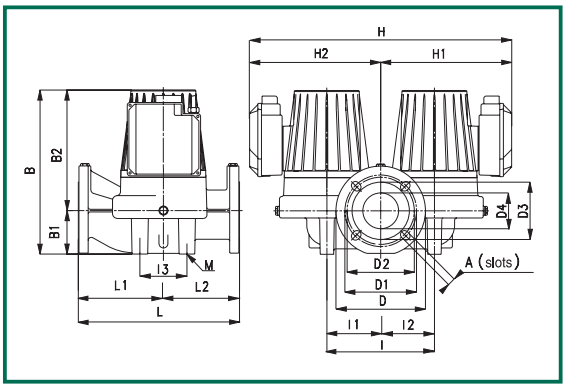
Hydraulic characteristics at 230V are shown from pages 67.

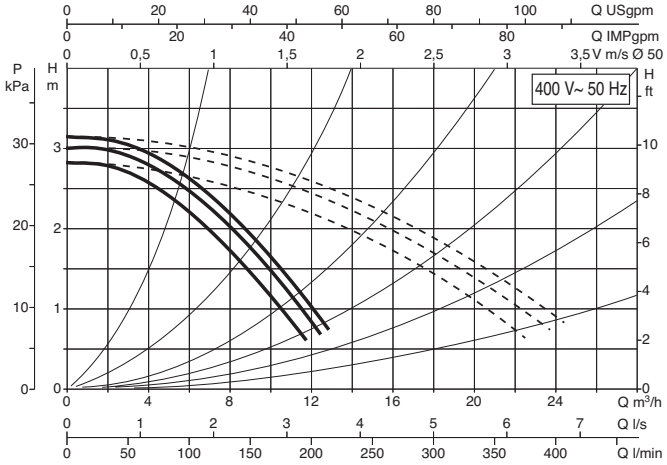
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
280	140	140	18	312	73	239	165	125	110	90	50	100	–	–	–	M10	254	96	158	360	295	320	0,033	24

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BMH 30/280.50 T	3x230 V ~	280	DN 50 - PN 10	2	1390	148	0.7	t°	75°	90°	110°	120°
				1	1340	134	0.55					
	3x400 V ~			3	1460	255	1.12	mt.	0.9	4	–	18
				2	1450	216	0.83					
				1	1350	131	0.32					

DMH 30/280.50 T

TWIN FLANGED - THREE-PHASE (1400 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
280	130	150	18	305	73	232	165	125	110	90	50	240	120	120	120	M14	552	276	276	590	335	430	0,084	51,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DMH 30/280.50 T	3x230 V ~	280	DN 50 - PN 10	2	1390	148	0.7	t°	75°	90°	110°	120°
				1	1340	134	0.55					
	3x400 V ~			3	1460	255	1.12	mt.	0.9	4	–	18
				2	1450	216	0.83					
				1	1350	131	0.32					

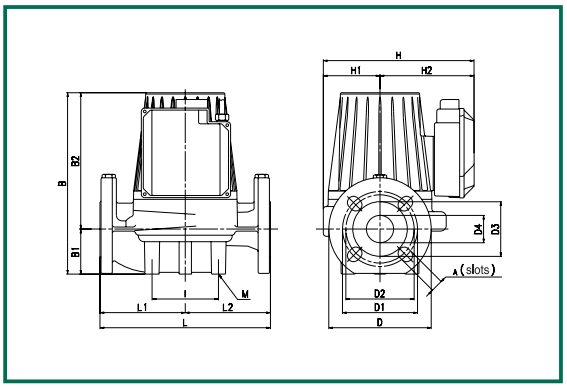
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

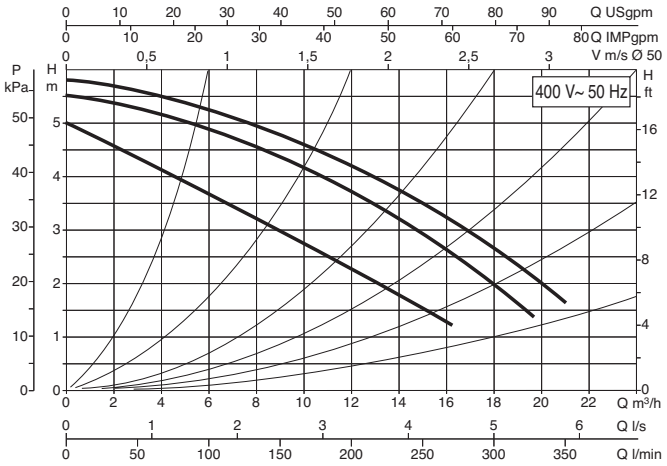
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BMH 60/280.50 T

SINGLE FLANGED - THREE-PHASE (1400 r.p.m.)





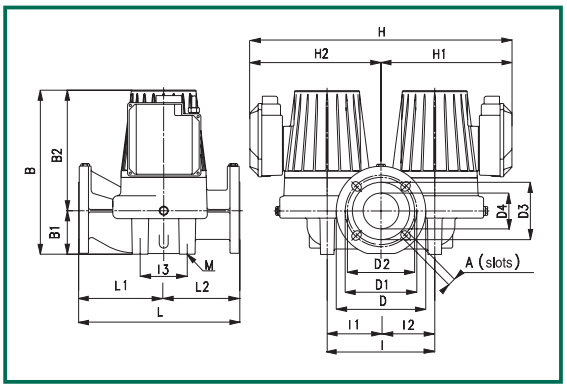
Hydraulic characteristics at 230V are shown from pages 67.

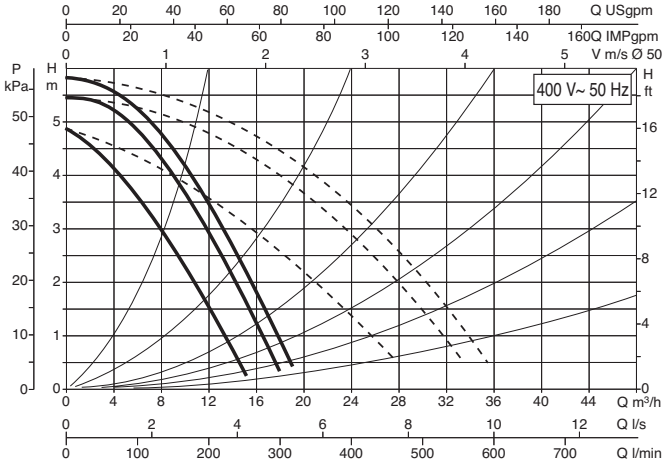
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
280	140	140	18	312	73	239	165	125	110	90	50	100	–	–	–	M10	254	96	158	360	295	320	0,033	24

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BMH 60/280.50 T	3x230 V ~	280	DN 50 - PN 10	2	1210	272	0.94	t°	75°	90°	110°	120°
				1	1120	240	0.8					
	3x400 V ~			3	1400	410	1.2	mt.	4	7.5	–	21
				2	1360	367	0.95					
				1	1130	235	0.46					

DMH 60/280.50 T

TWIN FLANGED - THREE-PHASE (1400 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
280	130	150	18	308	73	235	165	125	110	90	50	240	120	120	120	M14	556	278	278	590	335	430	0,084	44,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DMH 60/280.50 T	3x230 V ~	280	DN 50 - PN 10	2	1210	272	0.94	t°	75°	90°	110°	120°
				1	1120	240	0.8					
	3x400 V ~			3	1400	410	1.2	mt.	4	7.5	–	21
				2	1360	367	0.95					
				1	1130	235	0.46					

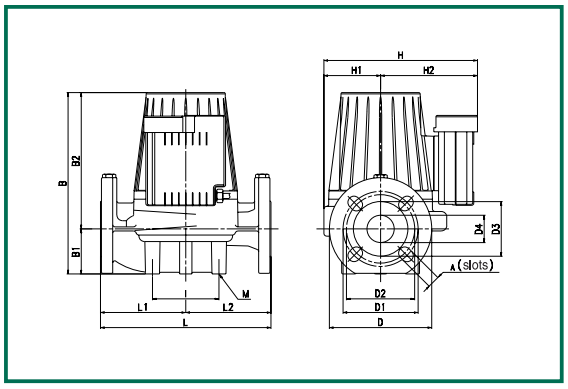
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

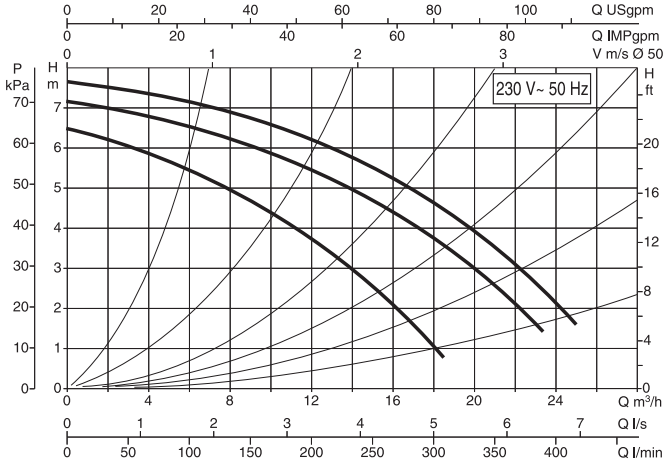
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 60/280.50 M

SINGLE FLANGED - SINGLE-PHASE (2800 r.p.m.)



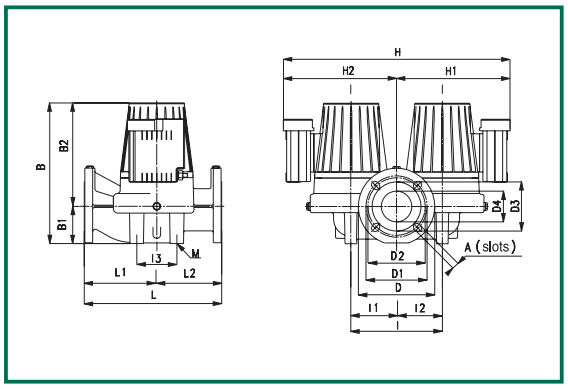


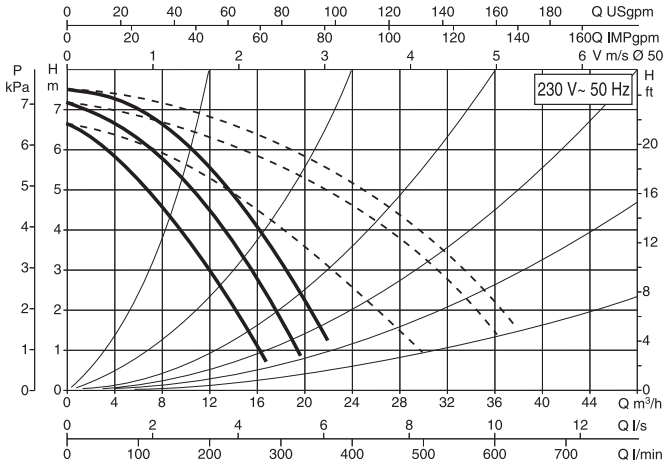
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
280	140	140	18	312	73	239	165	125	110	90	50	100	–	–	–	M10	254	156	158	360	295	320	0,033	24

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 60/280.50 M	–	280	DN 50 - PN 10	–	–	–	–	t°	75°	90°	110°	120°
	1x230 V ~			3	2840	595	2.79	mt.	1.6	6	14	–
				2	2730	540	2.45					
				1	2200	506	2.58					

DPH 60/280.50 M

TWIN FLANGED - SINGLE-PHASE (2800 r.p.m.)





L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
280	130	150	18	308	73	235	165	125	110	90	50	240	120	120	120	M14	554	278	278	590	335	430	0,084	44,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 60/280.50 M	–	280	DN 50 - PN 10	–	–	–	–	t°	75°	90°	110°	120°
	1x230 V ~			3	2840	595	2.79	mt.	1.6	6	14	–
				2	2730	540	2.45					
				1	2200	506	2.58					

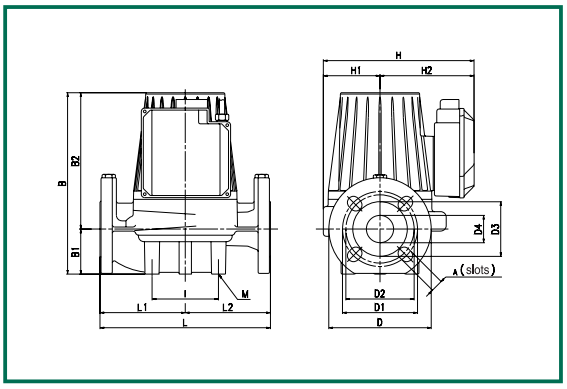
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

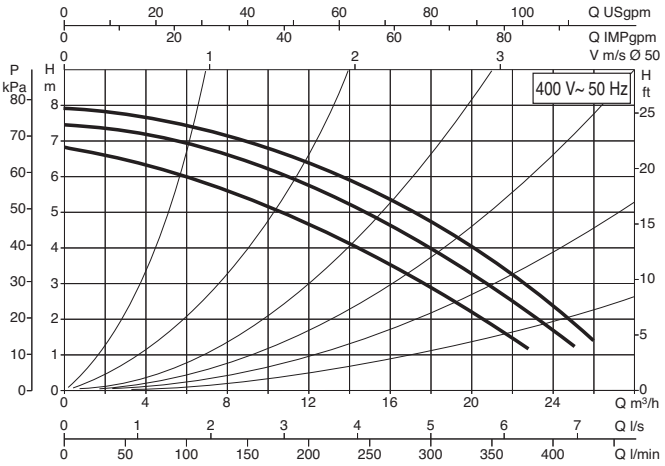
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 60/280.50 T

SINGLE FLANGED - THREE-PHASE (2800 r.p.m.)





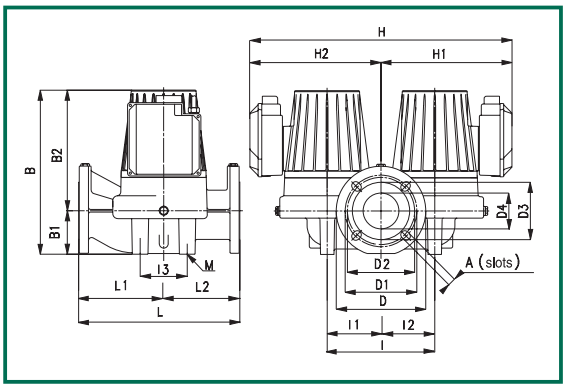
Hydraulic characteristics at 230V are shown from pages 67

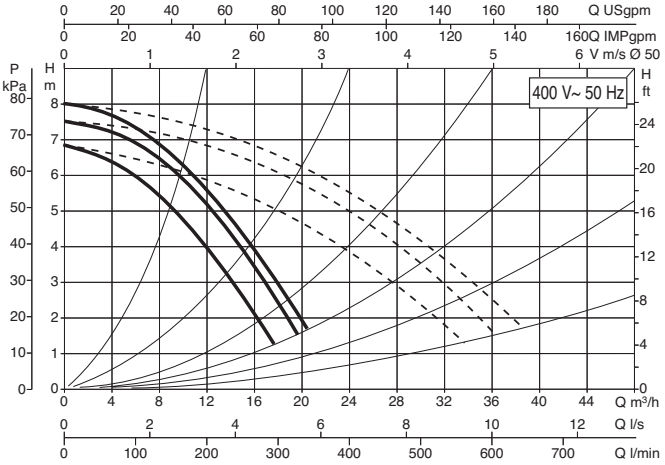
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
280	140	140	18	312	73	239	165	125	110	90	50	100	–	–	–	M10	254	156	158	360	295	320	0,033	24

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 60/280.50 T	3x230 V ~	280	DN 50 - PN 10	2	2670	464	1.35	t°	75°	90°	110°	120°
				1	2570	432	1.23					
	3x400 V ~			3	2890	589	1.31					
				2	2860	546	1.1	mt.	1.6	6	–	19
				1	2570	423	0.71					

DPH 60/280.50 T

TWIN FLANGED - THREE-PHASE (2800 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
280	130	150	18	308	73	235	165	125	110	90	50	240	120	120	120	M14	554	278	278	590	335	430	0,084	44,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 60/280.50 T	3x230 V ~	280	DN 50 - PN 10	2	2670	464	1.35	t°	75°	90°	110°	120°
				1	2570	432	1.23					
	3x400 V ~			3	2890	589	1.31					
				2	2860	546	1.1	mt.	1.6	6	–	19
				1	2570	423	0.71					

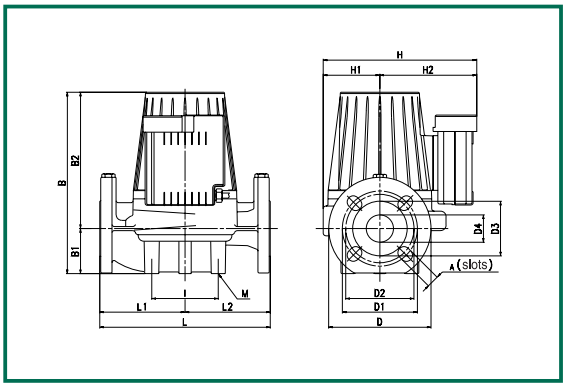
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

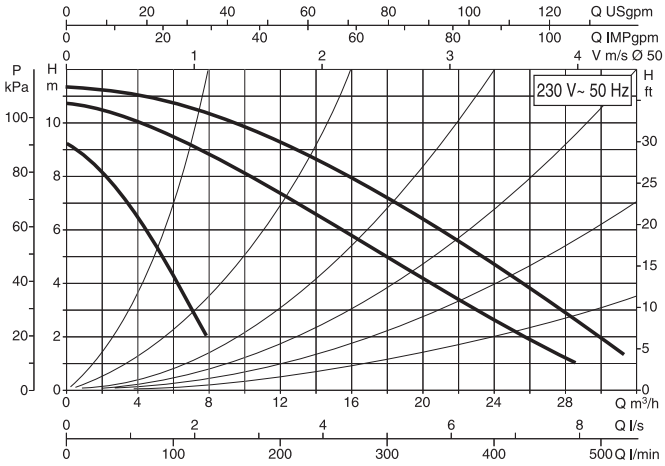
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 120/280.50 M

SINGLE FLANGED - SINGLE-PHASE (2800 r.p.m.)



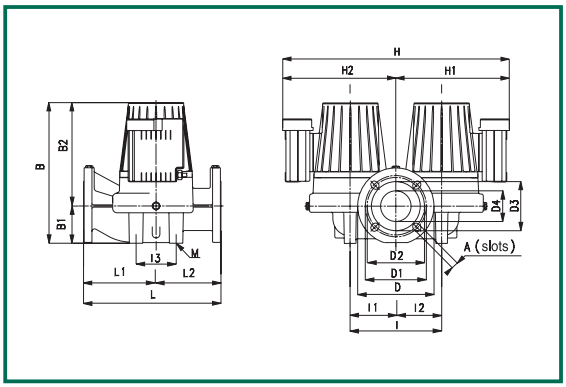


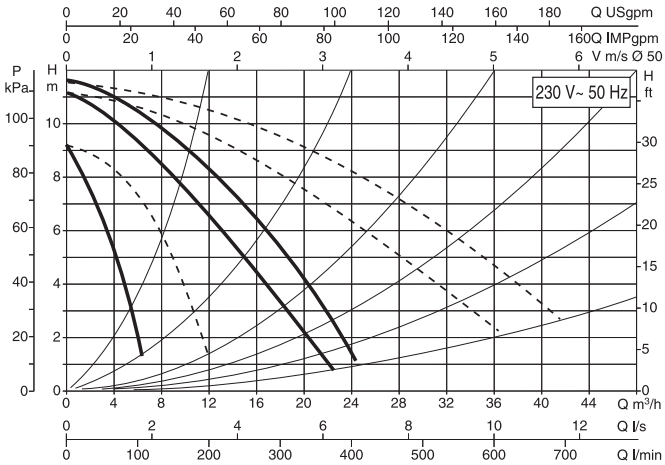
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
280	140	140	18	312	73	239	165	125	110	90	50	100	–	–	–	M10	254	96	158	360	295	320	0,033	24

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 120/280.50 M	–	280	DN 50 - PN 10	–	–	–	–	t°	75°	90°	110°	120°
	1x230 V ~			3	2690	870	3,97	mt.	2	5	–	20
				2	2360	800	3,69					
				1	1340	590	3,12					

DPH 120/280.50 M

TWIN FLANGED - SINGLE-PHASE (2800 r.p.m.)





L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
280	130	150	18	308	73	235	165	125	110	90	50	240	120	120	120	M14	556	278	278	590	335	430	0,084	44,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 120/280.50 M	–	280	DN 50 - PN 10	–	–	–	–	t°	75°	90°	110°	120°
	1x230 V ~			3	2690	870	3,97	mt.	2	5	–	20
				2	2360	800	3,69					
				1	1340	590	3,12					

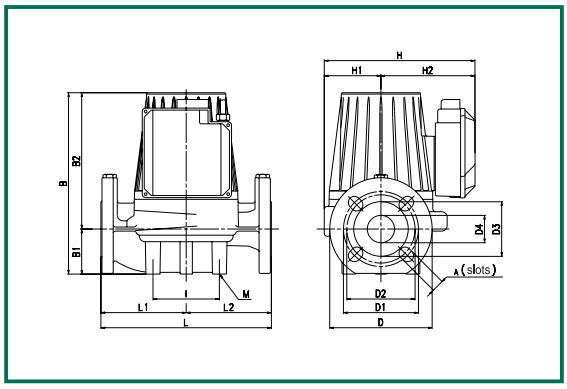
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

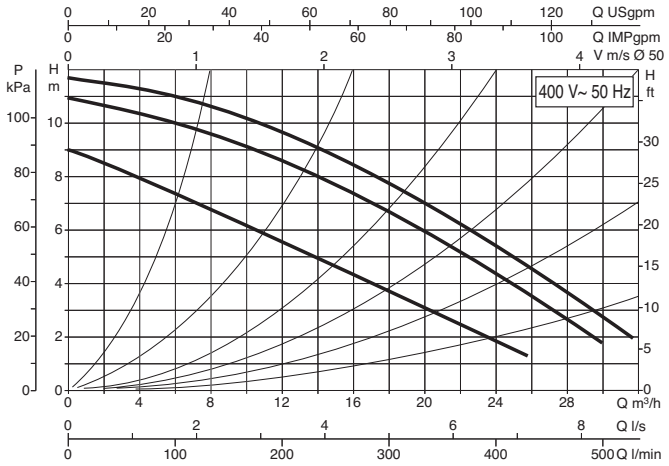
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 120/280.50 T

SINGLE FLANGED - THREE-PHASE (2800 r.p.m.)





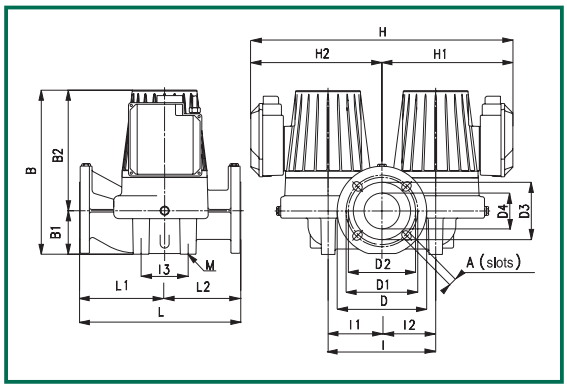
Hydraulic characteristics at 230V are shown from pages 67.

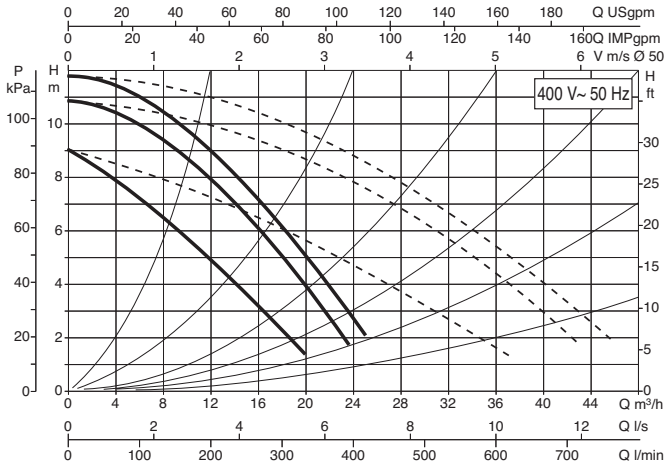
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
280	140	140	18	312	73	239	165	125	110	90	50	100	–	–	–	M10	254	96	158	360	295	320	0,033	26

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE t°	75°	90°	110°	120°
BPH 120/280.50 T	3x230 V ~	280	DN 50 - PN 10	2	2430	683	1.95					
				1	2240	605	1.75					
	3x400 V ~			3	2810	898	1.67					
				2	2740	840	1.47	mt.	2	5	–	20
				1	2260	603	1					

DPH 120/280.50 T

TWIN FLANGED - THREE-PHASE (2800 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
280	130	150	18	308	73	235	165	125	110	90	50	240	120	120	120	M14	556	278	278	590	335	430	0,084	49

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE t°	75°	90°	110°	120°
DPH 120/280.50 T	3x230 V ~	280	DN 50 - PN 10	2	2430	683	1.95					
				1	2240	605	1.75					
	3x400 V ~			3	2810	898	1.67					
				2	2740	840	1.47	mt.	2	5	–	20
				1	2260	603	1					

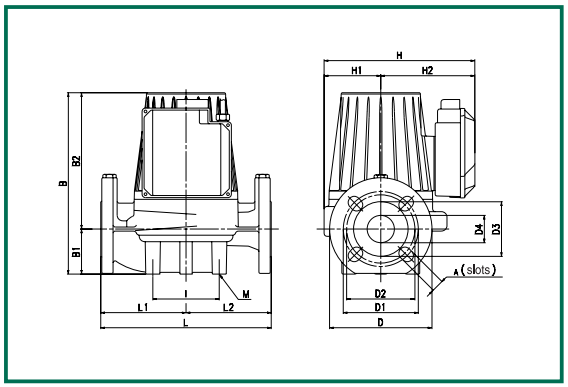
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

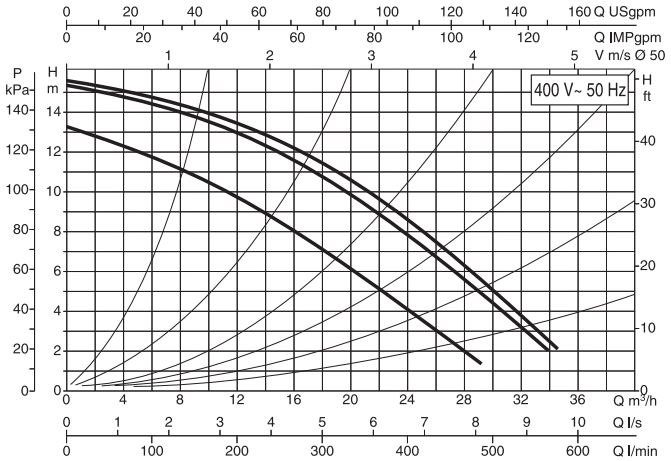
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 150/280.50 T

SINGLE FLANGED - THREE-PHASE (2800 r.p.m.)





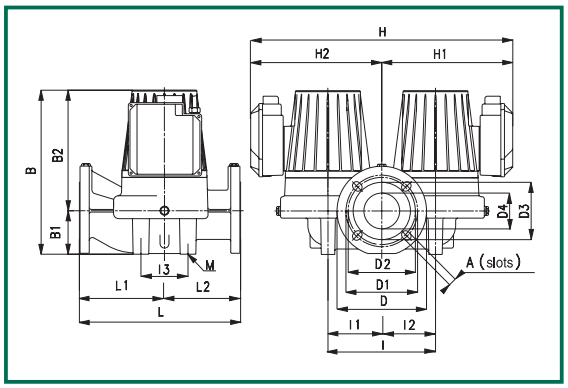
Hydraulic characteristics at 230V are shown from pages 67.

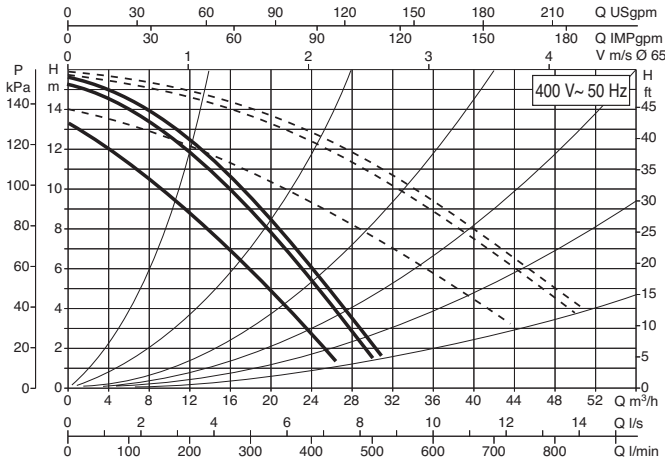
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
280	140	140	18	362	73	289	165	125	110	90	50	100	–	–	–	M10	254	96	158	360	295	320	0,033	26

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 150/280.50 T	3x230 V ~	280	DN 50 - PN 10	2	2553	1130	3.22	t°	75°	90°	110°	120°
				1	2420	1032	3					
	3x400 V ~			3	2850	1470	2.9					
				2	2802	1360	2.5	mt.	2	5	–	20
				1	2425	1030	1.7					

DPH 150/280.50 T

TWIN FLANGED - THREE-PHASE (2800 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
280	130	150	18	358	73	285	165	125	110	90	50	240	120	120	120	M14	556	278	278	590	335	430	0,084	49

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 150/280.50 T	3x230 V ~	280	DN 50 - PN 10	2	2553	1130	3.22	t°	75°	90°	110°	120°
				1	2420	1032	3					
	3x400 V ~			3	2850	1470	2.9					
				2	2802	1360	2.5	mt.	2	5	–	20
				1	2425	1030	1.7					

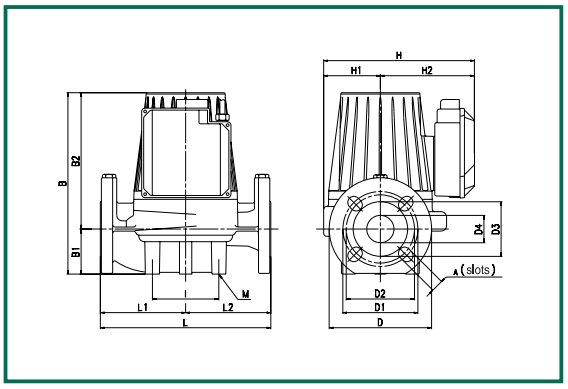
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

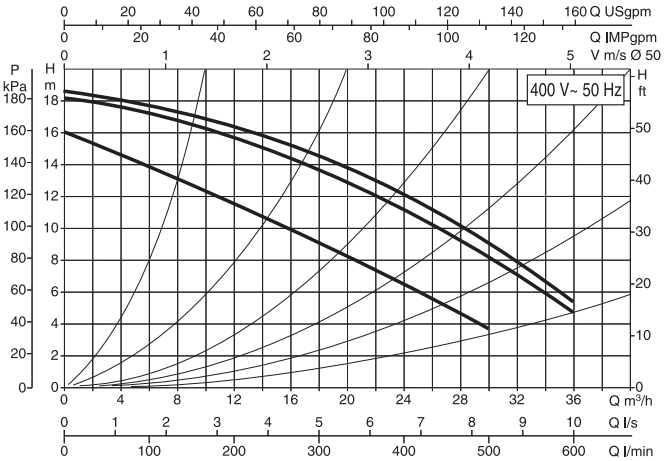
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 180/280.50 T

SINGLE FLANGED - THREE-PHASE (2800 r.p.m.)





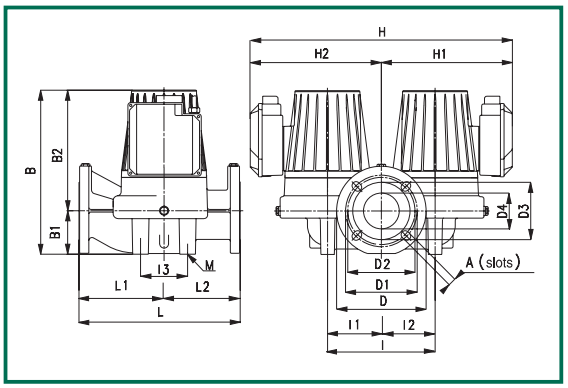
Hydraulic characteristics at 230V are shown from pages 67.

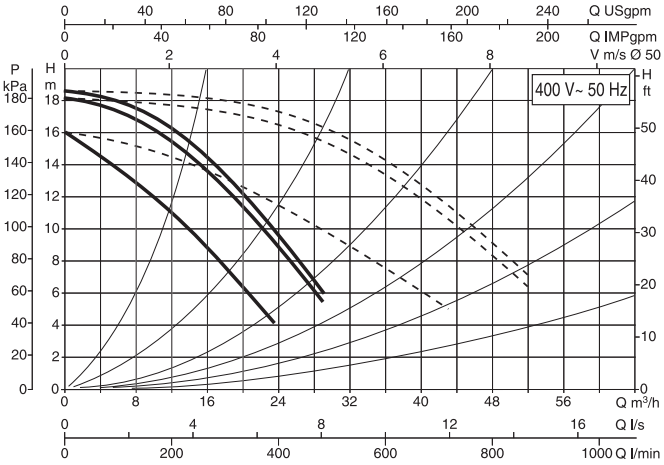
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
280	140	140	18	362	73	289	165	125	110	90	50	100	–	–	–	M10	254	96	158	360	295	320	0,033	26

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 180/280.50 T	3x230 V ~	280	DN 50 - PN 10	2	2520	1230	3,5	t°	75°	90°	110°	120°
				1	2340	1120	3,2					
	3x400 V ~			3	2830	1630	3	mt.	2	5	–	20
				2	2780	1540	2,70					
				1	2360	1130	1,85					

DPH 180/280.50 T

TWIN FLANGED - THREE-PHASE (2800 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
280	130	150	18	358	73	285	165	125	110	90	50	240	120	120	120	M14	556	278	278	590	335	430	0,084	49

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 180/280.50 T	3x230 V ~	280	DN 50 - PN 10	2	2520	1230	3,5	t°	75°	90°	110°	120°
				1	2340	1120	3,2					
	3x400 V ~			3	2830	1630	3	mt.	2	5	–	20
				2	2780	1540	2,70					
				1	2360	1130	1,85					

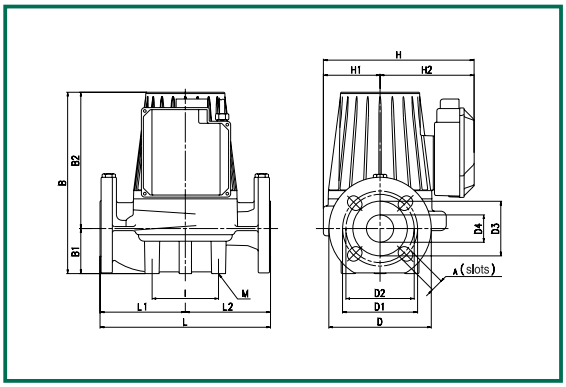
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

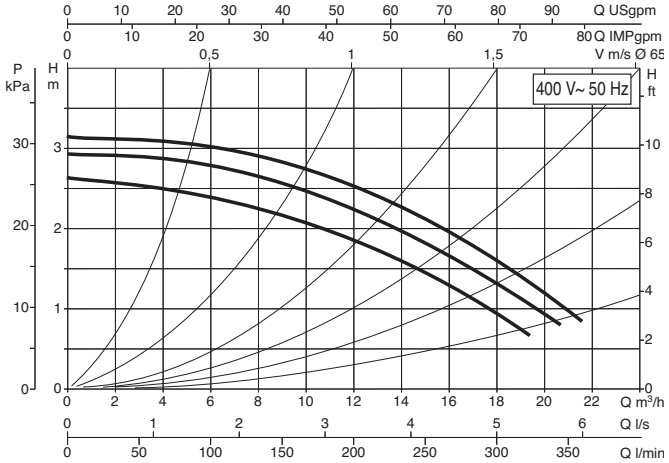
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BMH 30/340.65 T

SINGLE FLANGED - THREE-PHASE (1400 r.p.m.)





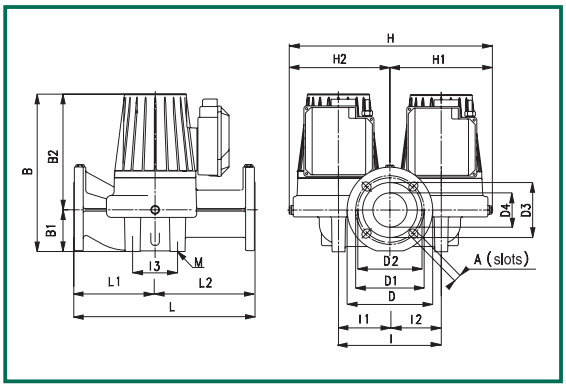
Hydraulic characteristics at 230V are shown from pages 67.

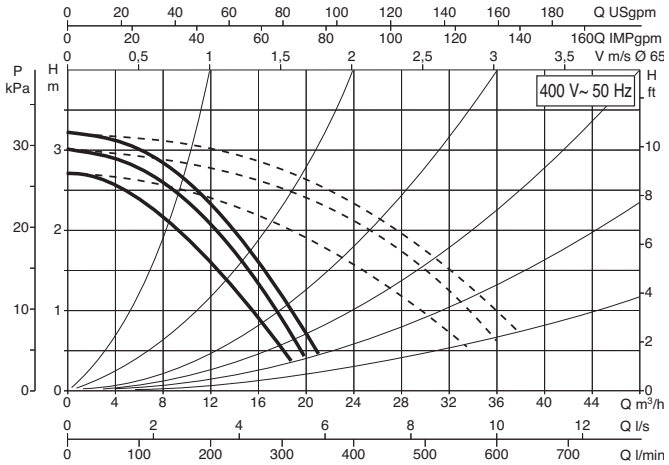
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
340	170	170	18	334	82	252	185	145	130	110	65	100	–	–	–	M12	259	100	159	435	295	400	0,051	27,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BMH 30/340.65 T	3x230 V ~	340	DN 65 - PN 10	2	1360	170	0.73	t°	75°	90°	110°	120°
				1	1310	154	0.60					
	3x400 V ~			3	1450	270	1.12	mt.	4	7.5	–	21
				2	1430	233	0.84					
				1	1310	150	0.35					

DMH 30/340.65 T

TWIN FLANGED - THREE-PHASE (1400 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
340	138,5	201,5	18	328	82	246	185	145	130	110	65	240	120	120	140	M14	476	238	238	590	420	505	0,125	57

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DMH 30/340.65 T	3x230 V ~	340	DN 65 - PN 10	2	1360	170	0.73	t°	75°	90°	110°	120°
				1	1310	154	0.60					
	3x400 V ~			3	1450	270	1.12	mt.	4	7.5	---	21
				2	1430	233	0.84					
				1	1310	150	0.35					

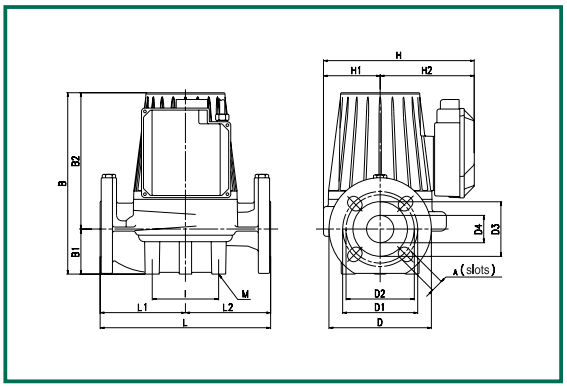
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

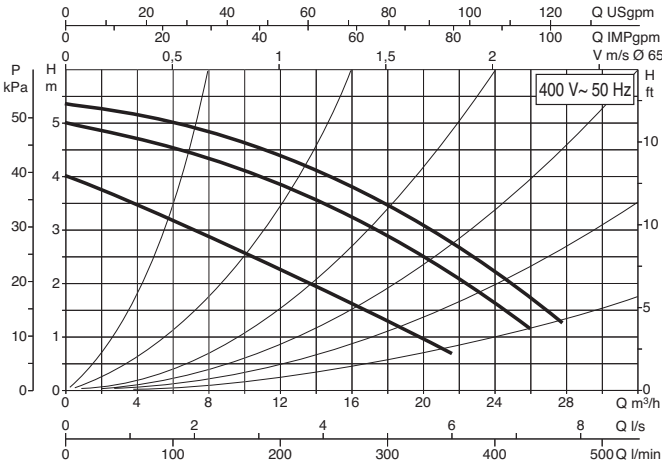
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BMH 60/340.65 T

SINGLE FLANGED - THREE-PHASE (1400 r.p.m.)





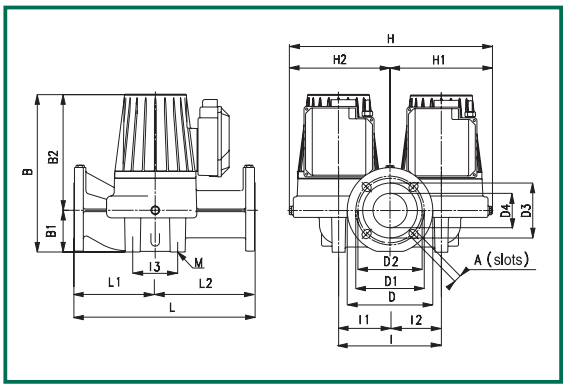
Hydraulic characteristics at 230V are shown from pages 67.

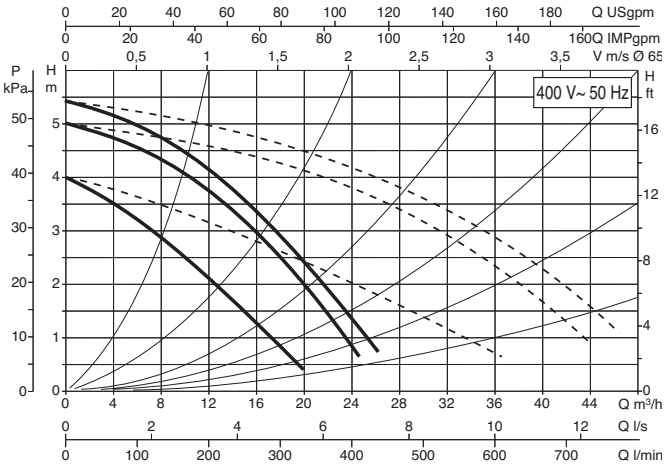
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
340	170	170	18	334	82	252	185	145	130	110	65	100	–	–	–	M12	259	100	159	435	295	400	0,051	27,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BMH 60/340.65 T	3x230 V ~	340	DN 65 - PN 10	2	1170	295	1	t°	75°	90°	110°	120°
				1	1070	257	0.85					
	3x400 V ~			3	1380	445	1.2	mt.	4	7.5	–	21
				2	1350	403	0.97					
				1	1090	255	0.49					

DMH 60/340.65 T

TWIN FLANGED - THREE-PHASE (1400 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
340	138,5	201,5	18	331	82	249	185	145	130	110	65	240	120	120	140	M14	476	238	238	590	420	505	0,125	50

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DMH 60/340.65 T	3x230 V ~	340	DN 65 - PN 10	2	1170	295	1	t°	75°	90°	110°	120°
				1	1070	257	0.85					
	3x400 V ~			3	1380	445	1.2	mt.	4	7.5	–	21
				2	1350	403	0.97					
				1	1090	255	0.49					

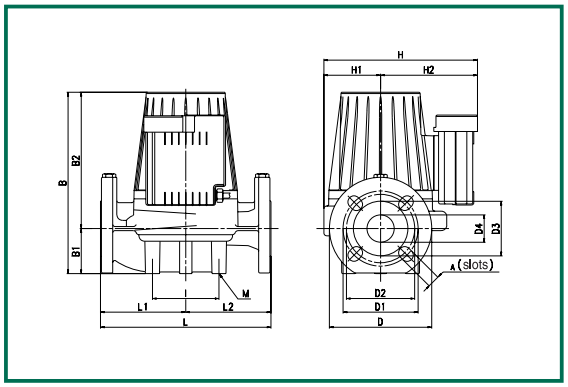
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

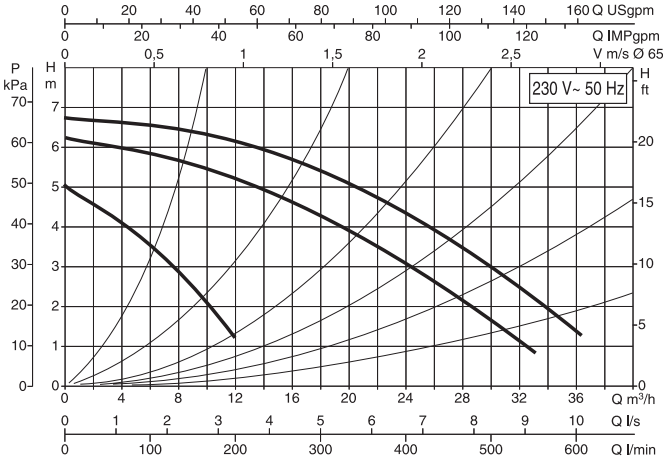
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 60/340.65 M

SINGLE FLANGED - SINGLE-PHASE (2800 r.p.m.)



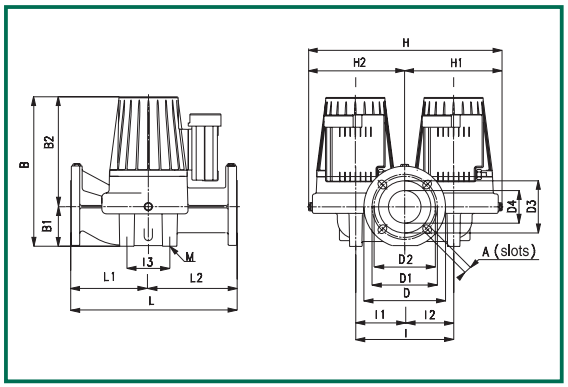


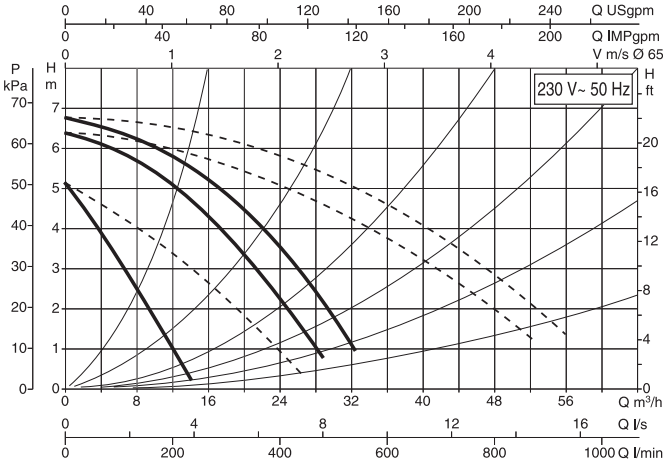
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
340	170	170	18	334	82	252	185	145	130	110	65	100	–	–	–	M12	259	100	159	435	295	400	0,051	27,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 60/340.65 M	–	340	DN 65 - PN 10	–	–	–	–	t°	75°	90°	110°	120°
	1x230 V ~			3	2780	735	3.37	mt.	1	4	13	–
				2	2580	685	3.13					
				1	1460	564	3.12					

DPH 60/340.65 M

TWIN FLANGED - SINGLE-PHASE (2800 r.p.m.)





L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
340	138,5	201,5	18	331	82	249	185	145	130	110	65	240	120	120	140	M14	476	238	238	590	420	505	0,125	50

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 60/340.65 M	–	340	DN 65 - PN 10	–	–	–	–	t°	75°	90°	110°	120°
	1x230 V ~			3	2780	735	3.37	mt.	1	4	13	–
				2	2580	685	3.13					
				1	1460	564	3.12					

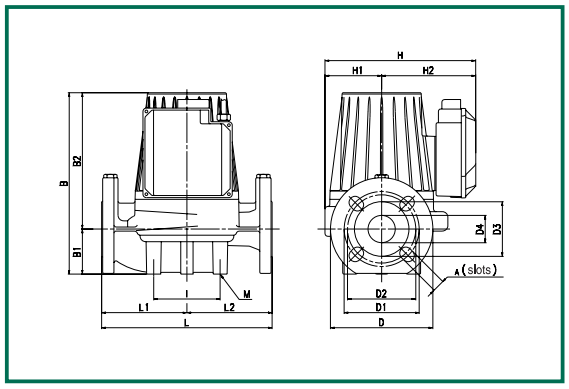
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

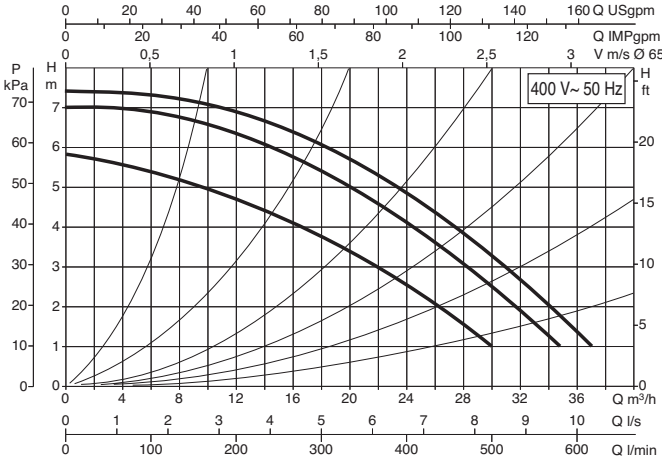
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 60/340.65 T

SINGLE FLANGED - THREE-PHASE (2800 r.p.m.)





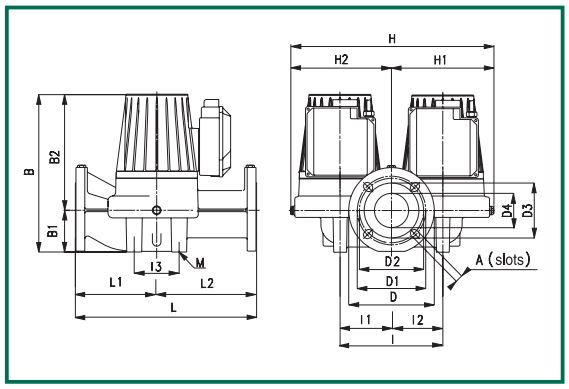
Hydraulic characteristics at 230V are shown from pages 67.

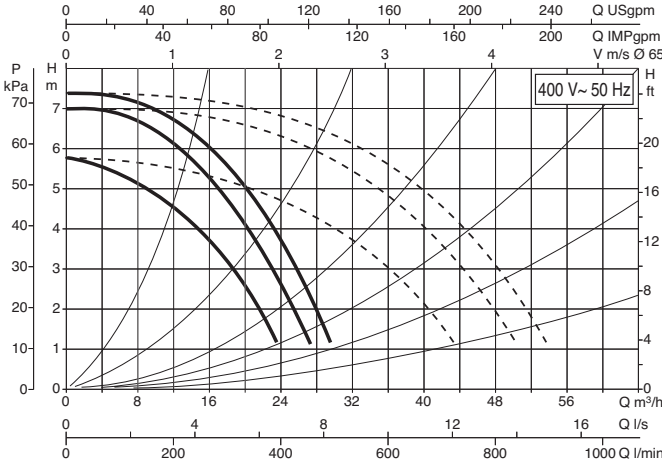
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
340	170	170	18	334	82	252	185	145	130	110	65	100	–	–	–	M12	259	100	159	435	295	400	0,051	30,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 60/340.65 T	3x230 V ~	340	DN 65 - PN 10	2	2550	582	1.67	t°	75°	90°	110°	120°
				1	2380	532	1.53					
	3x400 V ~			3	2850	756	1.5					
				2	2800	705	1.3	mt.	1	4	–	18
				1	2400	535	0.9					

DPH 60/340.65 T

TWIN FLANGED - THREE-PHASE (2800 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
340	138,5	201,5	18	331	82	249	185	145	130	110	65	240	120	120	140	M14	476	238	238	590	420	505	0,125	54,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 60/340.65 T	3x230 V ~	340	DN 65 - PN 10	2	2550	582	1.67	t°	75°	90°	110°	120°
				1	2380	532	1.53					
	3x400 V ~			3	2850	756	1.5					
				2	2800	705	1.3	mt.	1	4	–	18
				1	2400	535	0.9					

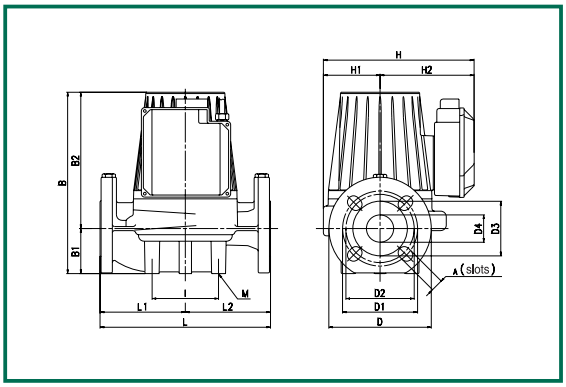
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

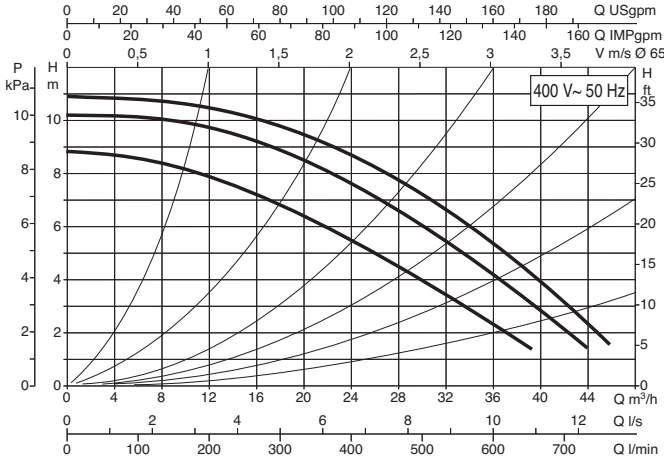
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 120/340.65 T

SINGLE FLANGED - THREE-PHASE (2800 r.p.m.)





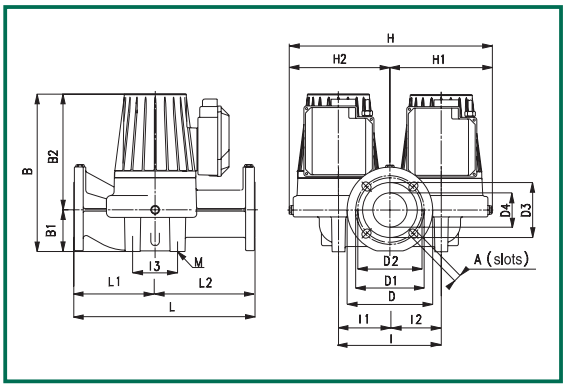
Hydraulic characteristics at 230V are shown from pages 67.

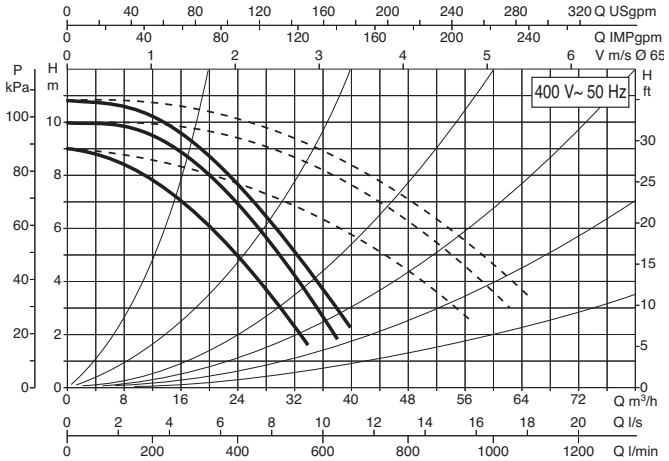
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
340	170	170	18	384	82	302	185	145	130	110	65	100	–	–	–	M12	259	100	159	435	295	400	0,051	32,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 120/340.65 T	3x230 V ~	340	DN 65 - PN 10	2	2630	1001	2.85	t°	75°	90°	110°	120°
				1	2500	940	2.66					
	3x400 V ~			3	2880	1275	2.64	mt.	6	9	–	22
				2	2830	1200	2.25					
				1	2520	934	1.52					

DPH 120/340.65 T

TWIN FLANGED - THREE-PHASE (2800 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
340	138,5	201,5	18	381	82	299	185	145	130	110	65	240	120	120	140	M14	476	238	238	590	420	505	0,125	59

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	FLANGES ON REQUEST	ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 120/340.65 T	3x230 V ~	340	DN 65 - PN 10	2	2630	-1001	2.85	t°	75°	90°	110°	120°
				1	2500	940	2.66					
	3x400 V ~			3	2880	1275	2.64	mt.	6	9	–	22
				2	2830	1200	2.25					
				1	2520	934	1.52					

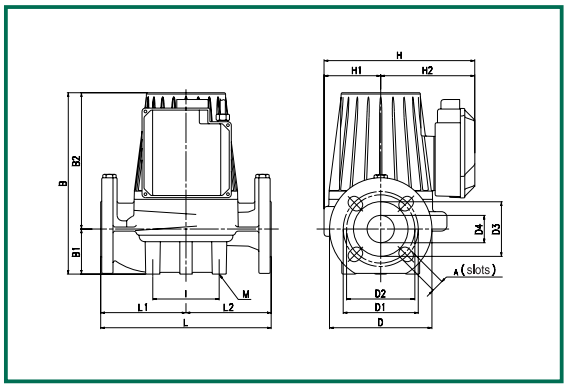
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

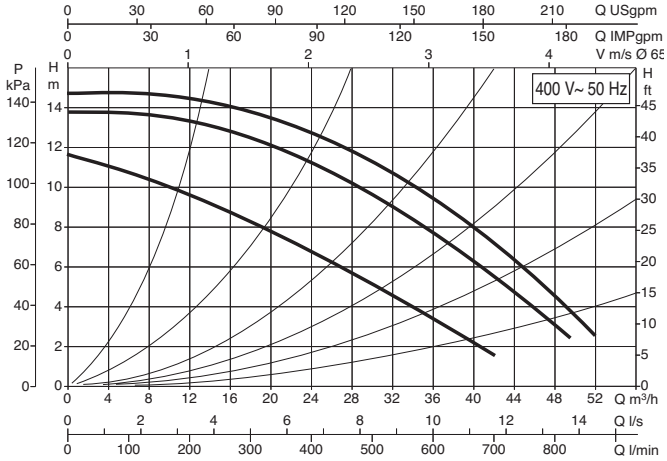
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 150/340.65 T

SINGLE FLANGED - THREE-PHASE (2800 r.p.m.)





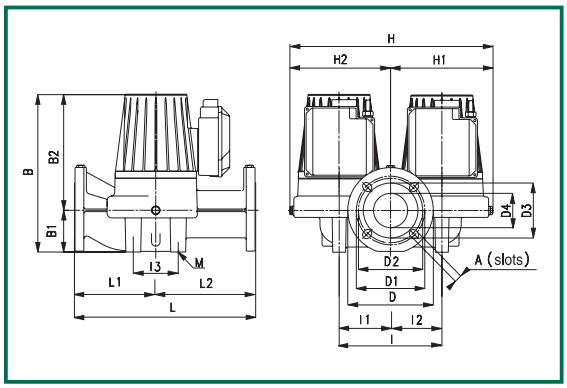
Hydraulic characteristics at 230V are shown from pages 67.

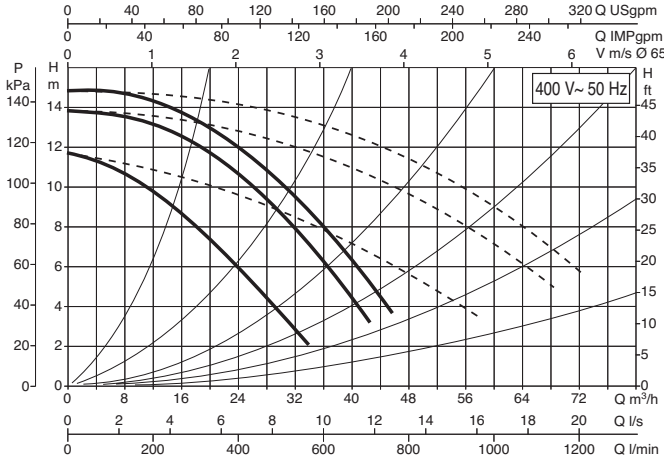
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
340	170	170	18	384	82	302	185	145	130	110	65	100	–	–	–	M12	259	100	159	435	295	400	0,051	32,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 150/340.65 T	3x230 V ~	340	DN 65 - PN 10	2	2410	1345	3.8	t°	75°	90°	110°	120°
				1	2250	1188	3.36					
	3x400 V ~			3	2800	1796	3.25	mt.	7	11	18	–
				2	2730	1690	2.93					
				1	2250	1210	2					

DPH 150/340.65 T

TWIN FLANGED - THREE-PHASE (2800 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
340	138,5	201,5	18	381	82	299	185	145	130	110	65	240	120	120	140	M14	476	238	238	590	420	505	0,125	59

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 150/340.65 T	3x230 V ~	340	DN 65 - PN 10	2	2410	1345	3.8	t°	75°	90°	110°	120°
				1	2250	1188	3.36					
	3x400 V ~			3	2800	1796	3.25	mt.	7	11	18	–
				2	2730	1690	2.93					
				1	2250	1210	2					

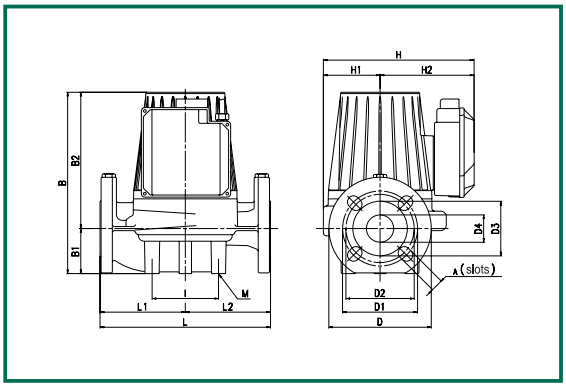
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

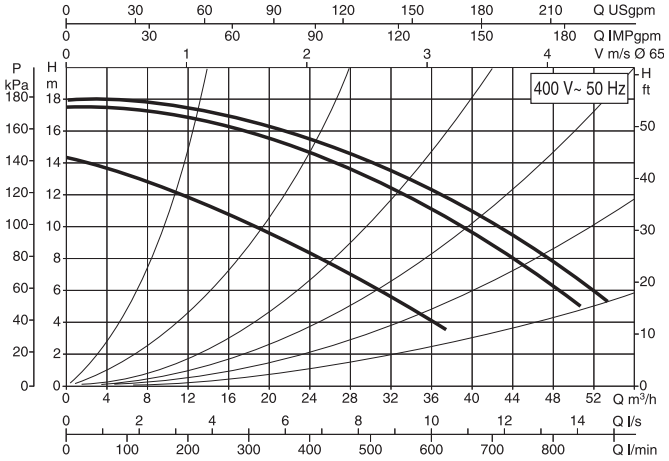
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 180/340.65 T

SINGLE FLANGED - THREE-PHASE (2800 r.p.m.)





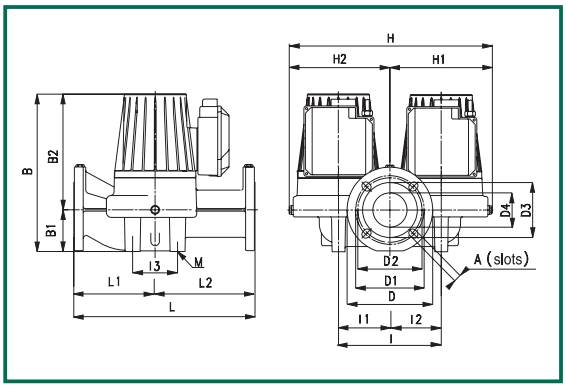
Hydraulic characteristics at 230V are shown from pages 67.

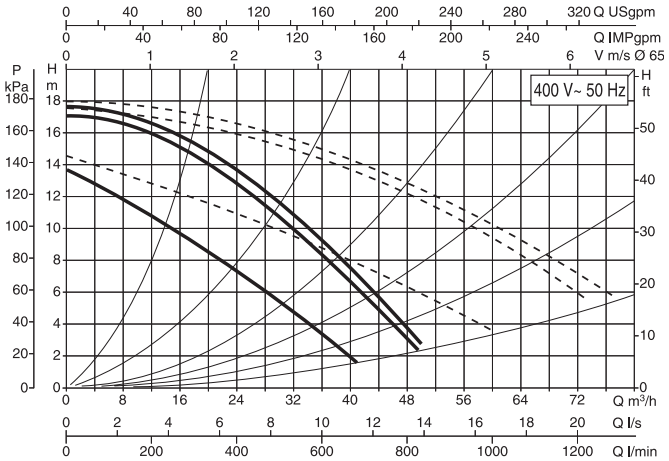
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
340	170	170	18	384	82	302	185	145	130	110	65	100	–	–	–	M12	259	100	159	435	295	400	0,051	32,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 180/340.65 T	3x230 V ~	340	DN 65 - PN 10	2	2380	1670	4,7	t°	75°	90°	110°	120°
				1	2170	1490	4,25					
	3x400 V ~			3	2780	2310	4	mt.	7	11	18	–
				2	2700	2210	3,5					
				1	2200	1490	2,4					

DPH 180/340.65 T

TWIN FLANGED - THREE-PHASE (2800 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
340	138,5	201,5	18	381	82	299	185	145	130	110	65	240	120	120	140	M14	476	238	238	590	420	505	0,125	59

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 180/340.65 T	3x230 V ~	340	DN 65 - PN 10	2	2380	1670	4,7	t°	75°	90°	110°	120°
				1	2170	1490	4,25					
	3x400 V ~			3	2780	2310	4	mt.	7	11	18	–
				2	2700	2210	3,5					
				1	2200	1490	2,4					

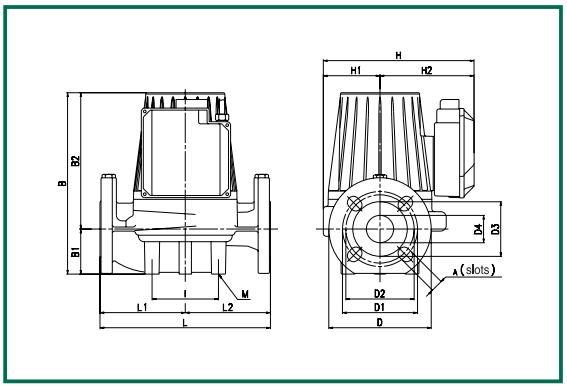
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

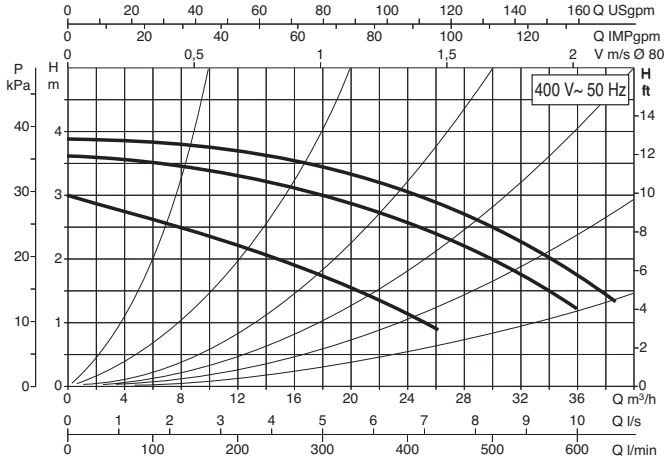
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BMH 30/360.80 T

SINGLE FLANGED - THREE-PHASE (1400 r.p.m.)





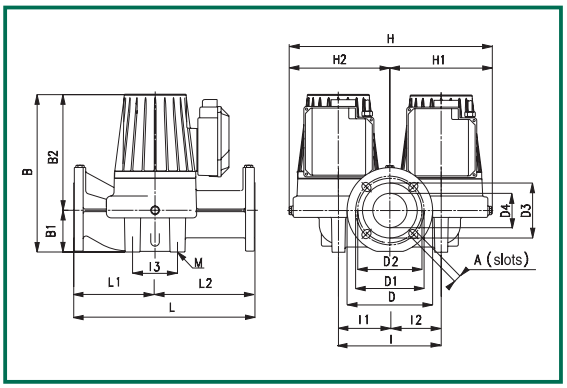
Hydraulic characteristics at 230V are shown from pages 67.

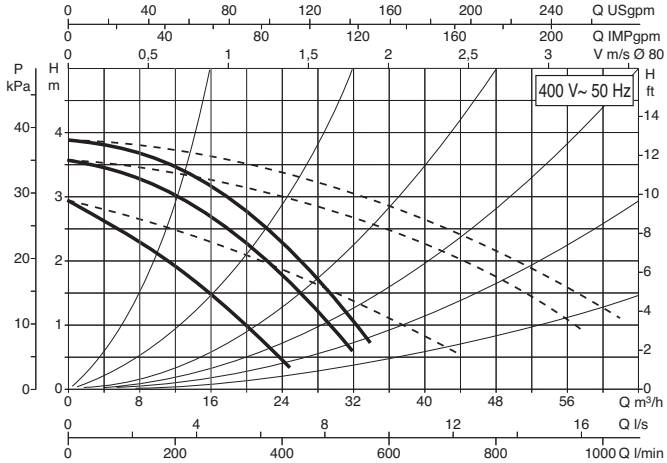
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
360	170	190	18	354	97	254	200	160	150	130	80	115	–	–	–	M12	297	100	159	435	295	400	0,051	31

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE
BMH 30/360.80 T	3x230 V ~	360	DN 80 - PN 10	2	1110	313	1.05	t° 75° 90° 110° 120°
				1	1010	268	0.88	
	3x400 V ~			3	1370	484	1.23	mt. 4 7.5 – 21
				2	1330	437	1	
				1	1030	266	0.51	

DMH 30/360.80 T

TWIN FLANGED - THREE-PHASE (1400 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
360	160	200	18	345	97	248	200	160	150	130	80	240	120	120	150	M14	480	240	240	590	420	505	0,125	54,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE
DMH 30/360.80 T	3x230 V ~	360	DN 80 - PN 10	2	1110	313	1.05	t° 75° 90° 110° 120°
				1	1010	268	0.88	
	3x400 V ~			3	1370	484	1.23	mt. 4 7.5 – 21
				2	1330	437	1	
				1	1030	266	0.51	

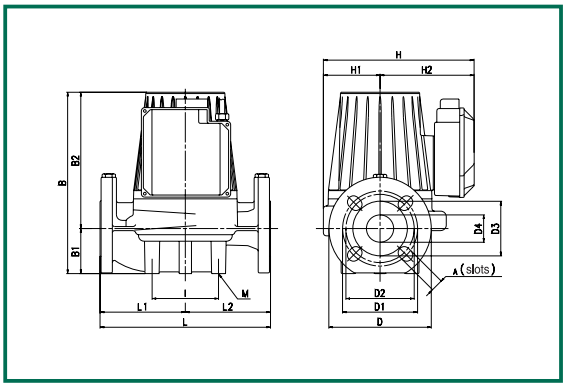
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

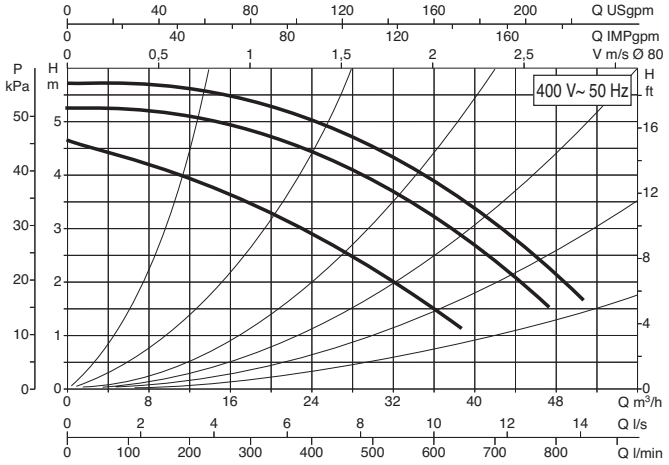
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BMH 60/360.80 T

SINGLE FLANGED - THREE-PHASE (1400 r.p.m.)





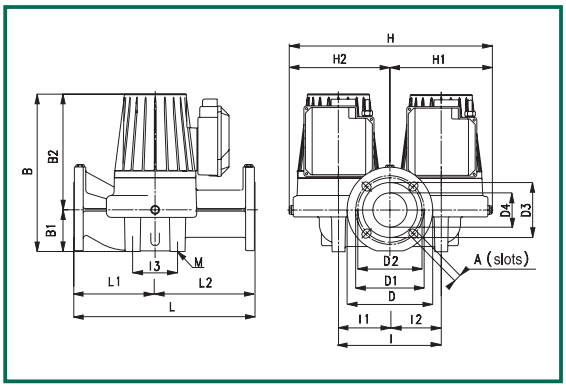
Hydraulic characteristics at 230V are shown from pages 67.

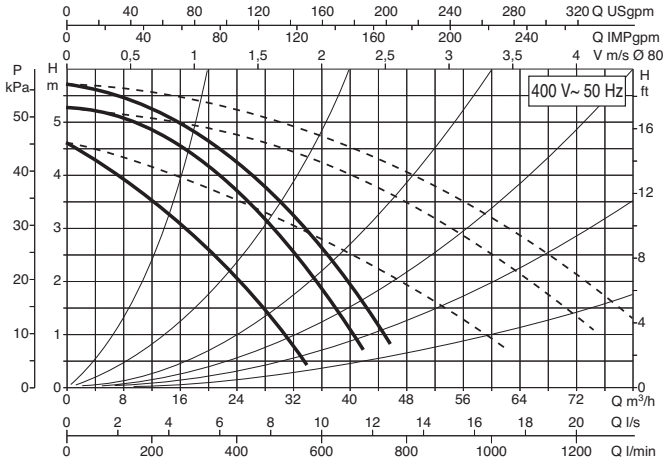
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
360	170	190	18	404	97	307	200	160	150	130	80	115	–	–	–	M12	259	100	159	435	295	400	0,051	40

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BMH 60/360.80 T	3x230 V ~	360	DN 80 - PN 10	2	1180	535	1.82	t°	75°	90°	110°	120°
				1	1100	465	1.55					
	3x400 V ~			3	1390	763	2.04	mt.	2	5	–	20
				2	1350	663	1.65					
				1	1100	465	0.89					

DMH 60/360.80 T

TWIN FLANGED - THREE-PHASE (1400 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
360	160	200	18	390	97	298	200	160	150	130	80	240	120	120	150	M14	480	240	240	590	420	505	0,125	72

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DMH 60/360.80 T	3x230 V ~	360	DN 80 - PN 10	2	1180	535	1.82	t°	75°	90°	110°	120°
				1	1100	465	1.55					
	3x400 V ~			3	1390	763	2.04	mt.	2	5	–	20
				2	1350	675	1.65					
				1	1100	465	0.89					

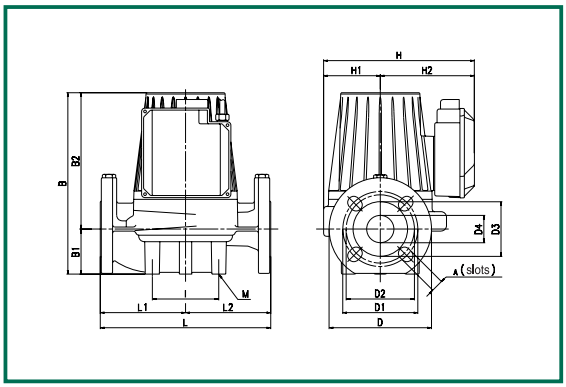
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

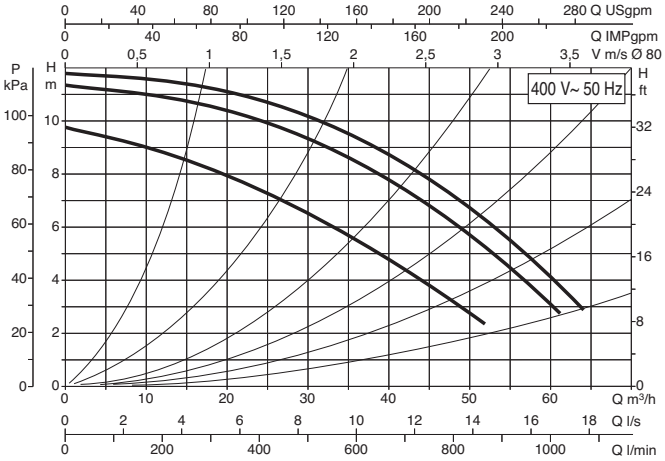
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 120/360.80 T

SINGLE FLANGED - THREE-PHASE (2800 r.p.m.)





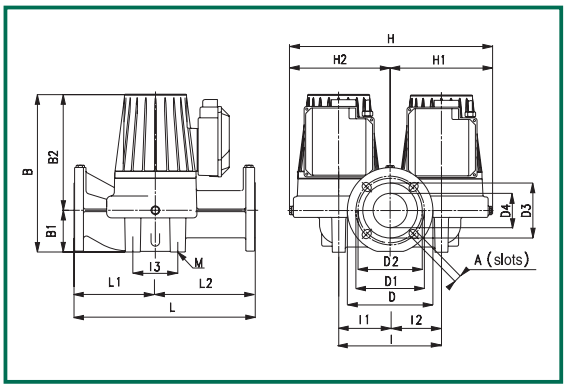
Hydraulic characteristics at 230V are shown from pages 67.

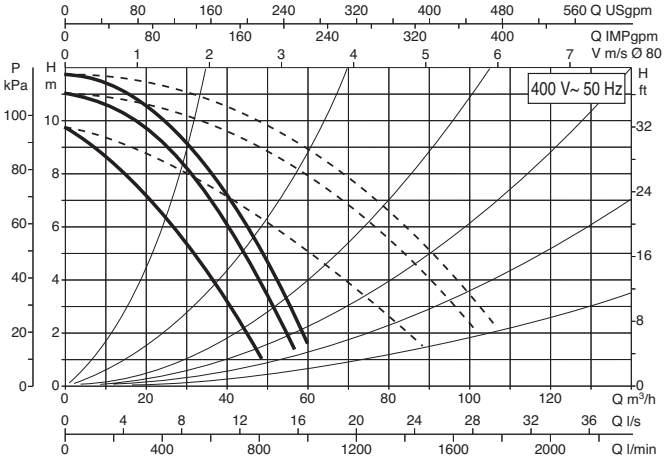
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
360	170	190	18	404	97	307	200	160	150	130	80	115	–	–	–	M12	259	100	159	435	295	400	0,051	40

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 120/360.80 T	3x230 V ~	360	DN 80 - PN 10	2	2500	1410	3.95	t°	75°	90°	110°	120°
				1	2340	1292	3.6					
	3x400 V ~			3	2830	1820	3.3	mt.	6	10	–	22
				2	2780	1710	2.93					
				1	2350	1302	2.13					

DPH 120/360.80 T

TWIN FLANGED - THREE-PHASE (2800 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
360	160	200	18	390	97	298	200	160	150	130	80	240	120	120	150	M14	480	240	240	590	420	505	0,125	72

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 120/360.80 T	3x230 V ~	360	DN 80 - PN 10	2	2500	1410	3.95	t°	75°	90°	110°	120°
				1	2340	1292	3.6					
	3x400 V ~			3	2830	1820	3.3	mt.	6	10	–	22
				2	2780	1710	2.93					
				1	2350	1302	2.13					

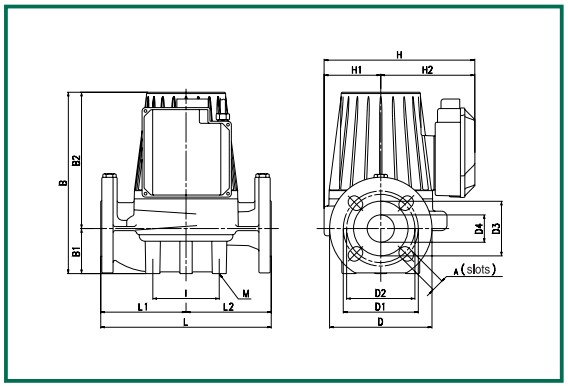
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

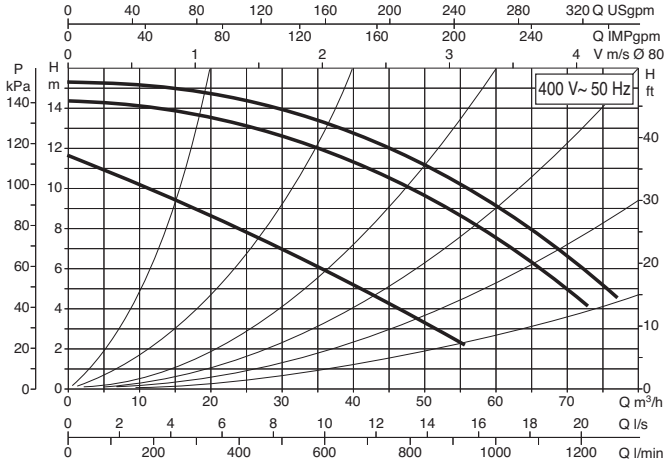
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 150/360.80 T

SINGLE FLANGED - THREE-PHASE (2800 r.p.m.)





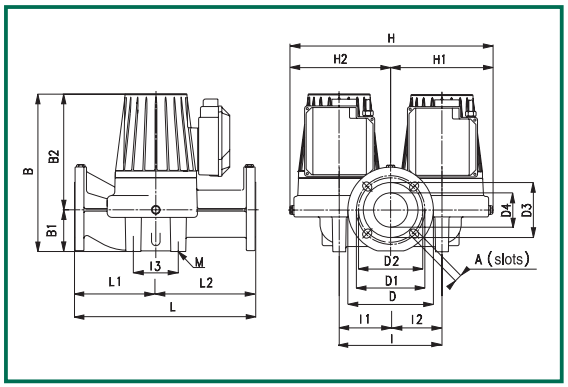
Hydraulic characteristics at 230V are shown from pages 67.

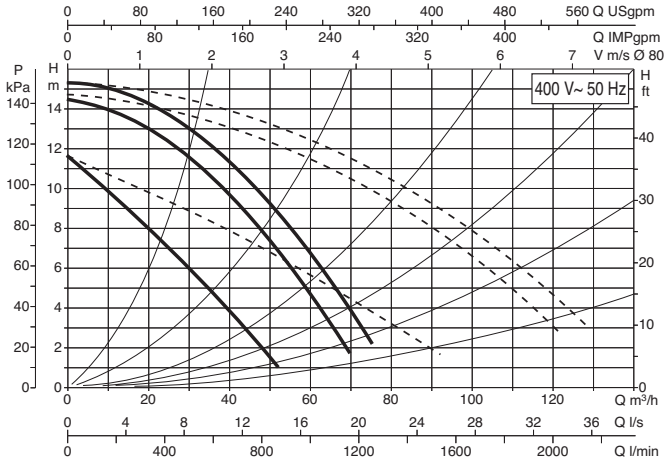
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
360	170	190	18	404	97	307	200	160	150	130	80	115	–	–	–	M12	259	100	159	435	295	400	0,051	40

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 150/360.80 T	3x230 V ~	360	DN 80 - PN 10	2	2140	1984	5.62	t°	75°	90°	110°	120°
				1	1900	1695	4.82					
	3x400 V ~			3	2710	2870	4.64	mt.	7	11	18	–
				2	2610	2686	4.32					
				1	1940	1710	2.85					

DPH 150/360.80 T

TWIN FLANGED - THREE-PHASE (2800 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
360	160	200	18	390	97	298	200	160	150	130	80	240	120	120	150	M14	480	240	240	590	420	505	0,125	72

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 150/360.80 T	3x230 V ~	360	DN 80 - PN 10	2	2140	1984	5.62	t°	75°	90°	110°	120°
				1	1900	1695	4.82					
	3x400 V ~			3	2710	2870	4.64	mt.	7	11	18	–
				2	2610	2686	4.32					
				1	1940	1710	2.85					

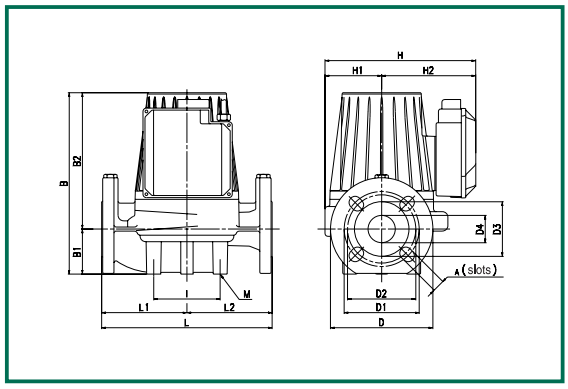
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

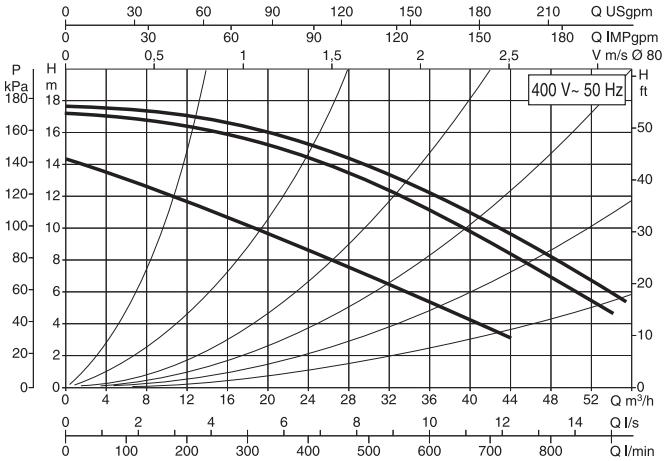
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH 180/360.80 T

SINGLE FLANGED - THREE-PHASE (2800 r.p.m.)





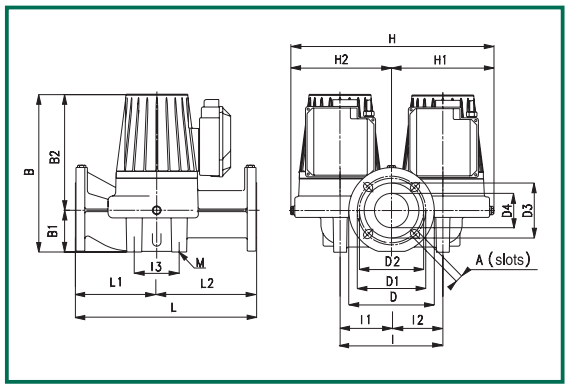
Hydraulic characteristics at 230V are shown from pages 67.

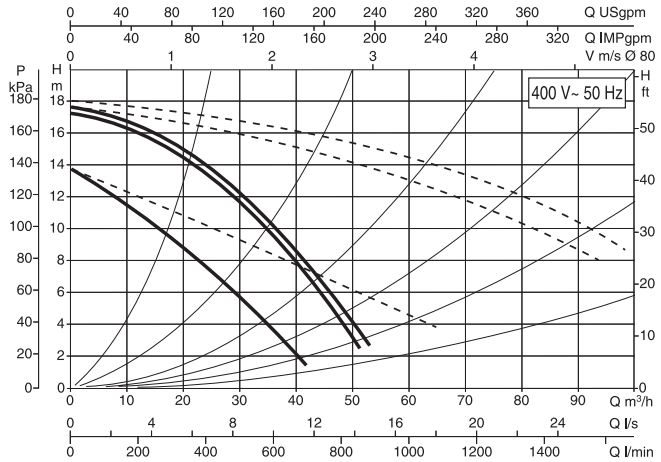
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
360	170	190	18	404	97	307	200	160	150	130	80	115	–	–	–	M12	259	100	159	435	295	400	0,051	40

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
BPH 180/360.80 T	3x230 V ~	360	DN 80 - PN 10	2	2380	1670	4,7	t°	75°	90°	110°	120°
				1	2170	1490	4,25					
	3x400 V ~			3	2780	2310	4	mt.	7	11	18	–
				2	2700	2210	3,5					
				1	2200	1490	2,4					

DPH 180/360.80 T

TWIN FLANGED - THREE-PHASE (2800 r.p.m.)





Hydraulic characteristics at 230V are shown from pages 67.

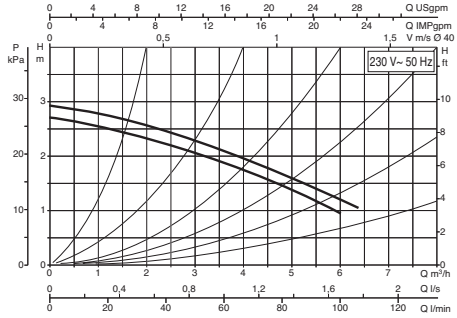
L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
360	160	200	18	390	97	298	200	160	150	130	80	240	120	120	150	M14	480	240	240	590	420	505	0,125	72

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm		ELECTRICAL DATA SPEED	N r.p.m.	P1 MAX W	In A	MINIMUM HEAD PRESSURE				
DPH 180/360.80 T	3x230 V ~	360	DN 80 - PN 10	2	2380	1670	4,7	t°	75°	90°	110°	120°
				1	2170	1490	4,25					
	3x400 V ~			3	2780	2310	4	mt.	7	11	18	–
				2	2700	2210	3,5					
				1	2200	1490	2,4					

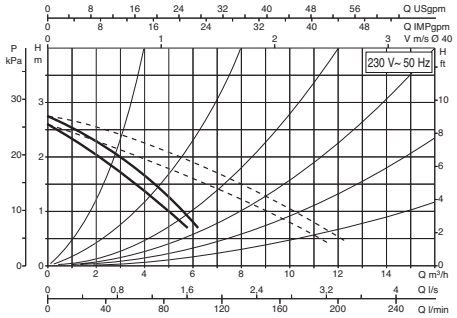
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

HYDRAULIC CHARACTERISTICS 230 V ~ 50Hz - THREE-PHASE

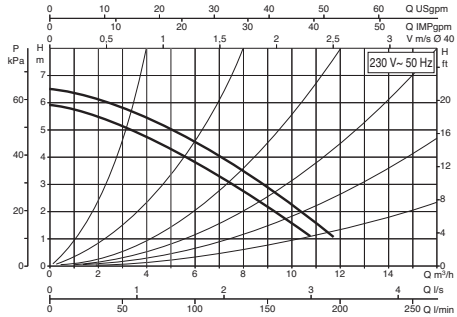
BMH 30/250.40 T



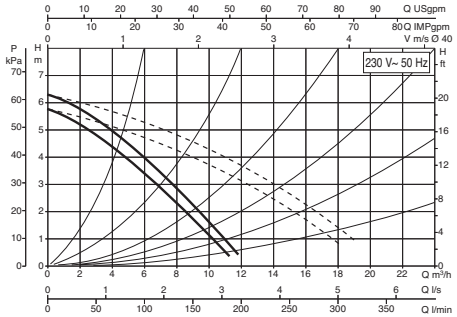
DMH 30/250.40 T



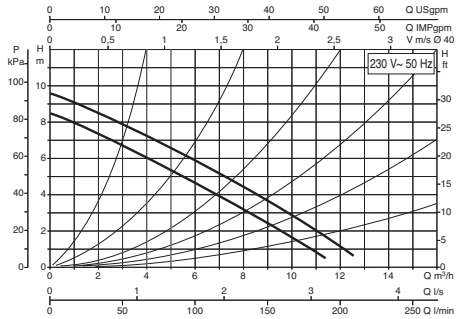
BPH 60/250.40 T



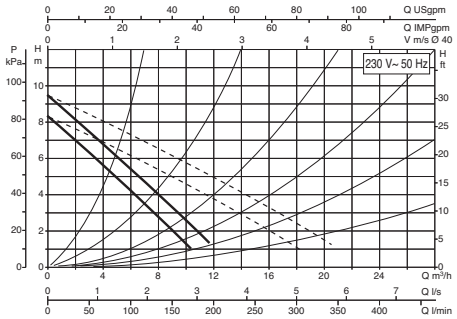
DPH 60/250.40 T



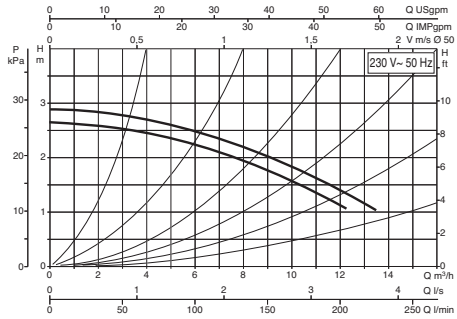
BPH 120/250.40 T



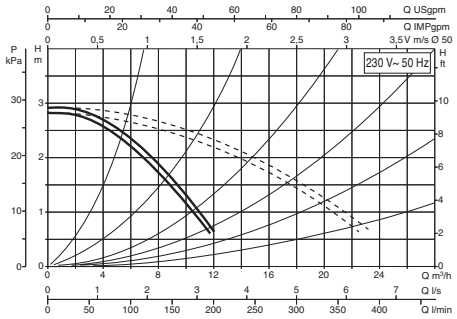
DPH 120/250.40 T



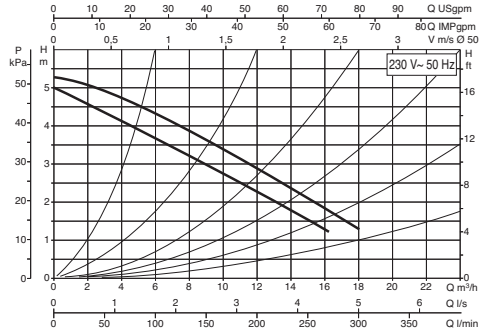
BMH 30/280.50 T



DMH 30/280.50 T



BMH 60/280.50 T



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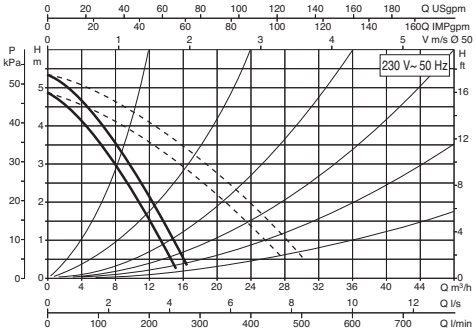
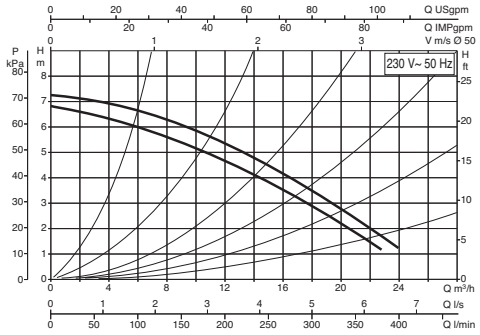
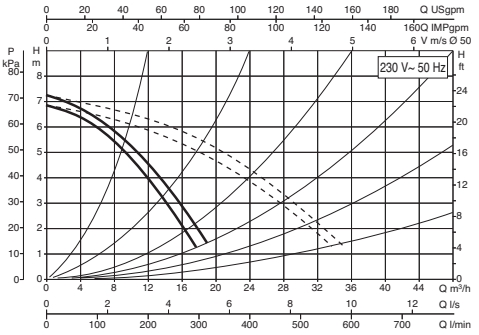


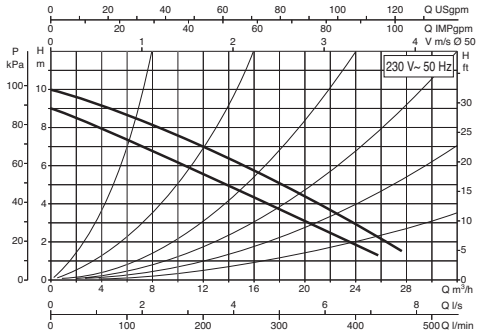
BPH 60/280.50 T



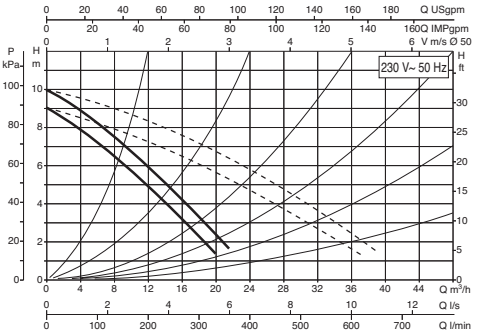
DPH 60/280.50 T



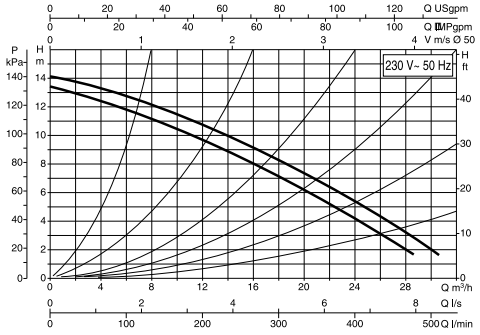
BPH 120/280.50 T



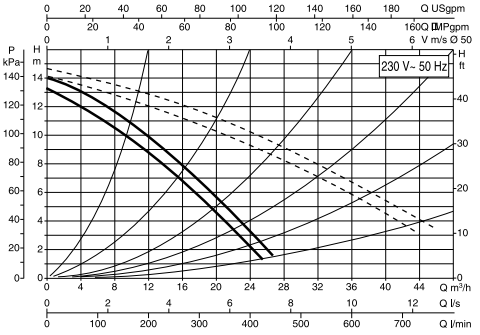
DPH 120/280.50 T



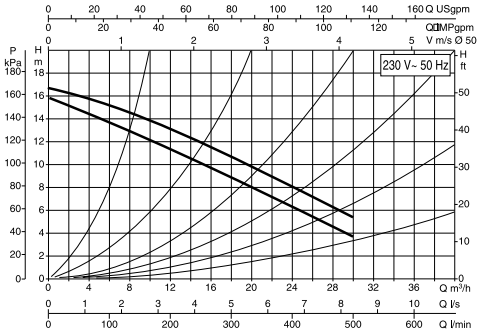
BPH 150/280.50 T



DPH 150/280.50 T



BPH 180/280.50 T



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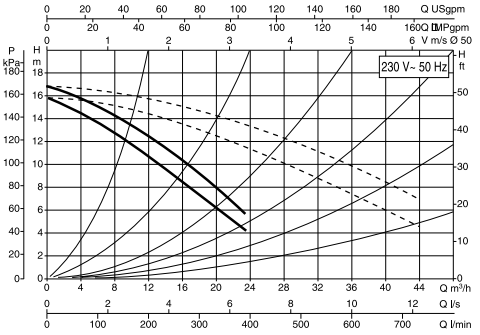
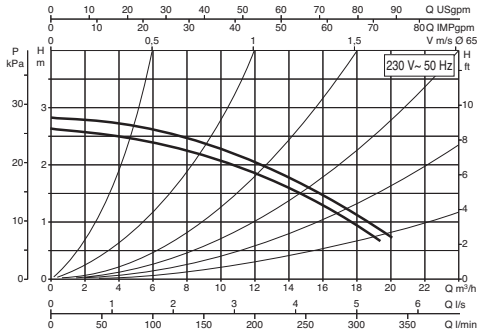
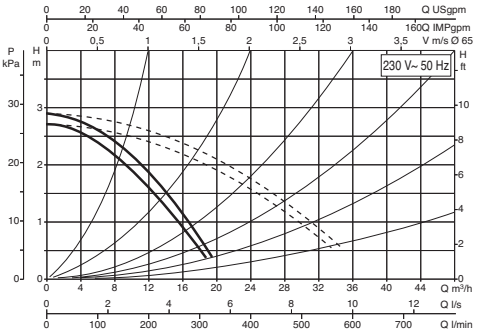


BMH 30/340.65 T



DMH 30/340.65 T



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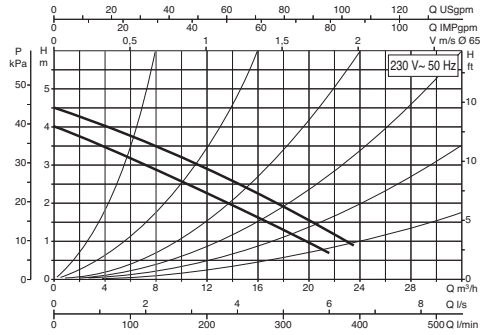

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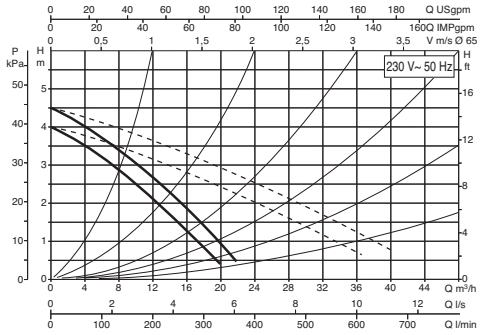
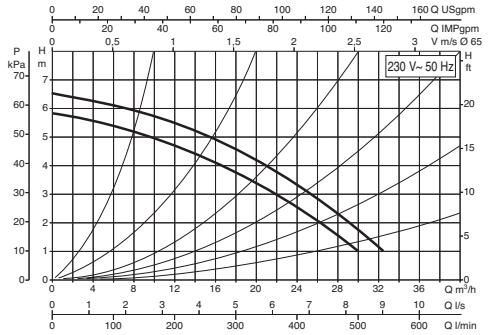


BPH 60/340.65 T



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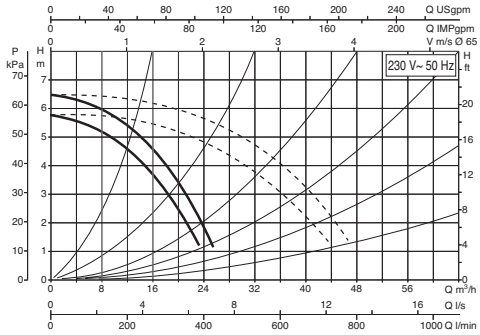
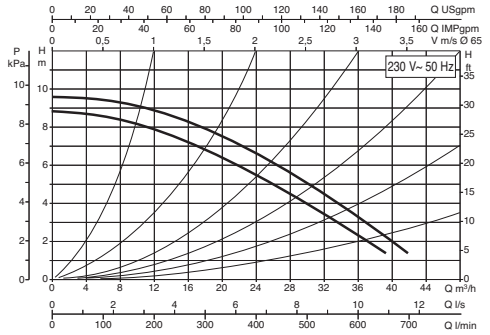


BPH 120/340.65 T



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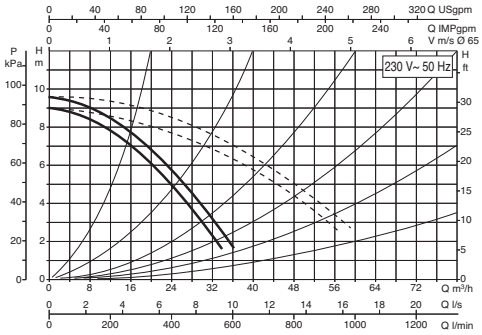
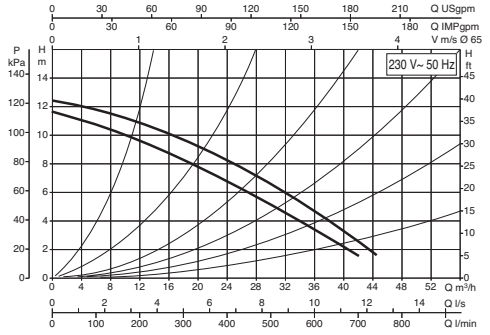


BPH 150/340.65 T



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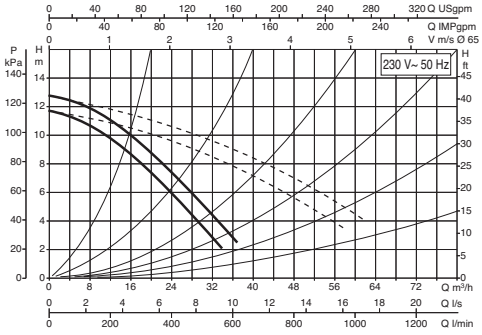
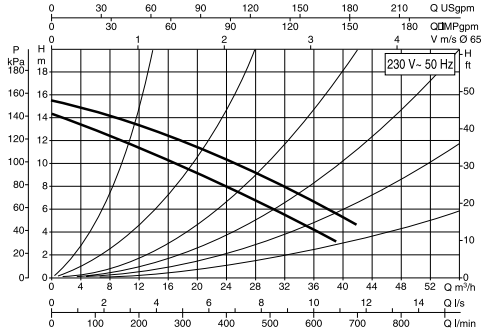
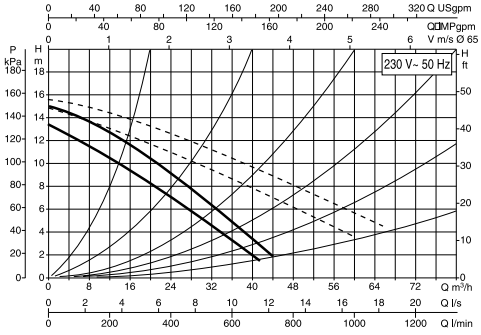


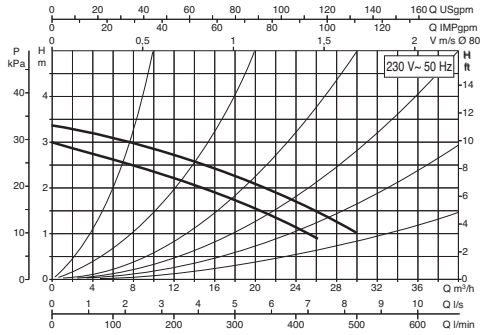
BPH 180/340.65 T



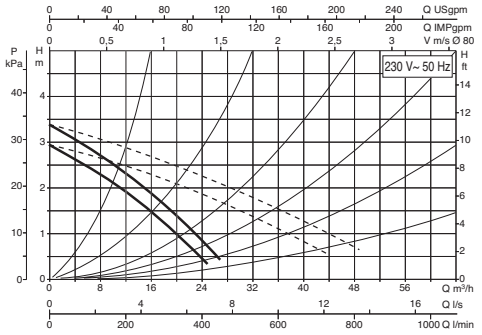
DPH 180/340.65 T



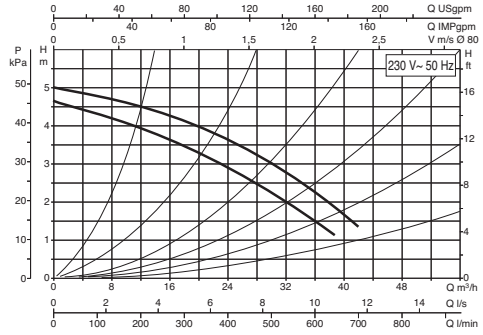
BMH 30/360.80 T



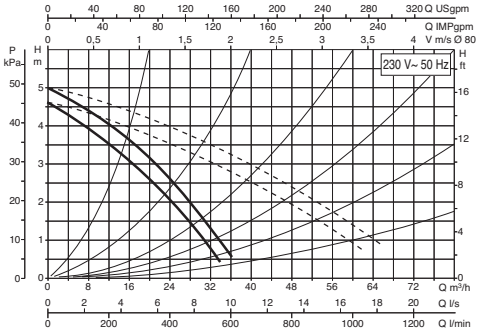
DMH 30/360.80 T



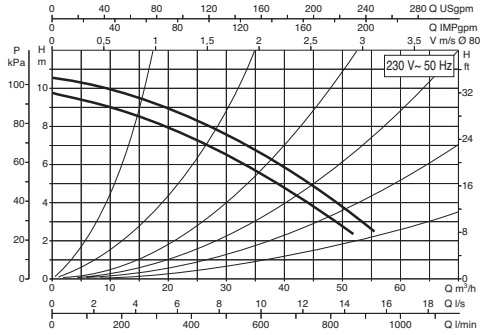
BMH 60/360.80 T



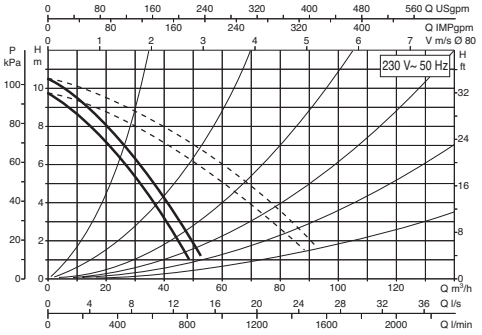
DMH 60/360.80 T



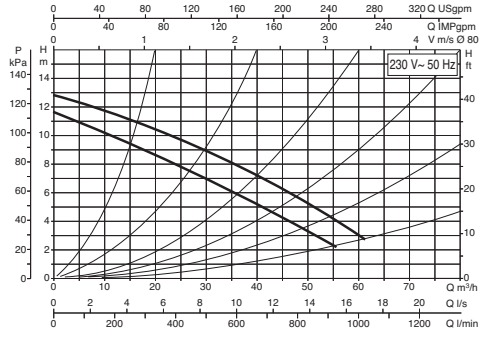
BPH 120/360.80 T



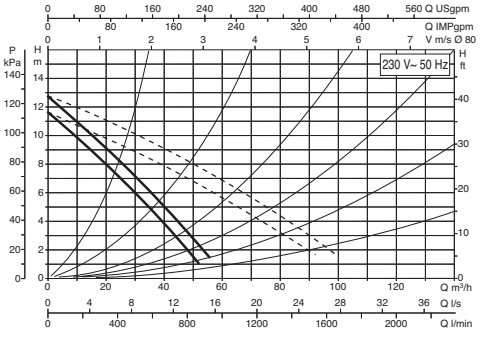
DPH 120/360.80 T



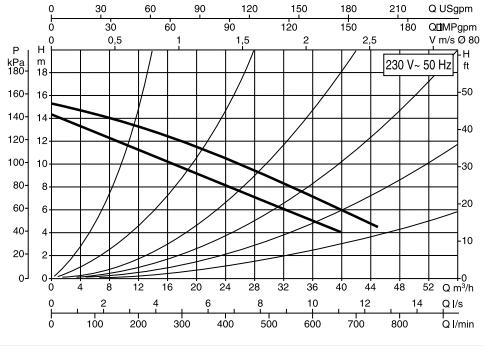
BPH 150/360.80 T



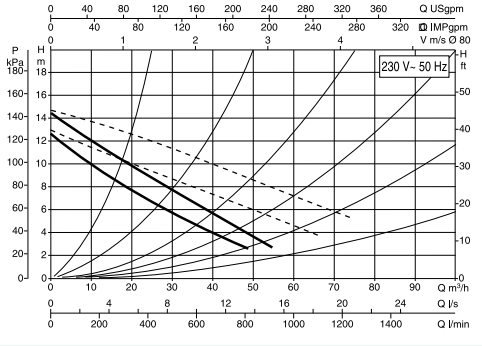
DPH 150/360.80 T



BPH 180/360.80 T



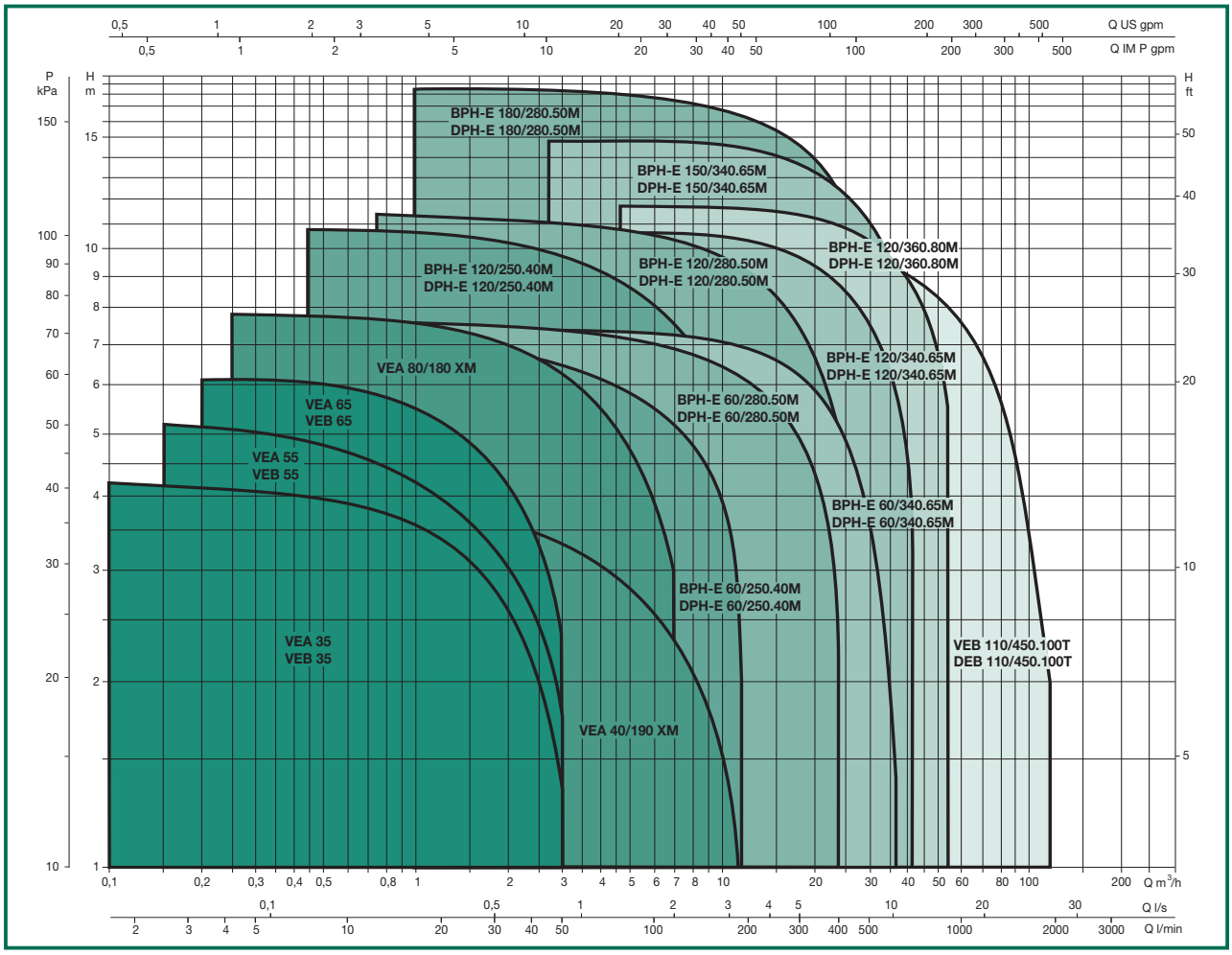
DPH 180/360.80 T



PERFORMANCE RANGE

Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

GRAPHIC AND NUMERICAL SELECTION TABLE



SINGLE SINGLE PHASE-THREE PHASE	TWIN SINGLE PHASE-THREE PHASE	P1 Max W	Q m³/h l/min	0 0	0,6 10	1,2 20	1,8 30	2,4 40	3 50	4,2 70	5,4 90	7,2 120	9,6 160	12 200	14,4 240	18 300	24 400	30 500	36 600	42 700	54 900	72 1200	80 1333	120 2000
VEA 35-VEB 35	-	78		4,3	3,9	3,4	2,8	2,15	1,4															
VEA 55-VEB 55	-	95		5,4	4,7	4,5	3,3	2,6	1,75															
VEA 65-VEB 65	-	102	H (m)	6,3	5,8	5,3	4,3	3,4	2,4															
VEA 80/180 XM	-	250		8,2			7,2	6,9	6,4	5,3	4,2													
VEA 40/190 XM	-	230		4					3,3	3	2,7	2,2	1,6	0,8										
VEB 110/450.100 T	**DEB 110/450.100 T**	2800	H (m)	11,5												10,5	10,3	9,9	9,5	9	8	6,2	5,3	2
BPH-E 60/250.40 M	**DPH-E 60/250.40 M**	344		7,2			6,8	6,7	6,5	6,2	5,8	5	3,7	2										
BPH-E 120/250.40 M	**DPH-E 120/250.40 M**	528		11			10,3	10,1	9,8	9,2	8,6	7,65	6,2	4,35	2,4									
BPH-E 60/280.50 M	**DPH-E 60/280.50 M**	606		7,65			7,5	7,45	7,4	7,3	7,2	6,98	6,7	6,2	5,75	4,6	2,3							
BPH-E 120/280.50 M	**DPH-E 120/280.50 M**	893		11,3						10,8	10,5	10,3	9,9	9,4	8,5	7,2	4,8	2,1						
BPH-E 180/280.50 M	**DPH-E 180/280.50 M**	1693	H (m)	18,4								17,4	17	16,4	15,6	14,4	12	8,8	5,2					
BPH-E 60/340.65 M	**DPH-E 60/340.65 M**	744		7,4						7,35	7,3	7,24	7,1	6,9	6,65	6,15	4,9	3,3	1,4					
BPH-E 120/340.65 M	**DPH-E 120/340.65 M**	1262		10,9						10,75	10,68	10,6	10,5	10,38	10,2	9,8	8,7	7,15	5,2	3				
BPH-E 150/340.65 M	**DPH-E 150/340.65 M**	1767		14,9						14,88	14,83	14,75	14,65	14,55	14,3	13,88	12,65	11	9,35	7,15				
BPH-E 120/360.80 M	**DPH-E 120/360.80 M**	1789		11,8								11,65	11,58	11,5	11,4	11,25	10,75	10,2	9,39	8,37	5,65			

ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

CE

GENERAL DATA

Applications

The VEA circulator features a built-in electronic control device that detects variations in the rate of flow required by the central heating system and automatically adapts its performance accordingly. It also ensures maximum efficiency and noiseless running with minimum power consumption in modern thermostat-controlled heating systems. When the system requires the maximum rate of flow, the circulator automatically moves to maximum speed and develops maximum power. When the system is choked, either manually by the user or automatically by the thermostats, the electronic control unit detects the decrease in required flow and reduces the speed of rotation of the circulator (rate of flow), but keeps the head, which would tend to increase with a traditional circulator, more or less constant.

Advantages

Noiseless running:no noise in the system piping near the thermostats caused by pressure build ups when these restrict the path of the water in order to reduce the rate of flow.

Cost effectiveness: noticeable reduction in electric power input compared with a circulator featuring a manual speed variator. Simplified system thanks to the elimination of by-pass valves or similar devices.

Complies with standards: this circulator has been designed in compliance with energy-saving regulations due to come into force or already in force in EEC countries, as well as EEC Directive 89/336 concerning electromagnetic compatibility.

Reliability:increased average lifetime of the circulator and reduced wear of touching rotating parts (driving shaft and brass bushes). Operation guaranteed even if the electronic control unit breaks down, by manually setting rotation to maximum speed, thereby overriding the control unit.

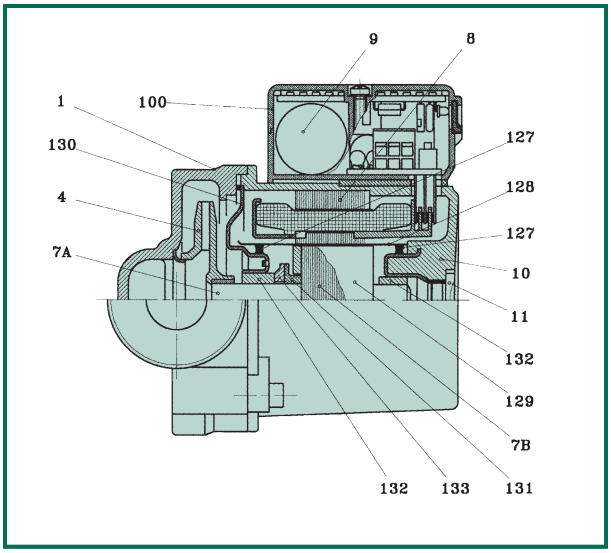
Construction characteristics

Pump body in cast iron and motor casing in aluminium.
Technopolymer impeller.
Stainless steel driving shaft, protective rotor sleeve, separator tube section and closing flange.
Ceramic thrust bearing and E.P.D.M. O-rings
Two-pole, asynchronous motor with wet rotor, mechanical seal not present.
Rotor mounted on graphite brushings.
Motor self-protected against resistance
No overload protection required.
Operating mode selection: "AUTOMATIC" or "MAXIMUM SPEED" in case the electronic unit is faulty.
Permanent display of operating mode provided by two led's.

ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

TECHNICAL DATA

N.	PARTS	MATERIALS
1	PUMP BODY	CAST IRON
4	IMPELLER	TECHNOPOLYMER
7A	DRIVE SHAFT	STAINLESS STEEL
7B	ROTOR	–
8	STATOR	–
9	CAPACITOR	–
10	MOTOR CASING	DIE CAST ALUMINIUM
11	AIR OUTLET CAP	BRASS
100	TERMINAL BOARD BOX	–
127	O-RING	E.P.D.M
128	STATOR SLEEVE	STAINLESS STEEL
129	ROTOR SLEEVE	STAINLESS STEEL
130	CLOSING FLANGE	STAINLESS STEEL
131	THRUST BOX SUPPORT	E.P.D.M
132	BRUSHINGS	GRAPHITE
133	THRUST BOX	CERAMICS



– Indice di denominazione: (esempio) VEA 35 / 180 X

VEA = circulator with threaded mouths
VEB = circulator with DN 25 oval flanges

maximum head (dm)

centre-to-centre distance (mm)

Standard (no ref.) = 1" 1/2 threaded mouths
X = 2" threaded mouths
1/2" = 1" threaded mouths

Operating range:	from 0,5 to 3,5 m^3/h with head up to 5 metres.
Performance:	according to corresponding curve characteristics.
Liquid temperature range:	from +2°C to +95°C. To prevent condensation from forming inside the motor, the pumped liquid must always be above room temperature.
Characteristics of pumped liquid:	clean, free from solids and mineral oils, non viscous, chemically neutral, close to the characteristics of water (max. glycol 30%).
Maximum working pressure:	10 bar (1000 kPa).
Minimum head pressure:	values referring to maximum flow and fluid at +90°C: 1,5 metres.
Installation:	with MOTOR AXIS HORIZONTAL on the delivery or return piping and intake mouth as near as possible to the expansion tank, higher than the maximum level of the boiler and as far away as possible from bends, elbows and unions, in order to prevent water turbulence and consequent noisiness.
Protection level:	IP42
Insulation class:	F
Cable grommet:	PG 11

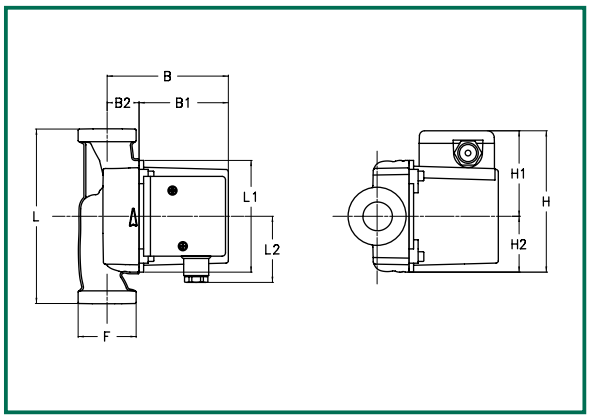
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

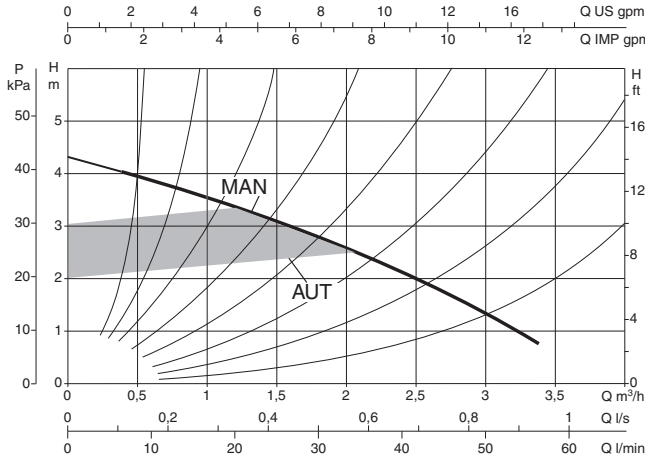
ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

Liquid temperature range: from +2°C to +95°C
Maximum operating pressure: 10 bar (1000 kPa)

VEA 35/130

SINGLE WITH UNIONS



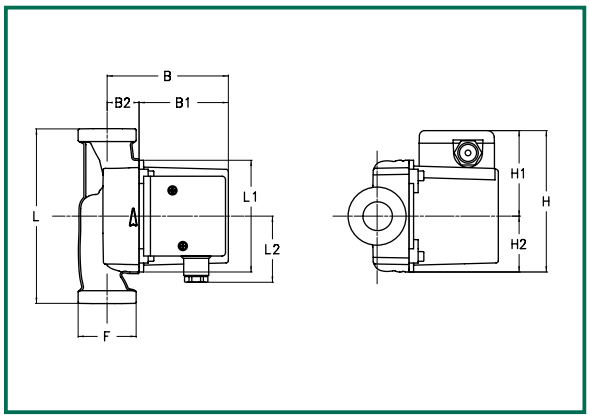


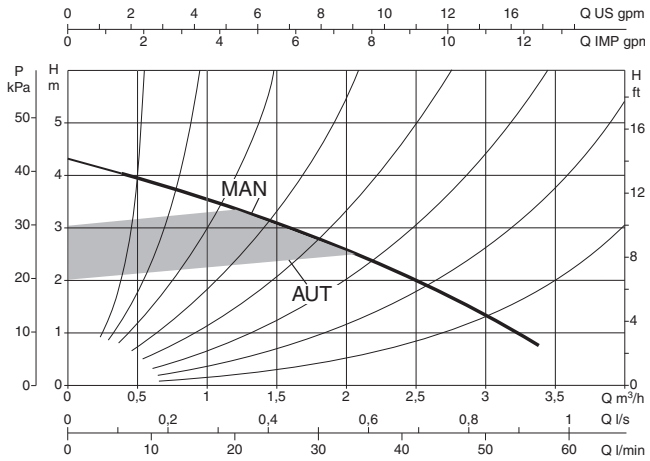
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
130	98	65	104	78	26	130	61	49	1 ½"	138	140	135	0,0026	2,65

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
VEA 35/130	1x230 V ~	130	1" F	¾" F - 1 ¼" M	MIN MAX	36 71	0,17 0,31	2	400	t° +90°C mt. 1,5

VEA 35/180

SINGLE WITH UNIONS





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
180	98	65	104	78	26	130	61	49	1 ½"	138	190	140	0,0036	2,8

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
VEA 35/180	1x230 V ~	180	1" F	¾" F - 1 ¼" M	MIN MAX	36 71	0,17 0,31	2	400	t° +90°C mt. 1,5

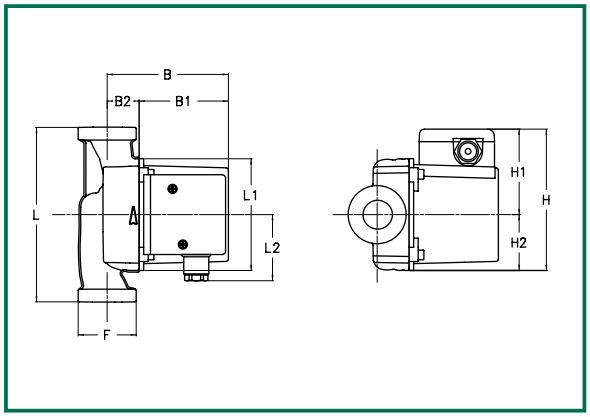
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

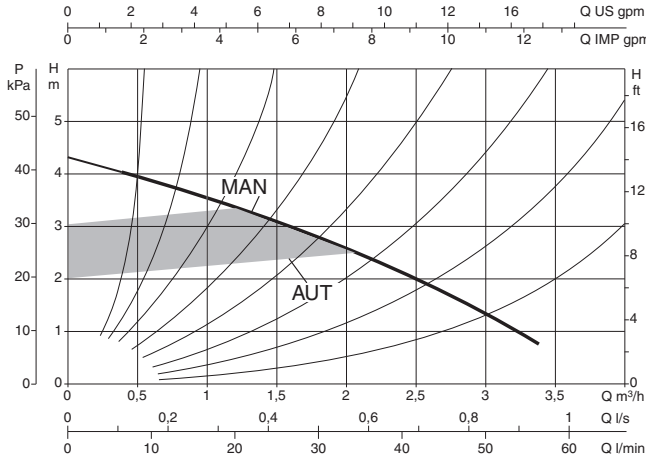
ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

Liquid temperature range: from +2°C to +95°C
Maximum operating pressure: 10 bar (1000 kPa)

VEA 35/180 X

SINGLE WITH UNIONS



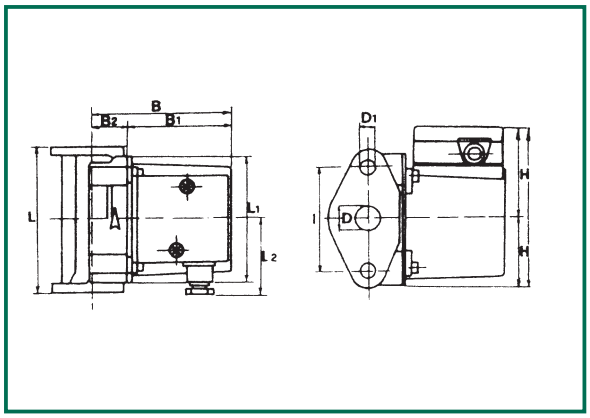


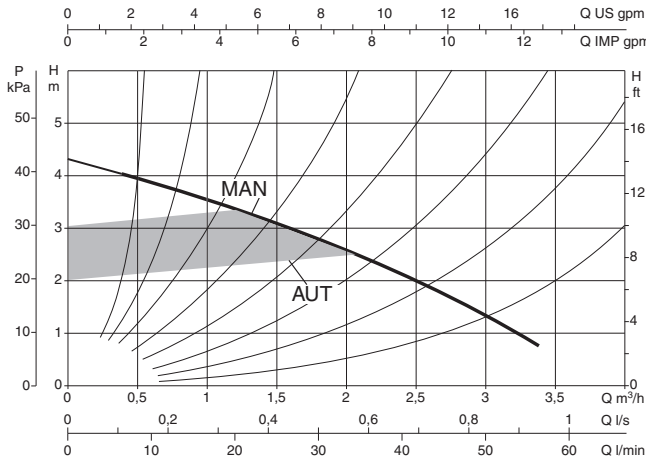
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
180	98	65	104	78	26	130	61	49	2"	138	190	140	0,0036	2,9

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR µF	Vc	
VEA 35/180 X	1x230 V ~	180	1 1/4" F	-	MIN MAX	36 71	0,17 0,31	2	400	t° +90°C mt. 1,5

VEB 35/120

SINGLE WITH OVAL FLANGES





L	L1	L2	B	B1	B2	H	H1	H2	D	D1	I	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
120	98	65	104	78	26	130	61	49	26	10	80	138	130	145	0,0026	3,15

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	OVAL FLANGES ON REQUEST		ELECTRICAL DATA					MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR µF	Vc	
VEB 35/120	1x230 V ~	120	DN25	DN20-DN32	MIN MAX	36 71	0,17 0,31	2	400	t° +90°C mt. 1,5

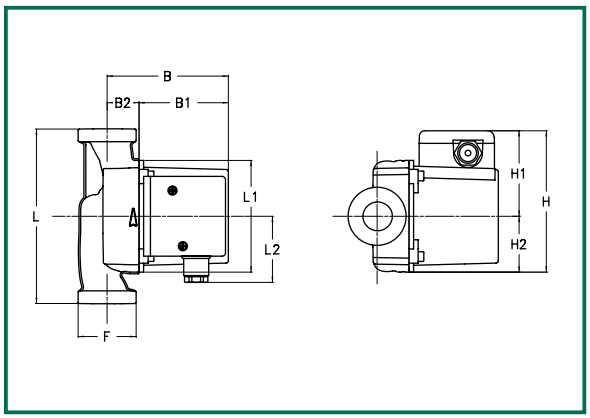
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

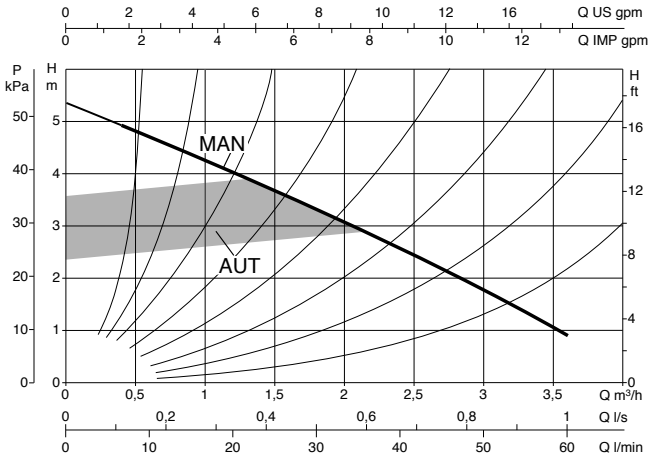
ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

Liquid temperature range: from +2°C to +95°C
Maximum operating pressure: 10 bar (1000 kPa)

VEA 55/130

SINGLE WITH UNIONS



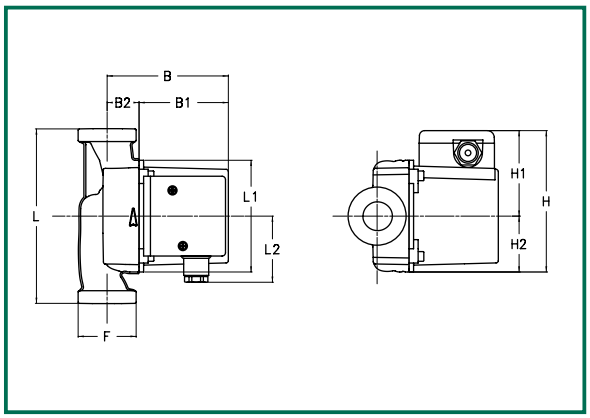


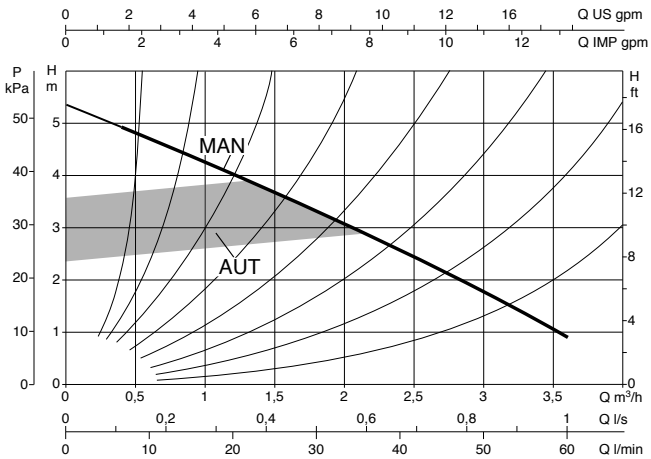
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
130	98	65	104	78	26	130	61	49	1 ½"	138	140	135	0,0026	2,65

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
VEA 55/130	1x230 V ~	130	1" F	¾" F - 1 ¼" M	MIN MAX	39 82	0,18 0,36	2,5	400	t° +90°C mt. 1,5

VEA 55/180

SINGLE WITH UNIONS





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
180	98	65	104	78	26	130	61	49	1 ½"	138	140	135	0,0036	2,8

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
VEA 55/180	1x230 V ~	180	1" F	¾" F - 1 ¼" M	MIN MAX	39 82	0,18 0,36	2,5	400	t° +90°C mt. 1,5

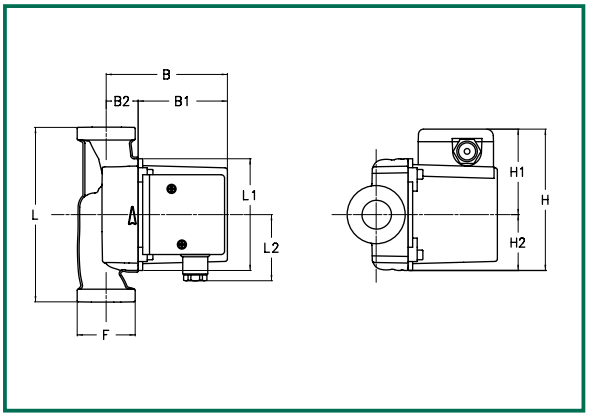
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

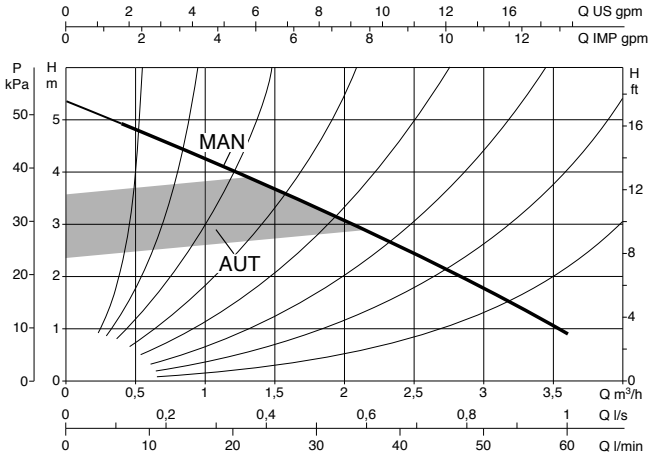
ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

Liquid temperature range: from +2°C to +95°C
Maximum operating pressure: 10 bar (1000 kPa)

VEA 55/180 X

SINGLE WITH UNIONS



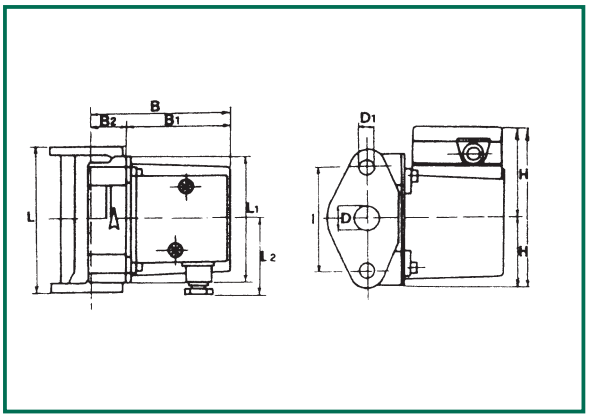


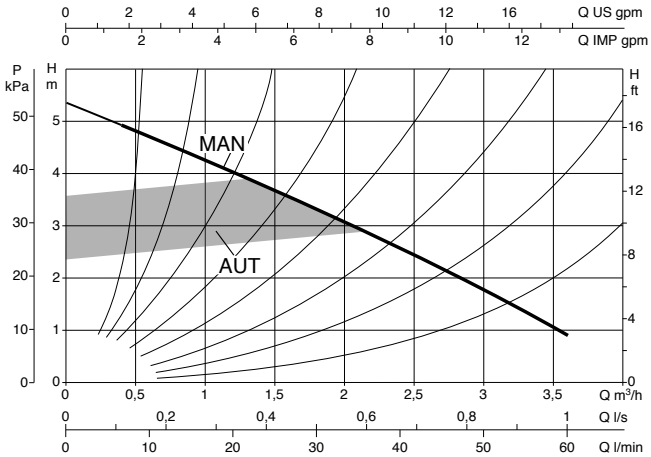
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
180	98	65	104	78	26	130	61	49	2"	138	190	140	0,0036	2,9

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR µF	Vc	
VEA 55/180 X	1x230 V ~	180	1 1/4" F	-	MIN MAX	39 82	0,18 0,36	2,5	400	t° +90°C mt. 1,5

VEB 55/120

SINGLE WITH OVAL FLANGES





L	L1	L2	B	B1	B2	H	H1	H2	D	D1	I	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
120	98	65	104	78	26	130	61	49	26	10	80	138	130	145	0,0026	3,15

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	OVAL FLANGES ON REQUEST		ELECTRICAL DATA					MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR µF	Vc	
VEB 55/120	1x230 V ~	120	DN25	DN20-DN32	MIN MAX	39 82	0,18 0,36	2,5	400	t° +90°C mt. 1,5

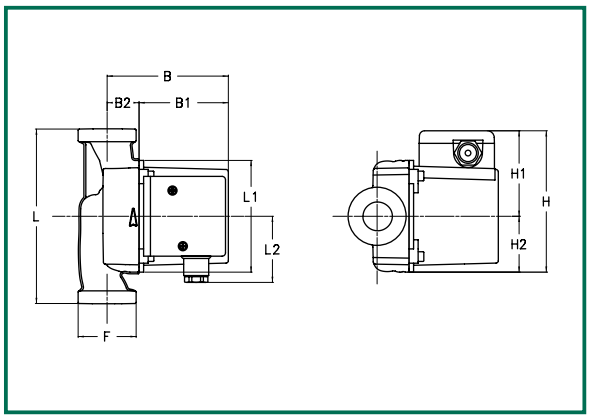
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

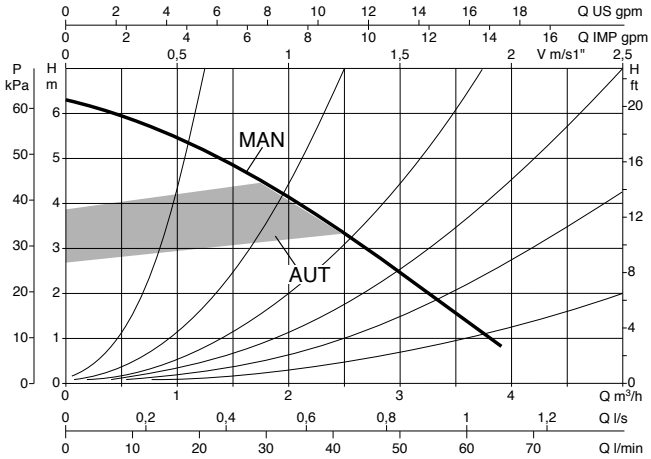
ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

Liquid temperature range: from +2°C to +95°C
Maximum operating pressure: 10 bar (1000 kPa)

VEA 65/130

SINGLE WITH UNIONS



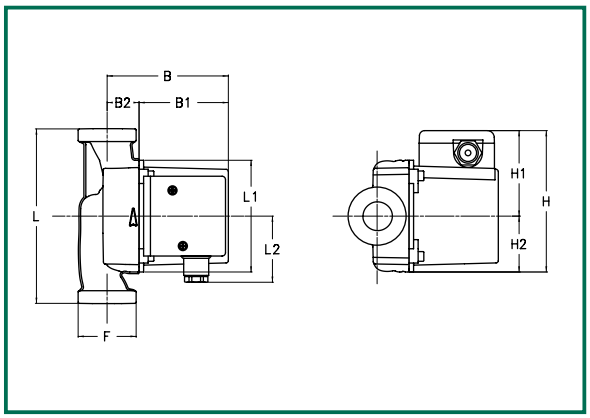


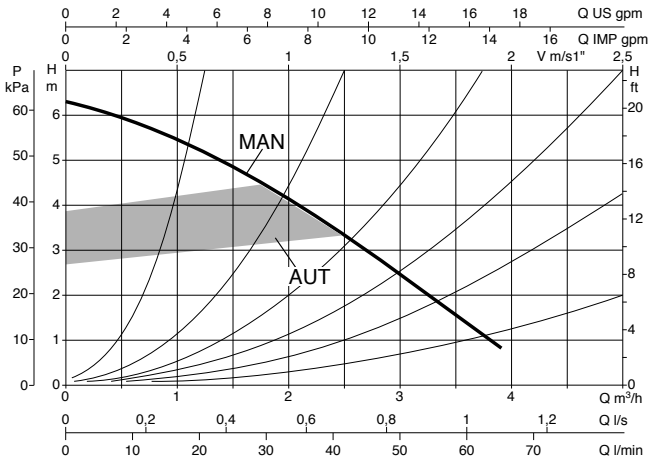
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
130	98	65	104	78	26	130	61	49	1 ½"	138	140	135	0,0026	2,65

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
VEA 65/130	1x230 V ~	130	1" F	¾" F - 1 ¼" M	MIN MAX	46 102	0,20 0,45	2,5	400	t° +90°C mt. 1,5

VEA 65/180

SINGLE WITH UNIONS





L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	PACKING DIMENSIONS B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
180	98	65	104	78	26	130	61	49	1 ½"	138	140	135	0,0036	2,8

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
VEA 65/180	1x230 V ~	180	1" F	¾" F - 1 ¼" M	MIN MAX	46 102	0,20 0,45	2,5	400	t° +90°C mt. 1,5

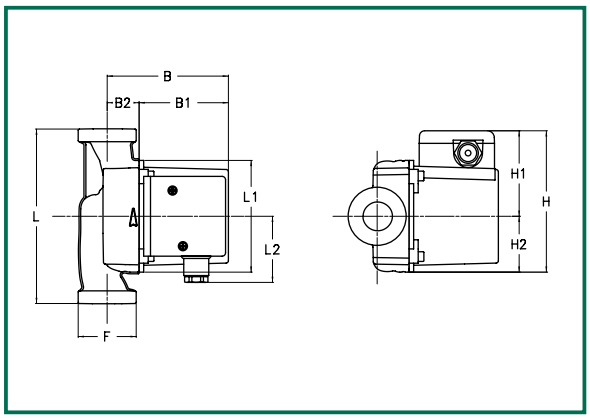
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

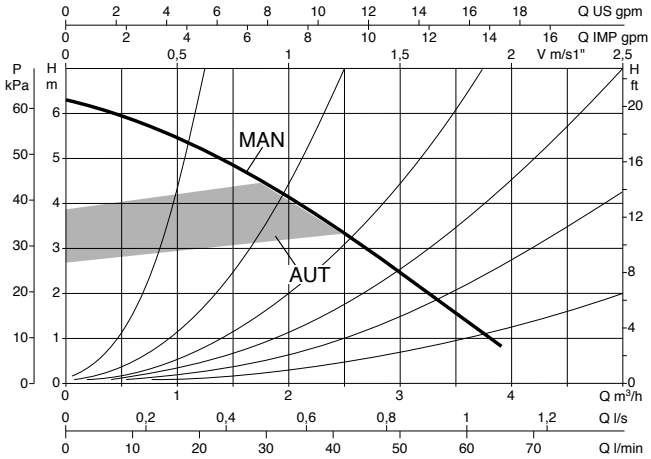
ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

Liquid temperature range: from +2°C to +95°C
Maximum operating pressure: 10 bar (1000 kPa)

VEA 65/180 X

SINGLE WITH UNIONS



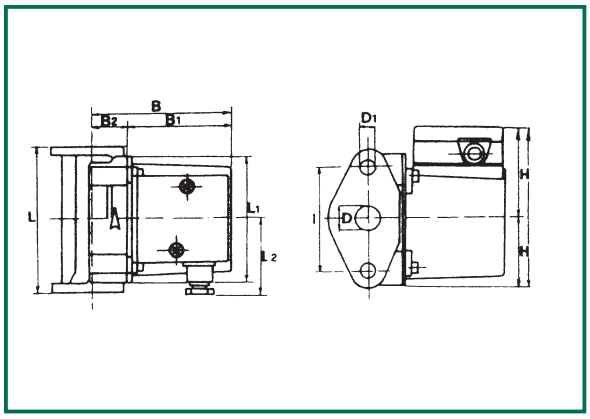


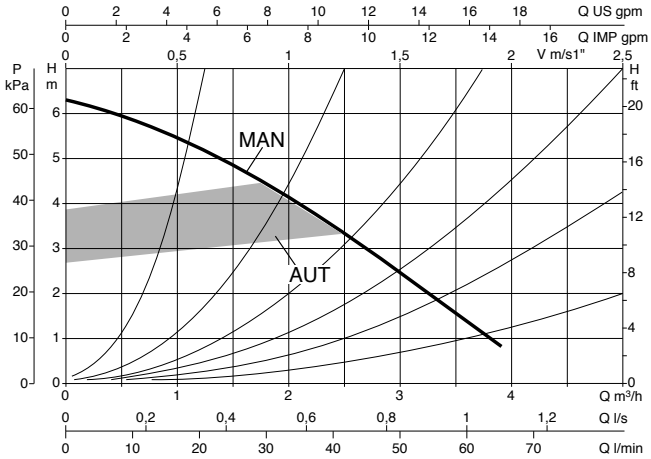
L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
180	98	65	104	78	26	130	61	49	2"	138	190	140	0,0036	2,9

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR µF	Vc	
VEA 65/180 X	1x230 V ~	180	1 ¼" F	–	MIN MAX	46 102	0,20 0,45	2,5	400	t° +90°C mt. 1,5

VEB 65/120

SINGLE WITH OVAL FLANGES





L	L1	L2	B	B1	B2	H	H1	H2	D	D1	I	PACKING DIMENSIONS L	B	H	VOLUME m³	WEIGHT Kg
120	98	65	104	78	26	130	61	49	26	10	80	138	130	145	0,0026	3,15

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM HEAD PRESSURE
			STANDARD	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR µF	Vc	
VEB 65/120	1x230 V ~	120	DN25	DN20-DN32	MIN MAX	46 102	0,20 0,45	2,5	400	t° +90°C mt. 1,5

ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

CE

GENERAL DATA

Applications

The VEA circulator incorporates an electronic control device which detects the variations in performance required by the heating system (fitted with automatic thermoastat valves) and automatically adapts the performance of the circulator itself in order to combine maximum efficiency and silence with minimum power consumption.
When the system requires total capacity, the circulator automatically adjusts to top speed in order to develop maximum power. When the system is choked, either due to a manual override by the user or the automatic cut-in of the thermostat valves, the electronic control device detects the required reduction of flow and reduces the speed of rotation of the circulator (and consequently the flow) while the head, that would otherwise tend to increase with a traditional circulator, remains constant.

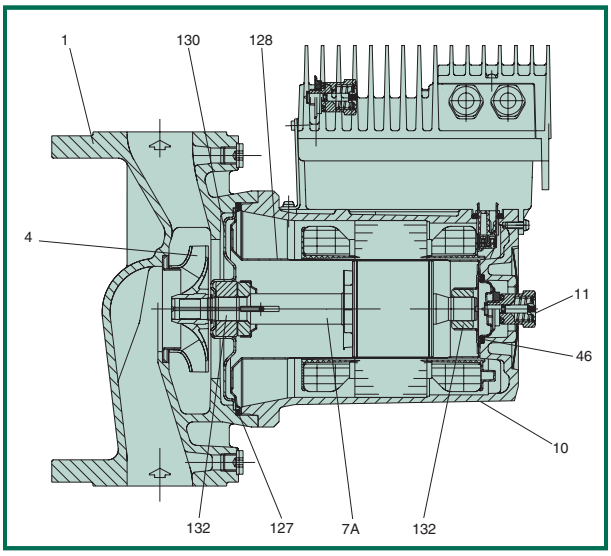
Advantages

Wet rotor circulator.
Pump body in cast iron.
Motor shaft and rotor protection in stainless steel.
Thanks to the internal protection of the motor, the pump requires no external motor protection device.
The pump always starts at average power (elevated torque) regardless of whether normal service or night-time reduction (min.) is set.
Zero potential contact for service and fault signalling.
Energy-saving mode (min. 1).
Available on request: analogue module which allows the speed of rotation to be set externally by means of a 0-10 V or 0-20 mA signal.
This product complies with EN 60335-2-51 European Standard.

ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

TECHNICAL DATA

N.	PARTS	MATERIALS
1	PUMP BODY	CAST IRON 200 UNI ISO 185
4	IMPELLER	TECHNOPOLYMER
7A	DRIVE SHAFT	STAINLESS STEEL
10	MOTOR CASING	ALUMINIUM
11	AIR OUTLET CAP	BRASS PCu Zn 40 Pb2 UNI 570S
127	O-RING	EPDM
46	O-RING	EPDM
128	STATOR SLEEVE	STAINLESS STEEL
130	CLOSING FLANGE	STAINLESS STEEL
132	BRUSHINGS	CERAMICS



– Denomination index: (example)

VEB 40 / 250 . 40 M

VEA = circulator with threaded mouths
VEB = circulator with flanges

maximum head (dm)

centre distance (mm)

(DN) nominal diameter mounths with flanges
X = 2” threaded mouths

M = motor single-phase
T = motor three-phase

Operating range:	from 0,5 to 120 m^3/h with head up to 11,5 metres.
Liquid temperature range:	from +15°C to +95°C.
Characteristics of pumped liquid:	clean, free from solids and mineral oils, non viscous, chemically neutral, close to the characteristics of water.
Maximum working pressure:	6 bar (600 kPa). (special execution on request: 16 bar - 1600 kPa)
Insulation class:	H
Cable grommet:	PG 16
Protection level:	correspondent to IP42

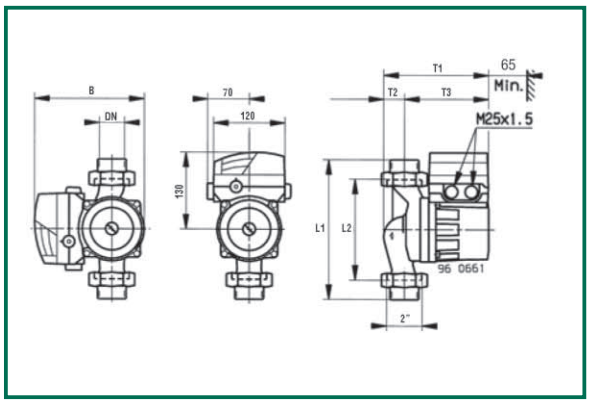
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

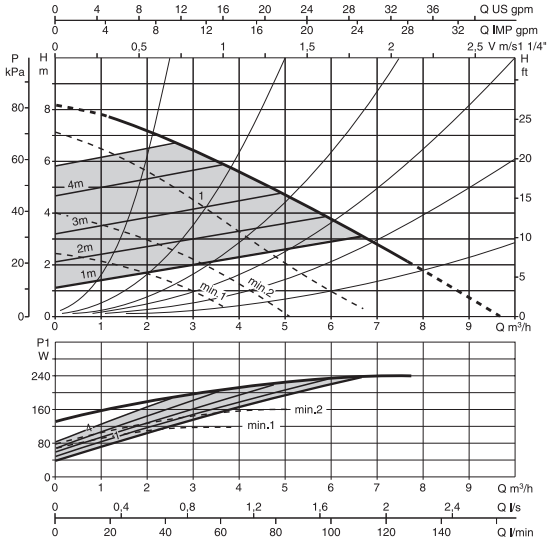
ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

Liquid temperature range: from +15°C to +95°C
Maximum operating pressure: 6 bar (600 kPa) - ON REQUEST 16 bar (1600 kPa)

VEA 80/180 XM

SINGLE WITH UNIONS - SINGLE-PHASE



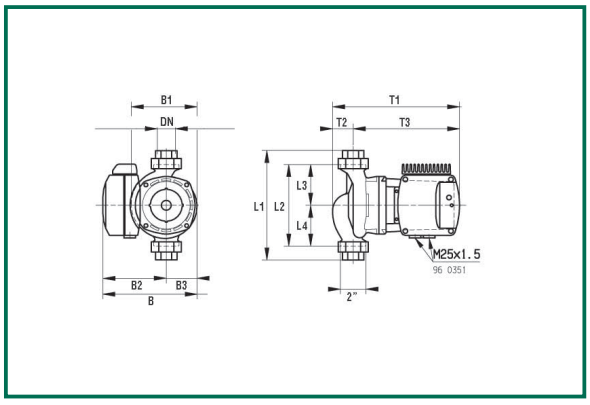


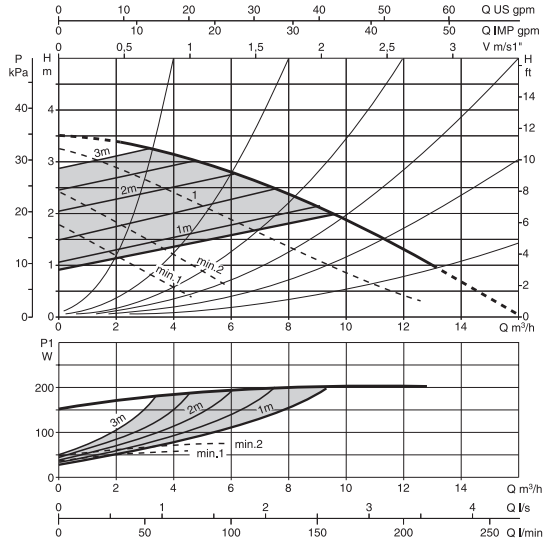
MODEL	DN	B	L1	L2	T1	T2	T3	WEIGHT
VEA 80/180 XM	1 1/2", 1 1/4", 1", 1 3/4"	184	245	180	176	35	141	4,5

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	ELECTRICAL DATA					
			SPEED	n r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc
VEA 80/180 XM	1x230 V ~	180	MIN regulation	960	40	0,2	5	450
			MAX regulation	2700	250	1,1		
			min1	1600	60 ... 115	0,4		

VEA 40/190 XM

SINGLE WITH UNIONS - SINGLE-PHASE





MODEL	DN	B	B1	B2	B3	L1	L2	L3	L4	T1	T2	T3	WEIGHT
VEA 40/190 XM	1 1/2", 1 1/4", 1", 1 3/4"	220	153	148	72	255	190	95	95	296	48	248	15

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	ELECTRICAL DATA					
			SPEED	n r.p.m.	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc
VEA 40/190 XM	1x230 V ~	190	MIN regulation	600	32	0,2	8	450
			MAX regulation	1460	200	0,9		
			min1	600	30	0,2		

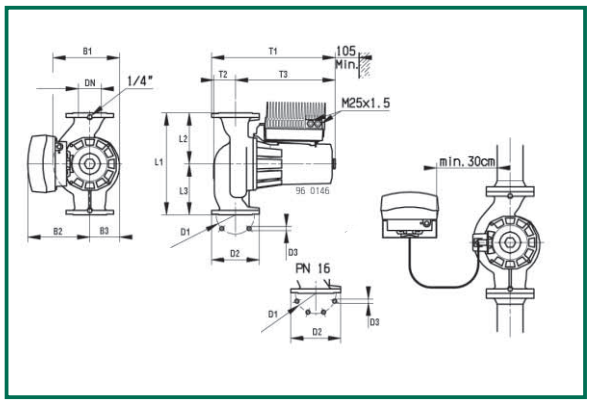
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

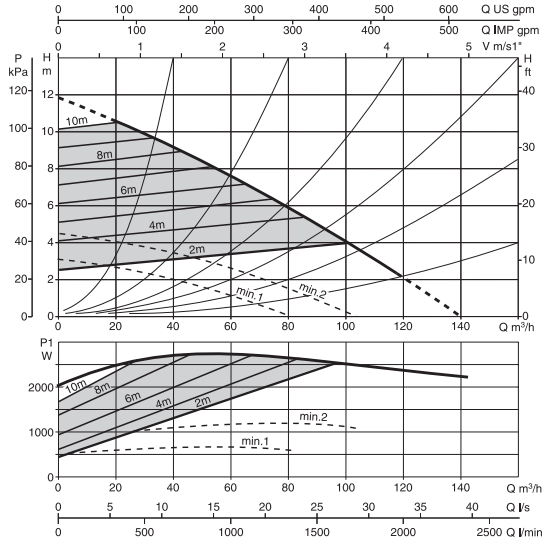
ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

Liquid temperature range: from +15°C to +95°C
Maximum operating pressure: 6 bar (600 kPa) - ON REQUEST 16 bar (1600 kPa)

VEB 110/450.100 T

SINGLE FLANGED - THREE-PHASE





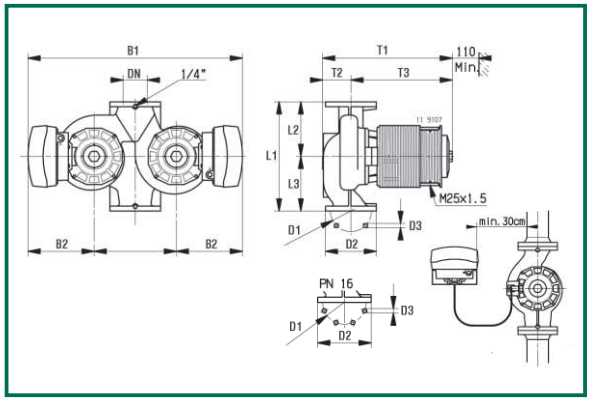
MODEL	DN	B1	B2	B3	PN 6 D1	PN 6 D2	PN 6 D3	PN 16 D1	PN 16 D2	PN 16 D3	L1	L2	PN 16 L3	T1	T2	T3	WEIGHT
VEB 110/450.100 T	100	294	273	131	170	210	18	180	220	18	450	225	225	545	96	440	75

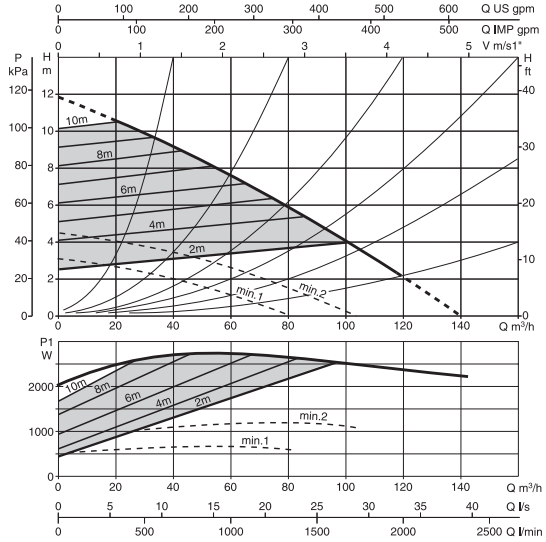
MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	ELECTRICAL DATA SPEED	n r.p.m.	P1 MAX W	In A
VEB 110/450.100 T	3x400 V ~	450	MIN regulation	800	400	1,0
			MAX regulation	1700	2800	6,0
			min1	800	400	1,0

* Only on request

DEB 110/450.100 T

TWIN FLANGED - THREE-PHASE





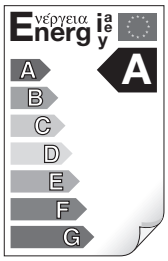
MODEL	DN	B1	B2	B3	PN 6 D1	PN 6 D2	PN 6 D3	PN 16 D1	PN 16 D2	PN 16 D3	L1	L2	PN 16 L3	T1	T2	T3	WEIGHT
DEB 110/450.100 T	100	886	273		170	210	18	180	220	18	450	225	225	535	117	419	152

MODEL	VOLTAGE 50 Hz	CENTRE DISTANCE mm	ELECTRICAL DATA SPEED	n r.p.m.	P1 MAX W	In A
DEB 110/450.100 T	3x400 V ~	450	MIN regulation	800	400	1,0
			MAX regulation	1700	2800	6,0
			min1	800	400	1,0

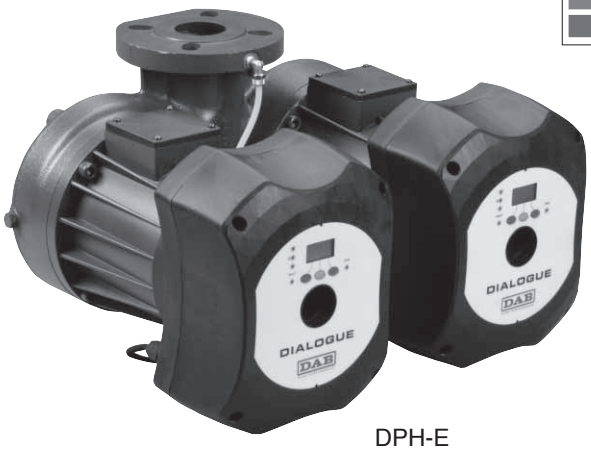
* Only on request

Hydraulic data reported to an only pump in function.

ELECTRONIC CIRCULATORS FOR HEATING AND CONDITIONING SYSTEMS



BPH-E



DPH-E

CE

APPLICATIONS

DIALOGUE electronic circulation pumps can be used in the heating, ventilation and air conditioning systems of apartment and office blocks such as:

- High-rise apartments
- Apartment blocks
- Houses
- Clinics and hospitals
- Schools
- Buildings adapted for offices
- Properties

All models are available both in the single version as well as in the back-up twin version

HEATING APPLICATIONS

Heating required in different applications varies significantly during the day/night due to the outside temperature and by the more or less presence of people within the rooms. In addition to this, the different requirements of the various locations and possible opening and closing of the various branches in complex systems must also be considered.

In practically all correctly dimensioned systems the electronically regulated wet rotor pumps constantly ensure a sufficient amount of energy as well as less noise and greater comfort in addition to a considerable reduction in the running costs. In order to reduce further loss in the single version circulator pump casing, the insulation should ideally be used, which can be ordered as an accessory and supplied separately.

AIR CONDITIONING APPLICATIONS

Unlike conventional electronic pumps, the **DIALOGUE** electronic circulation pumps can also be used in air conditioning systems where the temperature of the pumped liquid is lower than the ambient temperature. In these circumstances, condensation forms on the outer casing of the circulator that does not influence the correct functioning of the electronic and mechanical parts. The particular construction has been designed and assessed in order to allow the drainage of the condensate without damaging the structural components.

For the thermal insulation of the circulator's pump casing with the separately supplied insulating shells (for the single version only – the insulating shells must be specially made for the back-up twin versions), take care not to block the discharge labyrinths so as not to impair its performance.

STRUCTURAL CHARACTERISTICS

Enbloc circulation pump made up of cast iron hydraulic parts and an electric asynchronous motor with wet rotor. Aluminium motor casing. High performance volute pump casing thanks to the detailed design and smooth internal surfaces. In-line suction and delivery ports, flanged with threaded connectors for the introduction of the temperature and pressure sockets. Technopolymer rotor, hardened stainless steel motor

shaft mounted on graphite bushings that are lubricated by the pumped liquid. Stainless steel rotor and stator liner. Ceramic thrust washer, ethylene propylene grommet and brass air vent cap. Two pole asynchronous motor. An automatic type clapet valve is foreseen on the back-up twin version that is incorporated into the delivery port to prevent the circulation of water when the unit is idle. Furthermore, a blank flange is also supplied if one of the two motors requires maintenance. The standard PN10 production of the pump casing is compatible with PN6 counterflanges for the interchangeability of the pump on existing systems. The DN 80 PN 16 version (eight holes) can be supplied on request.

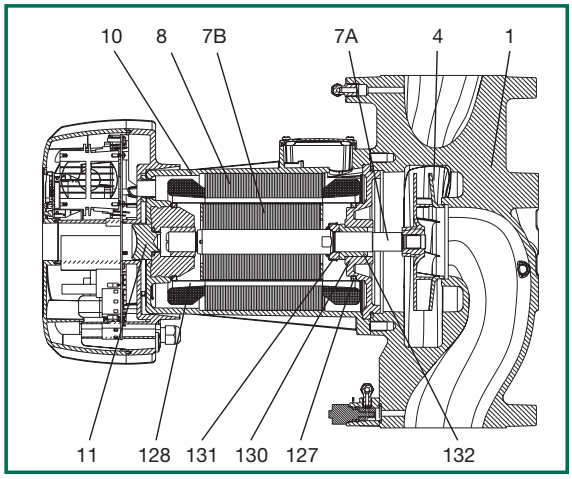
Circulator protection class: IP 44 Insulation class: H
Standard voltage: 230V, 50/60 Hz single-phase
The product complies with the EN 61800-3 – EN 60335-1 – EN 60335-2-51 European standards

DIALOGUE STRUCTURAL CHARACTERISTICS (Electronic devices)
For greater efficiency and strength, the **DIALOGUE** circulators are controlled by a IGBT based device with the latest NPT technology. The specific characteristics are as follows:
- sinusoidal PWM modulation
- High carrier frequency to eliminate any audio band noise
- 32 bit dedicated DPS processor
- "space vector" optimized algorithm

Setting has been made user friendly thanks to an intuitive and functional user interface. The simplified backlit display on the control panel, with three simple navigation keys, a pull-down menu in line with the latest mobile phone trends, and a wide range of functions make the BPH-E **DIALOGUE** circulator a revolutionary product. A reliable a sturdy construction combined to the modern and innovative design completes the product even from an aesthetical point of view.

TECHNICAL DATA

N.	PARTS	MATERIALS
1	PUMP BODY	CAST IRON 200 UNI ISO 185
4	IMPELLER	TECHNOPOLYMER B
7A	MOTOR SHAFT	STAINLESS STEEL AISI 420 C
7B	ROTOR	–
8	STATOR	–
10	MOTOR CASING	DIE CAST ALUMINIUM
11	AIR OUTLET CAP	BRASS P Cu Zn 40 Pb2 UNI 5705
127	SEAL RING	E.P.D.M.
128	STATOR SLEEVE	STAINLESS STEEL AISI 321 – AISI 304
130	CLOSING FLANGE	CAST IRON 200 UNI ISO 185
131	THRUST BOX SUPPORT	STAINLESS STEEL AISI 304 L
132	BRUSHINGS	CARBON EC 941



DENOMINATION INDEX:
(example)

B P H - E 120 / 250 . 40 M

B = single circulator
D = twin circulator

M = 4-pole motor
P = 2-pole motor

H = suitable for both heating and air conditioning

E = electronic **DIALOGUE**

maximum head (dm)
axes centres (mm)
(DN) nominal diameter of the flanged ports

M = single-phase motor

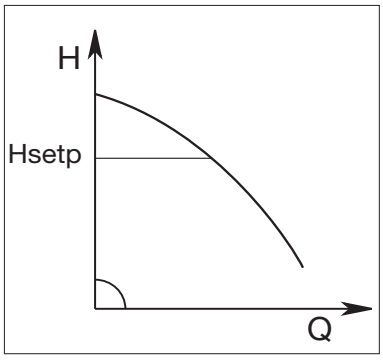
Operating range:	from 13,8 to 59,76 m^3/h with head up to 18,2 metres;
Liquid temperature range:	from –10 °C to +120 °C
Liquid quality requirements:	clean, free from solids, not viscous, not aggressive and close to the characteristics of water. (glicole max 30%).
Maximum operating pressure:	10 bar (1000 kPa)
Flanging:	DN 40, DN 50, DN 65, PN 10 (4 holes), DN 80 in PN 6 / 10 (4 holes)
Minimum head pressure:	see tables.
Special version on request:	Flanging - DN 80 in PN 10 / PN 16 (8 holes)
Accessories:	Counterflange PN 10 / DN 40 - DN 50 - DN 65 - DN 80.
Electromagnetic compatibility:	BPH-E, DPH-E circulators respect standard EN 61800-3, in category C2, for electromagnetic compatibility.
	Electromagnetic emissions - Residential environment (in some cases measures to reduce them may be requested).
	Emissions of ducts - Residential environment (in some cases measures to reduce them may be requested).
	The models with power lower than 1 kW need a 2.4 mH external filter at input, as requested by standard EN 61000-3-2.

OPERATING MODES

All operations listed below can be consulted by all users (even those less qualified) by means of the Dialogue menu. Access to the settings and modification of the parameters is protected and reserved for qualified users only.

1 - Constant differential pressure regulation mode ΔP-c

The ΔP-c regulation mode maintains the system's differential pressure constant at the set value Hsetp based on the varying flow rate.



This regulation is particularly suitable for the following systems:

a. Dual pipe heating systems with thermostatic valves and:
- head less than 2 meters;
- natural circulation;
- low head loss in the parts of the system where the total quantity of water flows;
- high differential temperature (central heating).

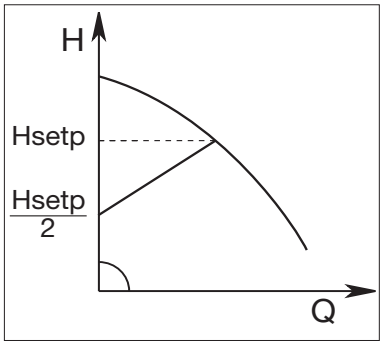
b. Floor heating systems with thermostatic valves

c. Single pipe heating systems with thermostatic valves and adjustment valves

d. Systems with primary circuit pumps with low head loss

2 - Proportional differential pressure regulation mode ΔP-v

The ΔP-v regulation mode, based on the changing flow rate, linearly varies the delivery value of the head from Hsetp to Hsetp/2.



This regulation is particularly suitable for the following systems:

a. Dual pipe heating systems with thermostatic valves and:
- head over 4 meters;
- exceptionally long piping;
- valves with a wide operating range;
- differential pressure regulator;
- high head loss in the parts of the system where the total quantity of water flows;
- low differential temperature

b. Floor heating systems and systems with thermostatic valves and high head loss in the boiler circuit.

c. Systems with primary circuit pumps with high head loss.

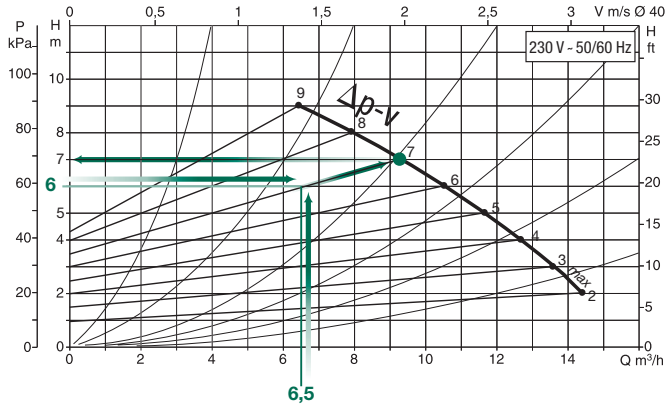
Example of setting the set point with ΔP-v

The following working point is needed:

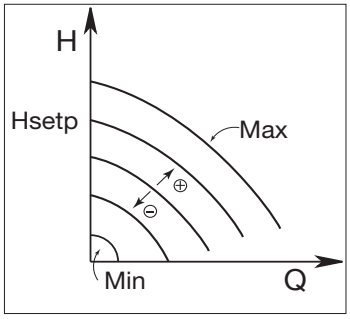
Q = 6,5 m³/h
H = 6 m

PROCEDURE:

1. Put the desired working point in the graph and look for the DIALOGUE curve closest to it (in this case the point is right on the curve)
2. Go up the curve until you cross the extreme curve of the circulator.
3. The reading of the head next to this cluster point will be the set point head to set to get the desired working point.



3 - Constant curve regulation mode

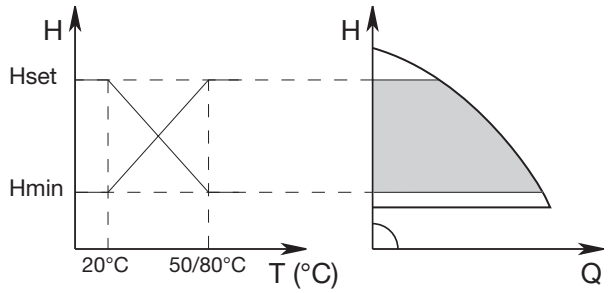


The regulation at constant speed deactivates the regulation of the electronic module. The speed of the pump can be manually regulated at a constant value through the control panel, remote control or by a 0-10V signal where:

V<= 3 Volt the rotation speed is 846 rpm (min speed)
V = 10 Volt the rotation speed is 2820 rpm (max speed)
For V between 3 and 10 Volt linear interpolation of the speed.

This type of regulation is particularly suitable for circulators in already existing systems.

4 - Proportional and constant differential pressure regulation mode based on the water temperature



The Setpoint related to the head of the circulator is reduced and increased base on the water temperature.

The temperature of the liquid can be set at 80°C or 50°C.

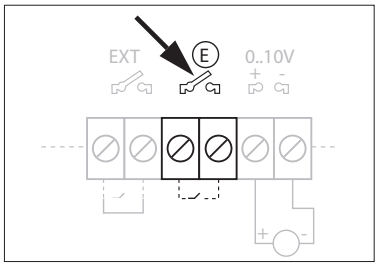
This type of regulation is particularly suitable for the following systems:

a. in systems with a variable flow rate (dual pipe heating systems), where a further reduction of the circulator's performance is ensured due to the drop in temperature of the circulating liquid when less heating is required.

b. in systems with a constant flow rate (single pipe and floor heating systems), where the performance of the circulator can be regulated only when the temperature change function is activated.

This is set by means of the control unit on the lid of the **DIALOGUE** device.

ECONOMY MODE

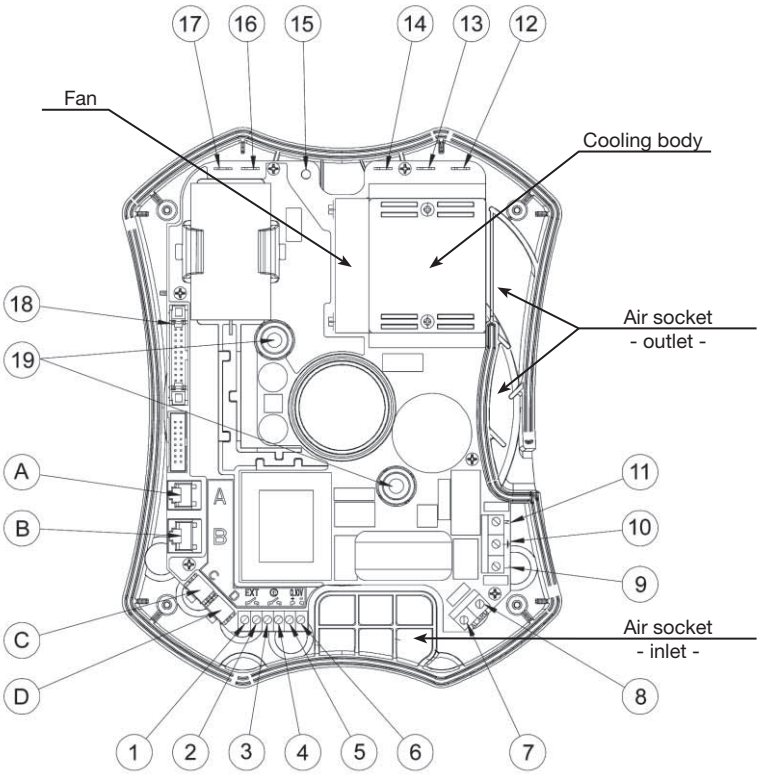


The economy mode can be set directly from the control panel by setting the reduction value (f.rid) that can have a maximum value of 50%.

The following values are replaced in all the previously listed settings:

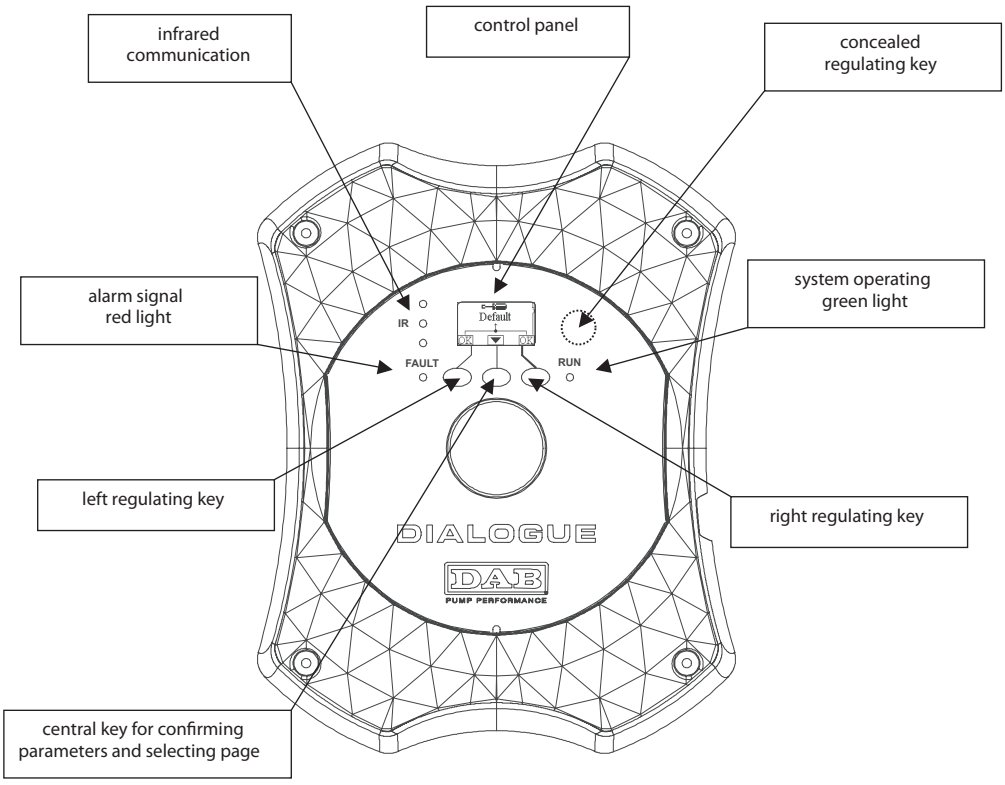
Hset
to a value of
Hset x f.rid

WIRING DIAGRAM



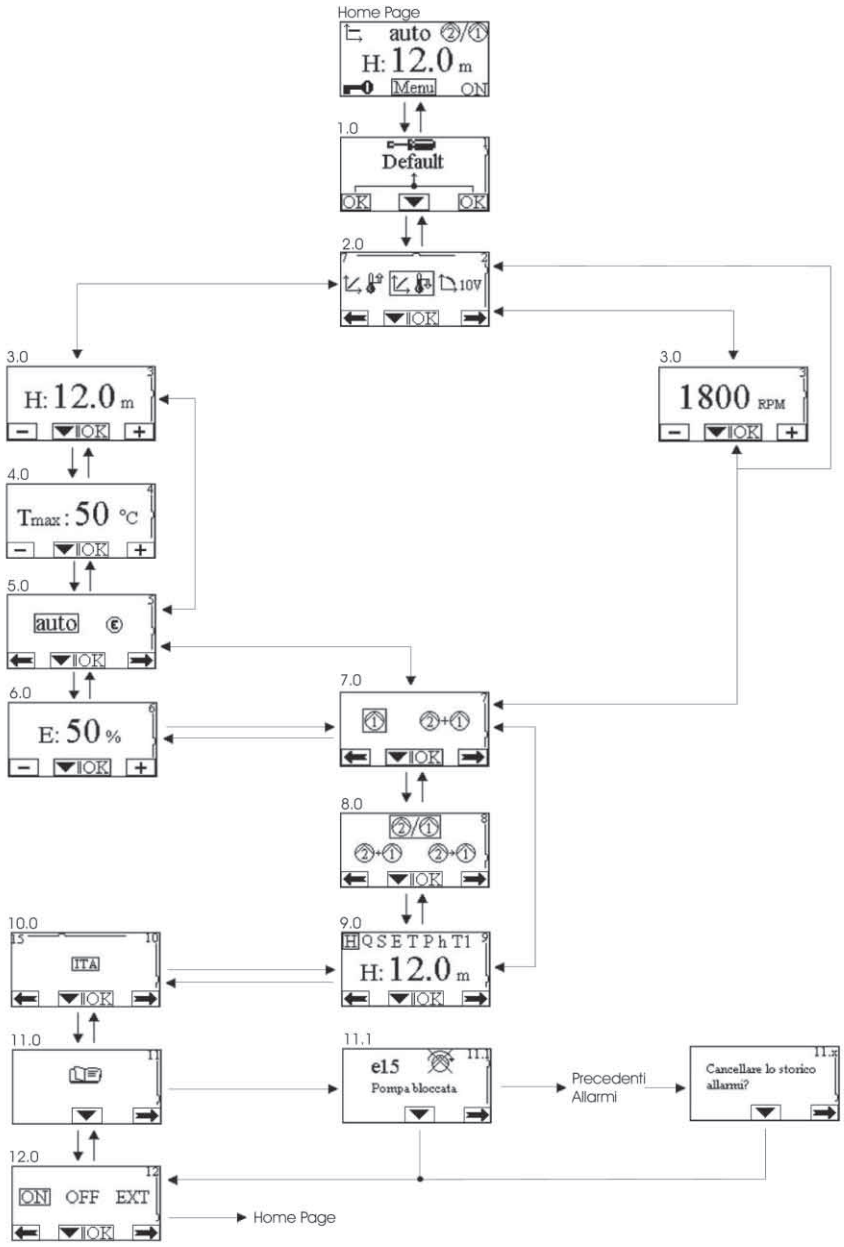
Ref.	Function
A	Connector for RS 485 remote serial connection
B	Connector for twin circulators
C	Connector for remote temperature sensor (optional)
D	Connector for sensor on the circulator (standard)
1-2 (exit)	Connecting terminals for remote control (connect only contacts with no voltage)
3-4 (Ⓔ)	Connecting terminals for economy function input (connect only contacts with no voltage)
5-6 (0-10V)	Connecting terminals for analog input 0-10V dc ref. 5 = +10V ref. 6 = 0V
7-8 (ALARM)	Connecting terminals for remote alarm contact 250V ac 5A
9-10-11	Connecting terminals for power supply line 1x230V 50-60Hz ref. 9 = Line ref. 10 = Earth ref. 11 = Neutral
12-13-14	Faston for connecting the motor cables ref. 12 = red cable ref. 13 = green cable ref. 14 = white cable
15	Motor earthing screw
16-17	Faston for connecting the motor protector – white cable
18	Dialogue display connector
19	Dialogue retaining screw

CONTROL PANEL - DESCRIPTION



DIALOGUE DISPLAY - THE SETTING PARAMETERS

The settings are made when passing from one page to another, in the circulator configuration menu.



DISPLAYABLE QUANTITIES DESCRIPTION

Symbol	Description
H Q S E T P h T1	Shows parameters
H	Head in metres
Q	Flow rate in m³/h **Q < Qmin** when Q is less than 30% of Q_{max} **Q = 0** only when the Dialogue is switched off.
S	Speed in revs/minute (rpm)
E	Analog input 0-10V
T	Liquid temperature in °C – input D
P	Power in kW
h	Working hours
T1	Liquid temperature in °C – input C
TMAX	Maximum liquid temperature in °C depending on regulation

Status

Symbol	Description
①	Single circulator or nr. 1
②	Circulator nr. 2
②/①	Alternate twin circul. (24 h. one motor/24 h. the other motor)
②←①	Principal/reserve twin circulators
②+①	Simultaneous twin circulators
ON	Circulator on
OFF	Circulator off
EXT	Circulator controlled by remote signal (ref. terminals 1-2)

Operating mode

Symbol	Description
auto	Auto
Ⓔ	Economy mode

Regulation mode

Symbol	Description
	Regulation with Δp-c (constant pressure)
	Regulation with Δp-c depending on temperature with positive increase
	Regulation with Δp-c depending on temperature with negative increase
	Regulation with Δp-v (variable pressure)
	Regulation with Δp-v depending on temperature with positive increase
	Regulation with Δp-v depending on temperature with negative increase
	Servomotor regulation with speed set on the display.
10V	Servomotor regulation with speed set by remote signal 0-10V

Miscellaneous

Symbol	Description
	Control panel blocked
▼‖OK ▲‖OK	Multifunction key for confirming parameters and scrolling pages

ALARMS MANAGEMENT

The **DIALOGUE** device can remotely reactivate the alarms that have occurred in the pump itself through a clean contact (250Vac – 5 Amp). These alarms are also memorised in the resident memory for subsequent consultation. The alarms archive can also be cancelled to perform dedicated tests.

ALARMS DISPLAY

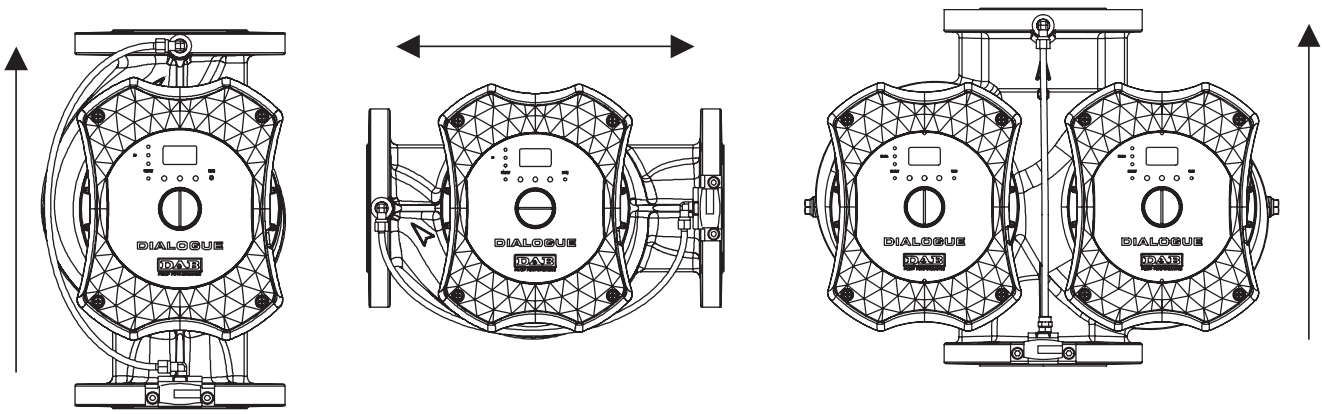
Symbol	Alarm type	
	E01	Pump blocked
	E02	Internal error V18”
min	E03	Low mains voltage” (LP)
max	E04	High mains voltage” (HP)
max	E06	Critical overheating of electronic parts”
	W01	Sensor signal absent”
①↔②	W02	Twin communication absent”
max	W03	Overheating of electronic parts”
	W04	Fault in cooling systems”
Imax	W05	Current overload protection”

W05 Imax: Motor current overload protection
The circulators in the BPH-E and DPH-E series contain a current limitation system to protect the electropumps against any current overloads. The maximum current that can be supplied is set for each size. If this current exceeds the set value, the protection intervenes, reducing the operating frequency (a **Warning W05** is generated in the alarm log). If this current does not fall within the predetermined values, the pump goes into a **blocking error E01** (the fixed red “FAULT” light is lit and the alarm relay closes) and attempts to restart every 10 minutes.

TROUBLESHOOTING

Error condition		
Display indication	**Description**	**Reset sequence**
E01	Pumpblocked	- Free the pump by hand.
E02	InternalerrorV18	- Disconnect power supply to Dialogue. After having waited 5 minutes, restore power supply to Dialogue.If the error persists, change the Dialogue.
E03	Low mains voltage (LP)	- Disconnect power supply to Dialogue. After having waited 5 minutes, restore power supply to Dialogue. Check that the mains voltage is correct, if necessary restore the data plate value.
E04	High mains voltage (HP)	- Disconnect power supply to Dialogue. After having waited 5 minutes, restore power supply to Dialogue. Check that the mains voltage is correct, if necessary restore the data plate value.
E06	Critical overheating of electronic parts	- Disconnect power supply to Dialogue. After having waited 5 minutes, open the cover of the Dialogue. Clean the air sockets and the cooling body with dry air (fig.3 page 5) Close the cover of the Dialogue.
W01	Sensor signal absent	- Check the sensor connection (ref. D). If the sensor is faulty, change it.
W02	Twin communication absent	- Check that the twin communication cable is intact. Check that the circulator is fed.
W03	Overheating of electronic parts	- Disconnect power supply to Dialogue. After having waited 5 minutes, open the cover of the Dialogue. Clean the air sockets and the cooling body with dry air (fig.3 page 5) Close the cover of the Dialogue.
W04	Faulty cooling systems	- Check that the fan is clean and that it moves freely. Change the Dialogue.
W05	Overload protection	- Check that the circulator turns freely. Check that the addition of antifreeze does not exceed the maximum amount of 30%.

INSTALLATION

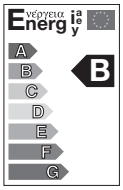


single **twin**

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

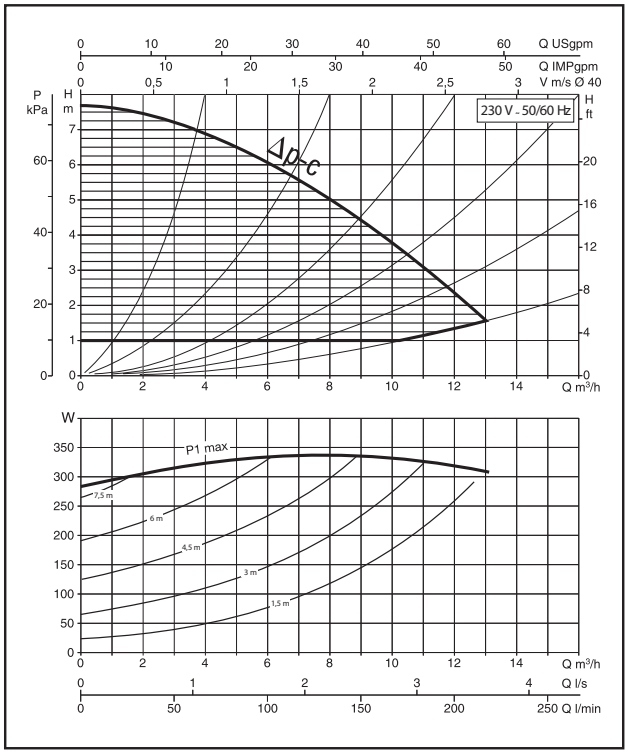
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

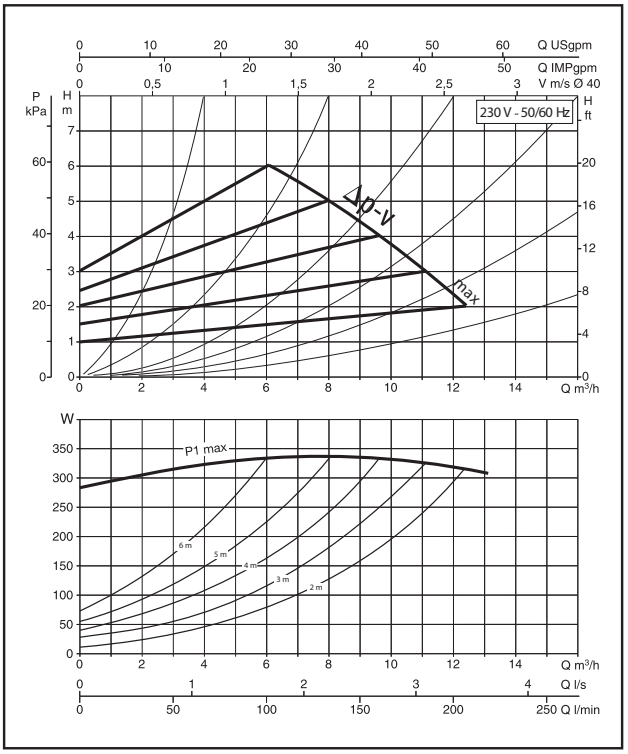


BPH-E 60/250.40 M

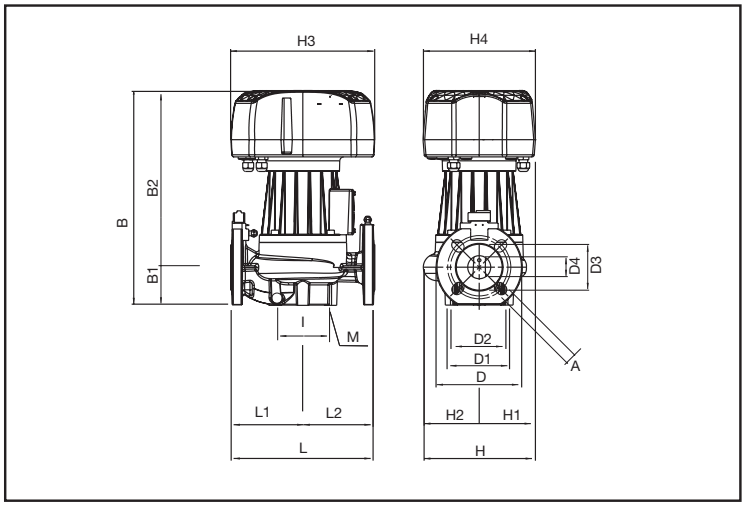
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

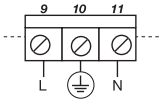


Dimensions



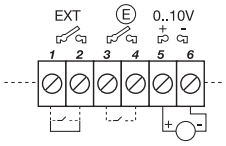
Terminals block layout

Power supply terminal block layout



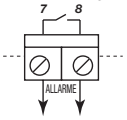
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 ((Ⓔ))
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
250	125	125	18	374	66	308	150	110	100	80	40	100	-	-	-	M10	195	83	112	250	196

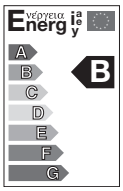
ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A					
BPH-E 60/250-40	230 V	250	DN 40 - PN 10	344	2	t°	75°	90°	110°	120°
						mt.	1,6	4	-	19

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

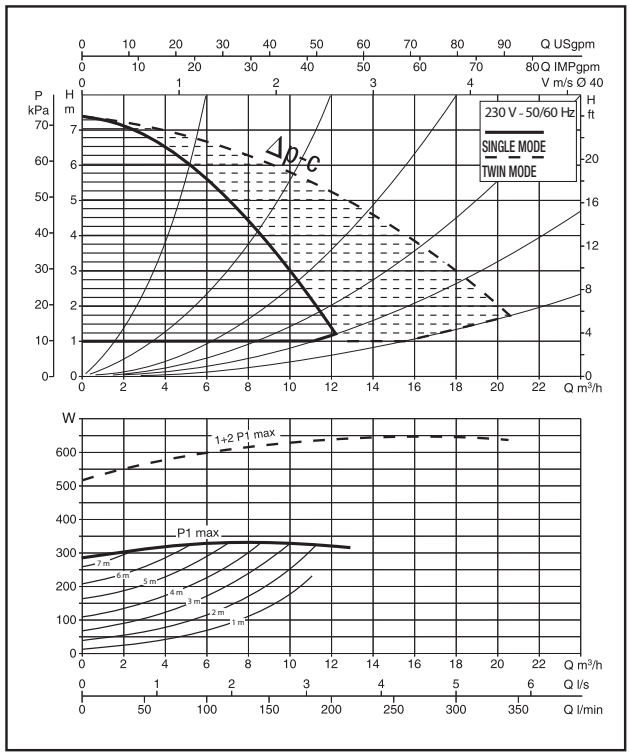
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

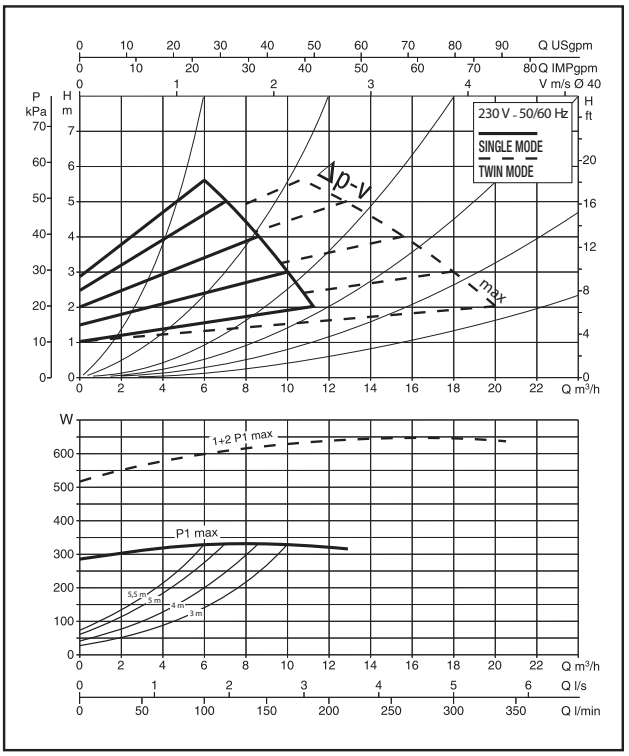


DPH-E 60/250.40 M

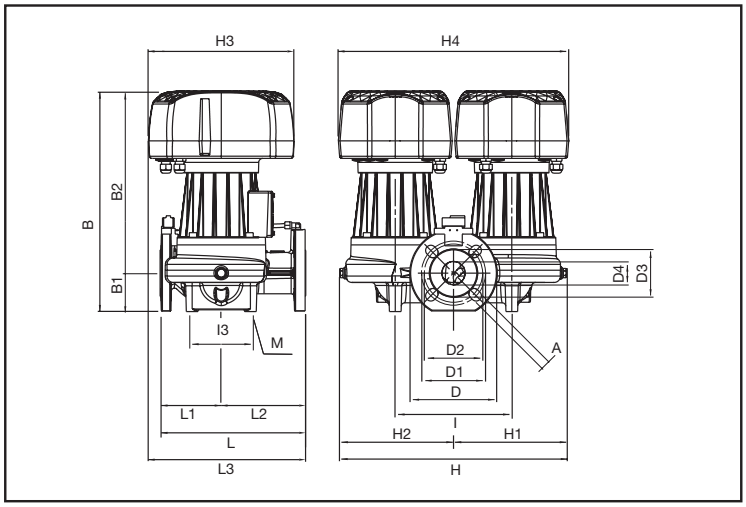
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

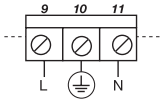


Dimensions



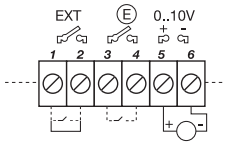
Terminals block layout

Power supply terminal block layout



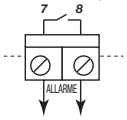
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 (Ⓔ)
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	L3	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
250	105	145	270	18	378	66	312	150	110	100	80	40	200	100	100	100	M12	389	194,5	195	250	396

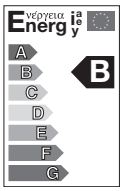
ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A					
DPH-E 60/250-40	230 V	250	DN 40 - PN 10	344	2	t°	75°	90°	110°	120°
						mt.	1,6	4	-	19

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

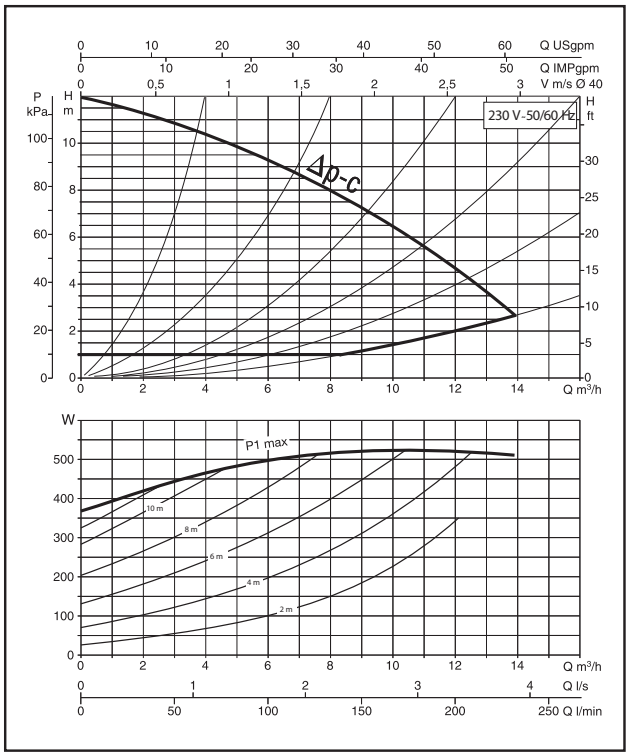
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

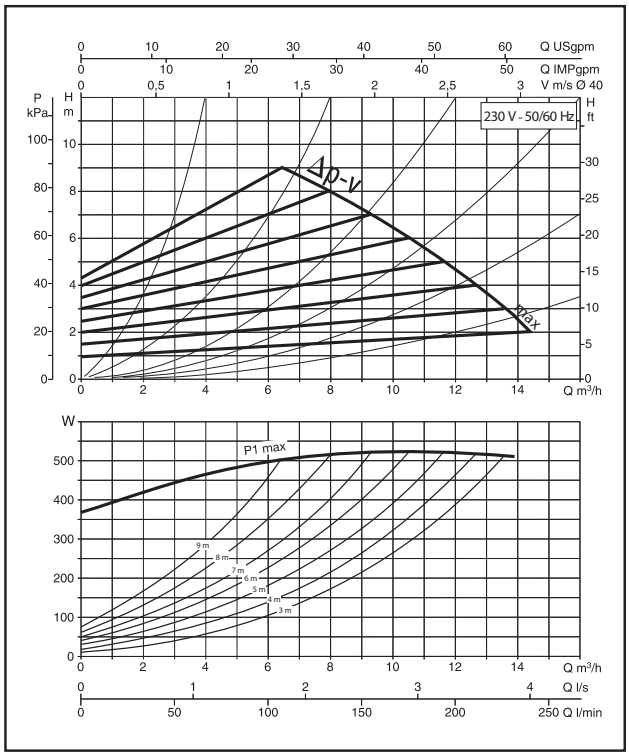


BPH-E 120/250.40 M

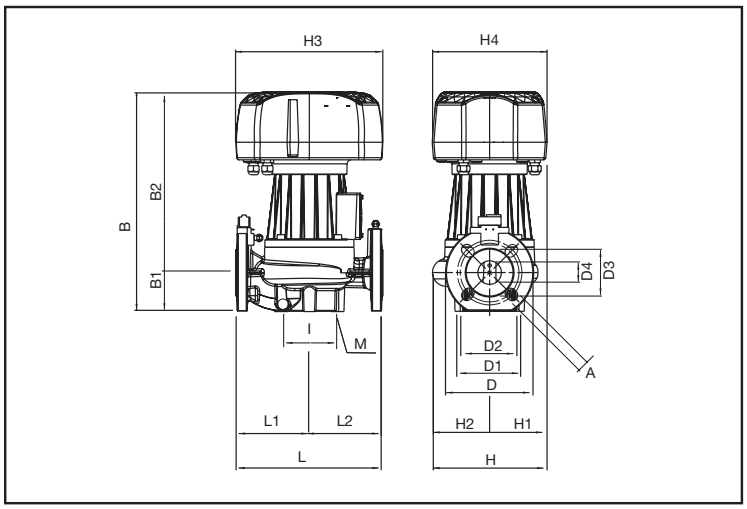
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

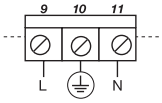


Dimensions



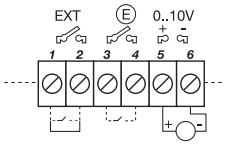
Terminals block layout

Power supply terminal block layout



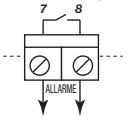
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 ((Ⓔ))
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
250	125	125	18	374	66	308	150	100	100	80	40	100	-	-	-	M10	195	83	112	250	196

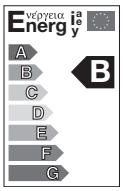
ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A					
BPH-E 120/250-40	230 V	250	DN 40 - PN 10	528	3	t°	75°	90°	110°	120°
						mt.	6	9	-	23

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

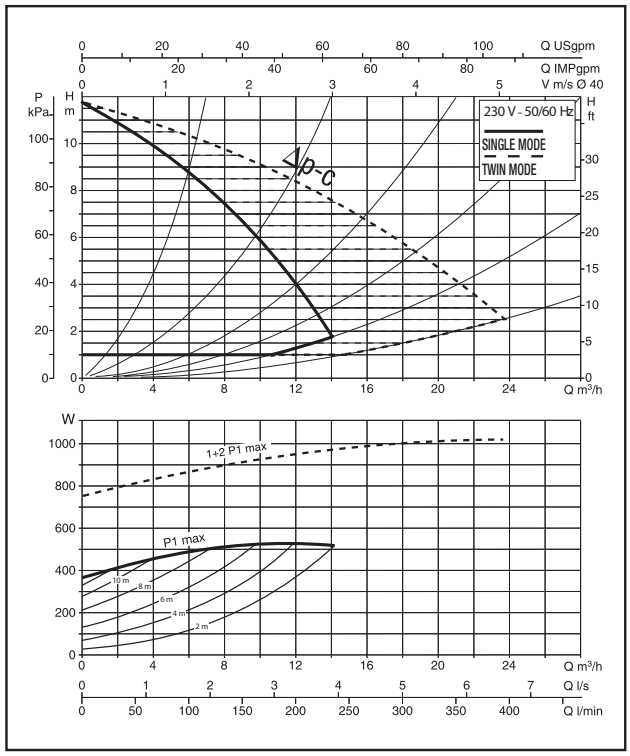
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

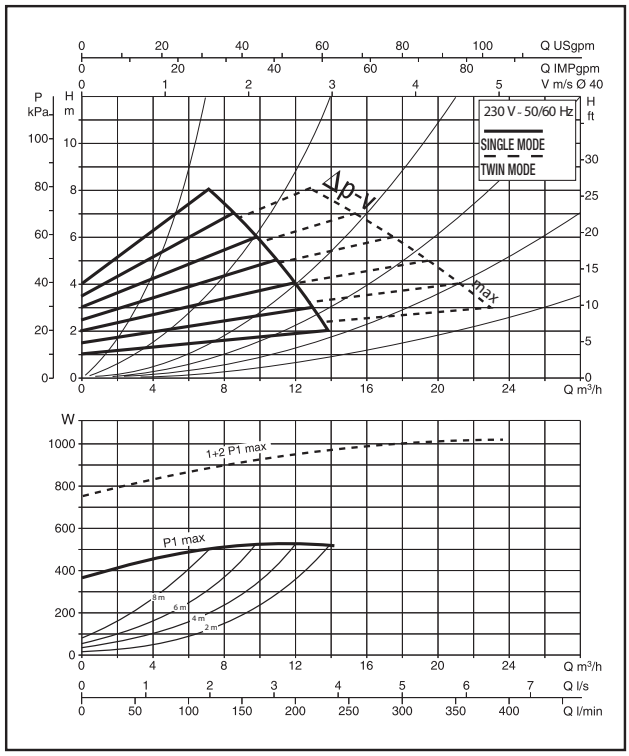


DPH-E 120/250.40 M

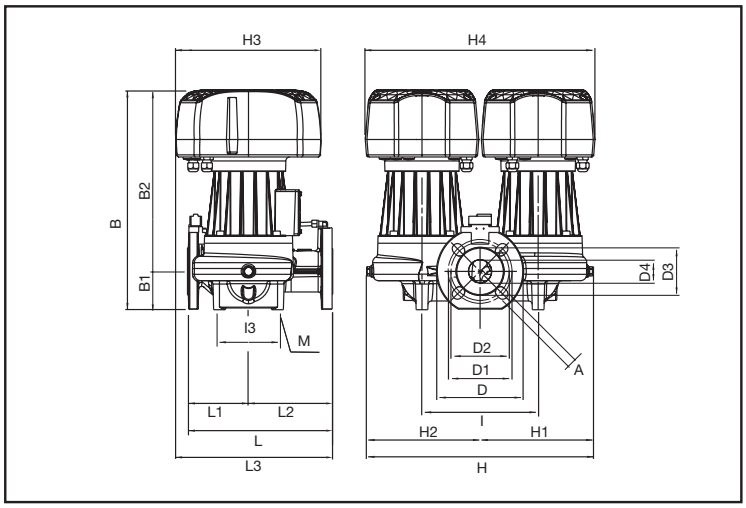
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

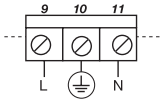


Dimensions



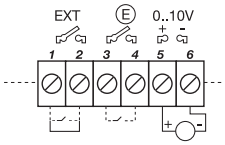
Terminals block layout

Power supply terminal block layout



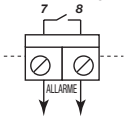
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 (Ⓔ)
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	L3	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
250	105	145	270	18	378	66	312	150	110	100	80	40	200	100	100	100	M12	389	194,5	195	250	396

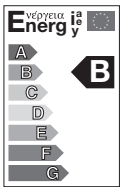
ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A					
DPH-E 120/250-40	230 V	250	DN 40 - PN 10	528	3	t°	75°	90°	110°	120°
						mt.	6	9	-	23

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

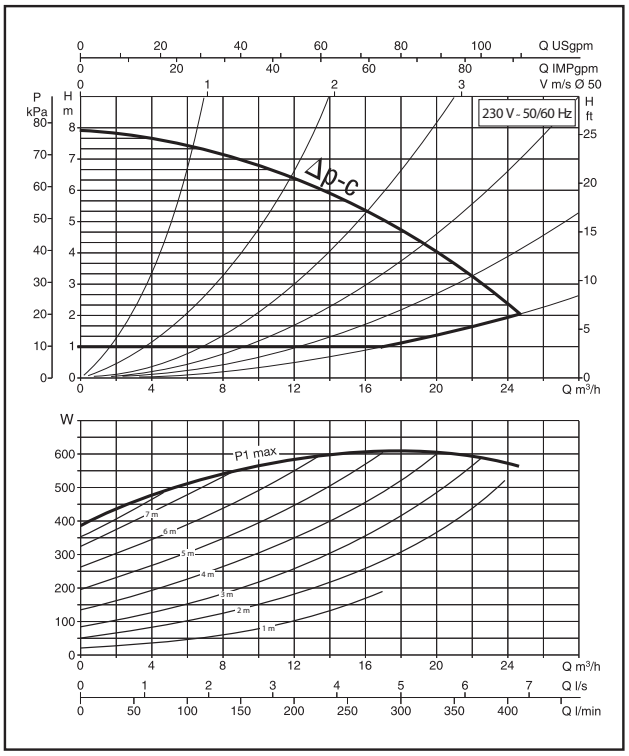
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

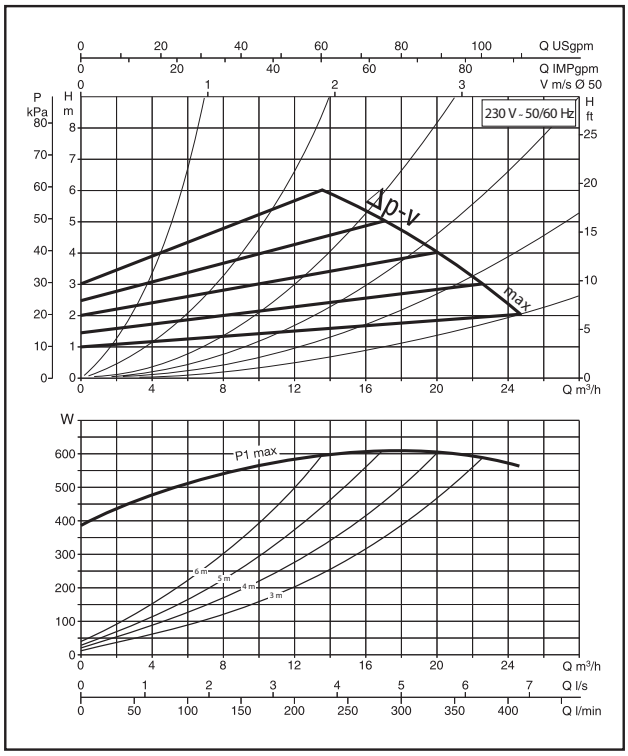


BPH-E 60/280.50 M

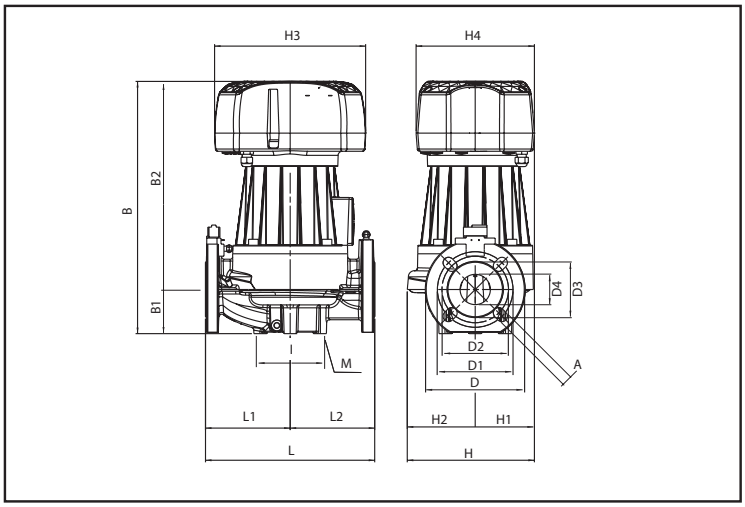
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

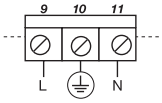


Dimensions



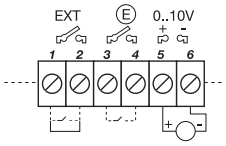
Terminals block layout

Power supply terminal block layout



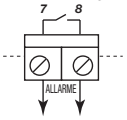
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 ((E))
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
280	140	140	18	417	73	344	165	125	110	90	50	100	-	-	-	M10	210	96	114	250	196

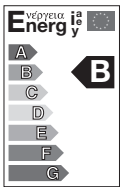
ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A					
BPH-E 60/280-50	230 V	280	DN 50 - PN 10	606	3,37	t°	75°	90°	110°	120°
						mt.	4	7,5	-	21

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

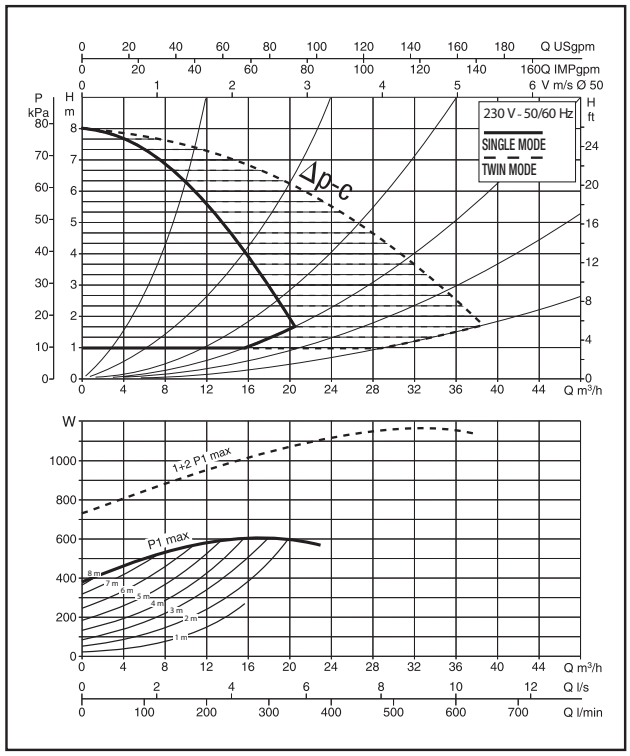
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

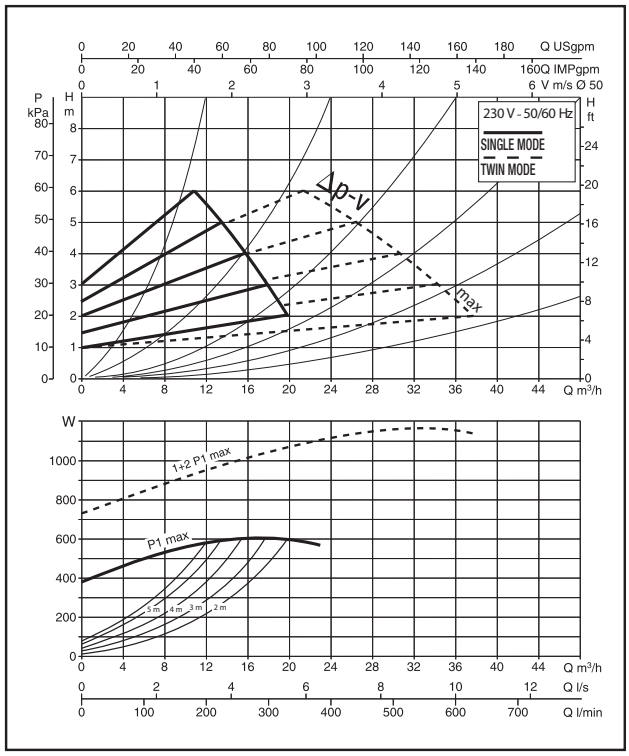


DPH-E 60/280.50 M

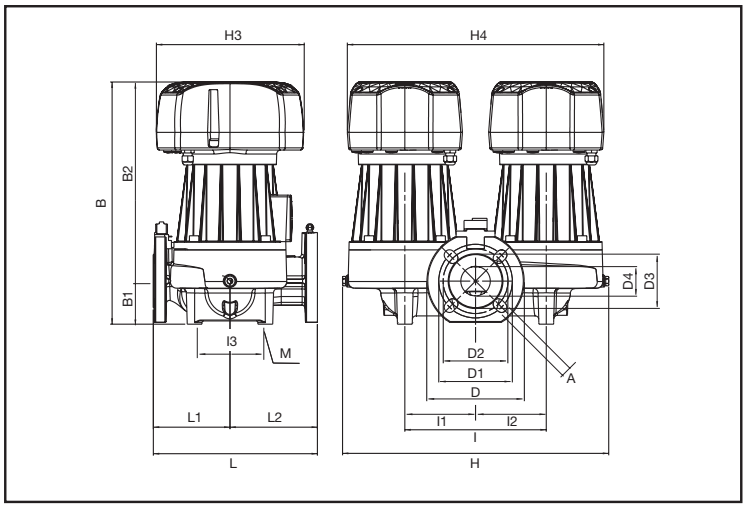
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

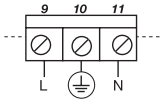


Dimensions



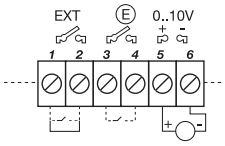
Terminals block layout

Power supply terminal block layout



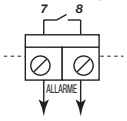
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 (Ⓔ)
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
280	130	150	18	411	73	338	165	125	110	90	50	240	120	120	120	M14	452	226	226	250	436

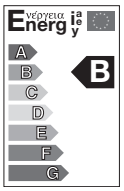
ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A					
DPH-E 60/280-50	230 V	280	DN 50 - PN 10	606	3,37	t°	75°	90°	110°	120°
						mt.	4	7,5	-	21

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

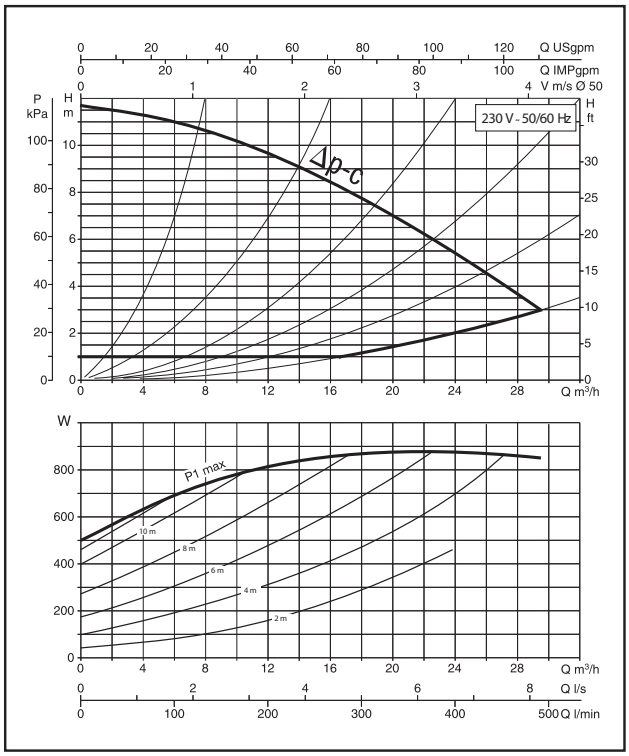
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

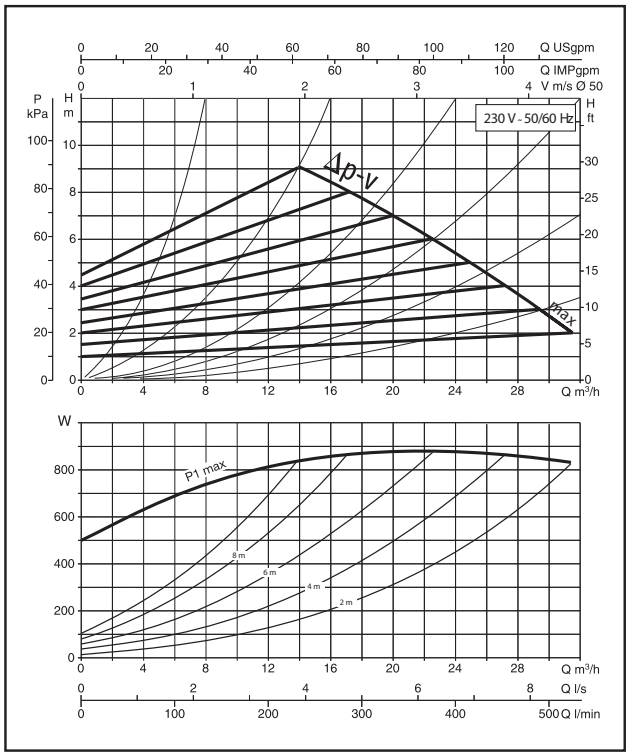


BPH-E 120/280.50 M

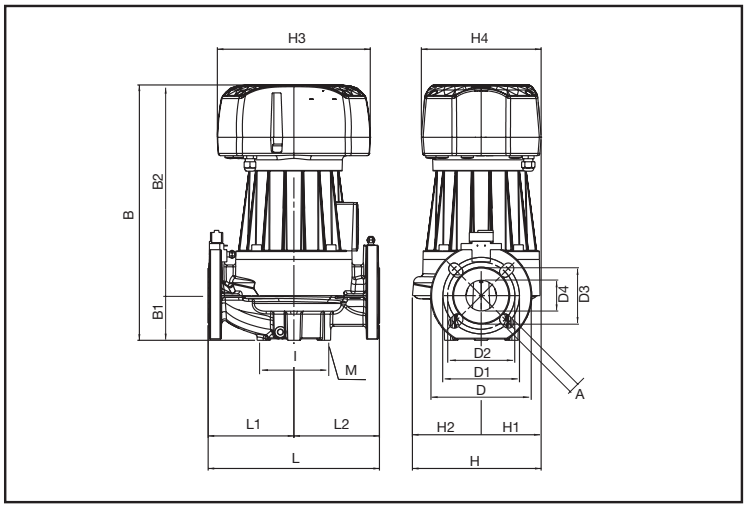
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

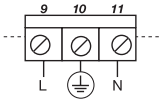


Dimensions



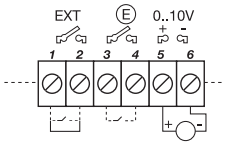
Terminals block layout

Power supply terminal block layout



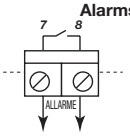
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 ((Ⓔ))
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
280	140	140	18	417	73	344	165	125	110	90	50	100	-	-	-	M10	210	96	114	250	196

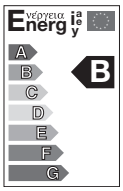
ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A					
BPH-E 120/280-50	230 V	280	DN 50 - PN 10	893	4,84	t°	75°	90°	110°	120°
						mt.	2	5	-	20

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

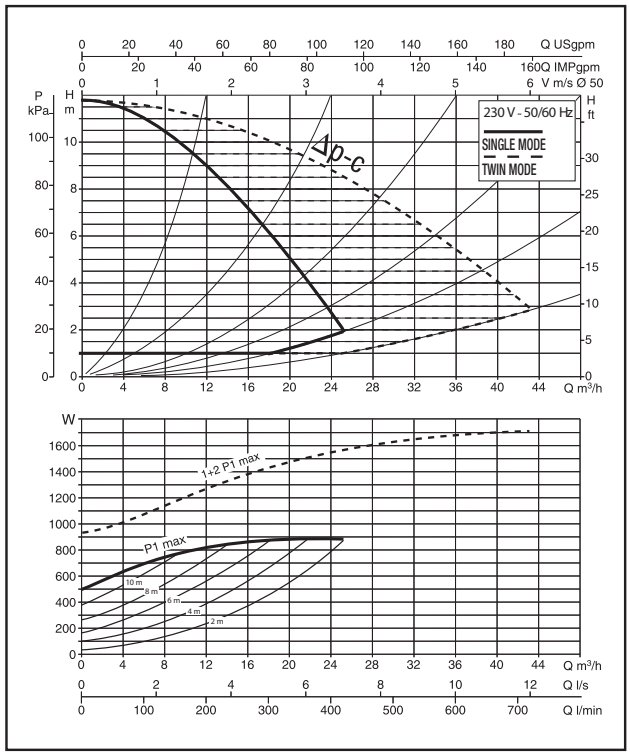
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

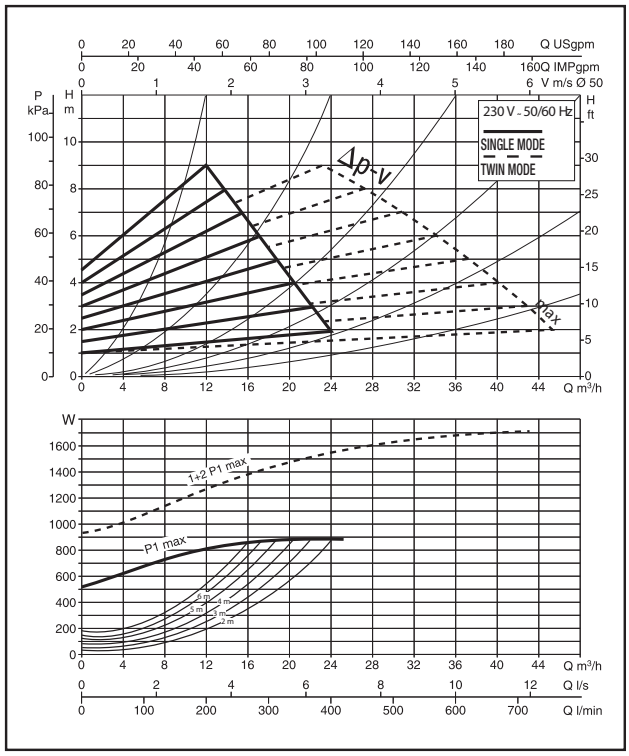


DPH-E 120/280.50 M

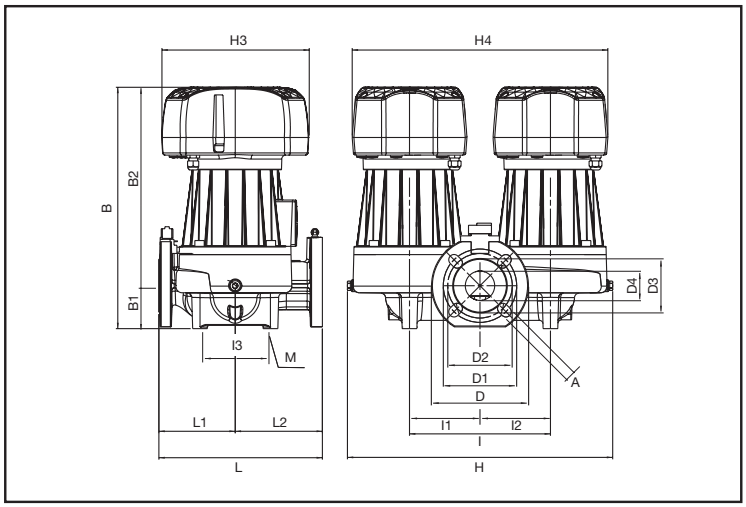
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

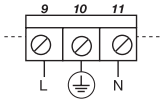


Dimensions



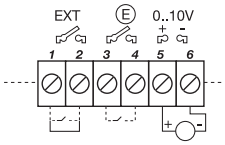
Terminals block layout

Power supply terminal block layout



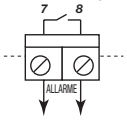
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 (Ⓔ)
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
280	130	150	18	411	73	338	165	125	110	90	50	240	120	120	120	M14	452	226	226	250	436

ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A	t°	75°	90°	110°	120°
DPH-E 120/280-50	230 V	280	DN 50 - PN 10	893	4,84	mt.	2	5	-	20

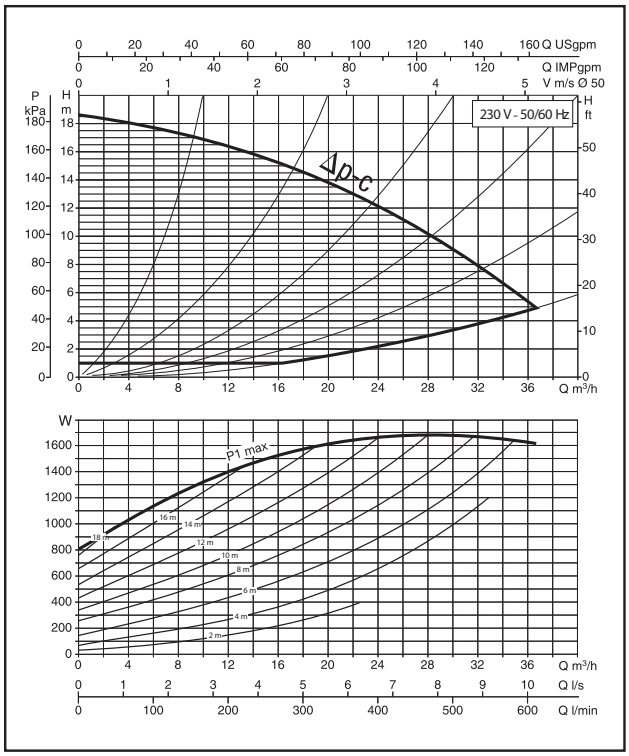
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

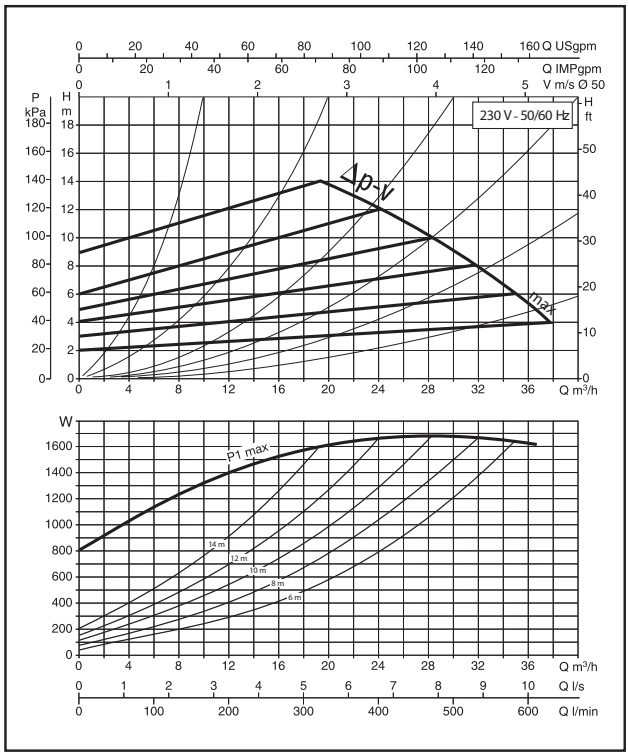
Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

BPH-E 180/280.50 M

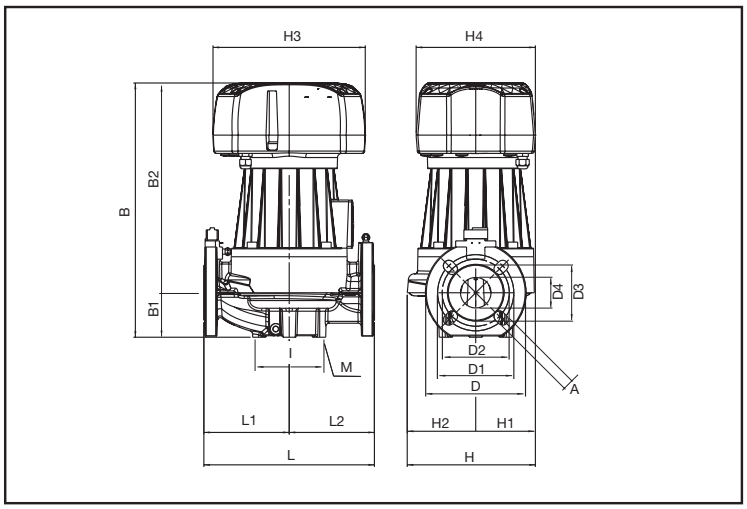
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

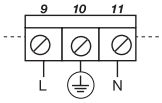


Dimensions



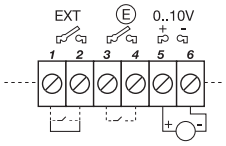
Terminals block layout

Power supply terminal block layout



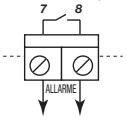
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 ((Ⓔ))
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
280	140	140	18	467	73	394	165	125	110	90	50	100	-	-	-	M10	210	96	114	250	196

ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A					
BPH-E 180/280-50	230 V	280	DN 50 - PN 10	1693	9,2	t°	75°	90°	110°	120°
						mt.	2	5	-	20

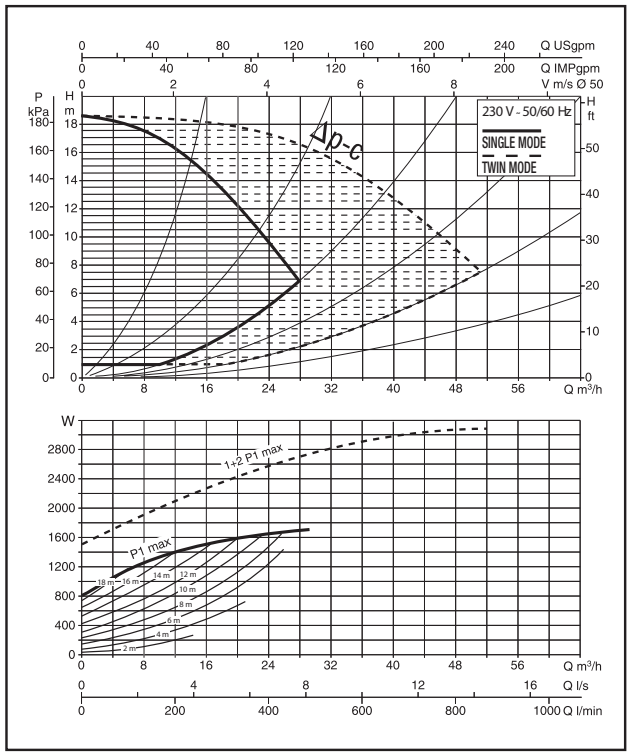
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

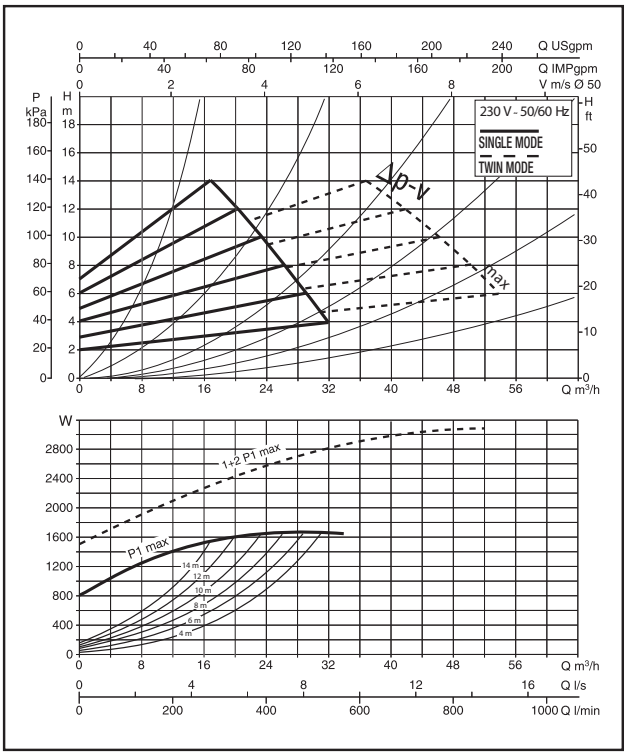
Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

DPH-E 180/280.50 M

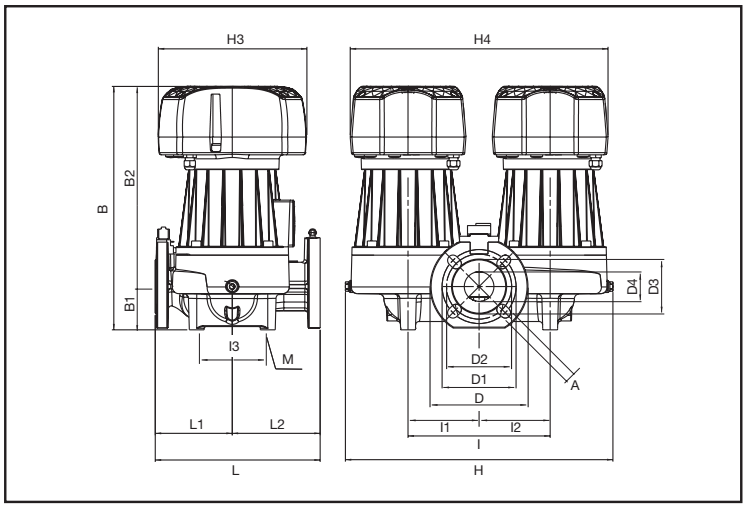
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

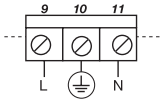


Dimensions



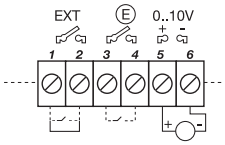
Terminals block layout

Power supply terminal block layout



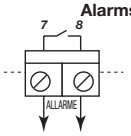
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 (Ⓔ)
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
280	130	150	18	461	73	388	165	125	110	90	50	240	120	120	120	M14	452	226	226	250	436

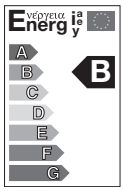
ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A					
DPH-E 180/280-50	230 V	280	DN 50 - PN 10	1693	9,2	t°	75°	90°	110°	120°
						mt.	2	5	-	20

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

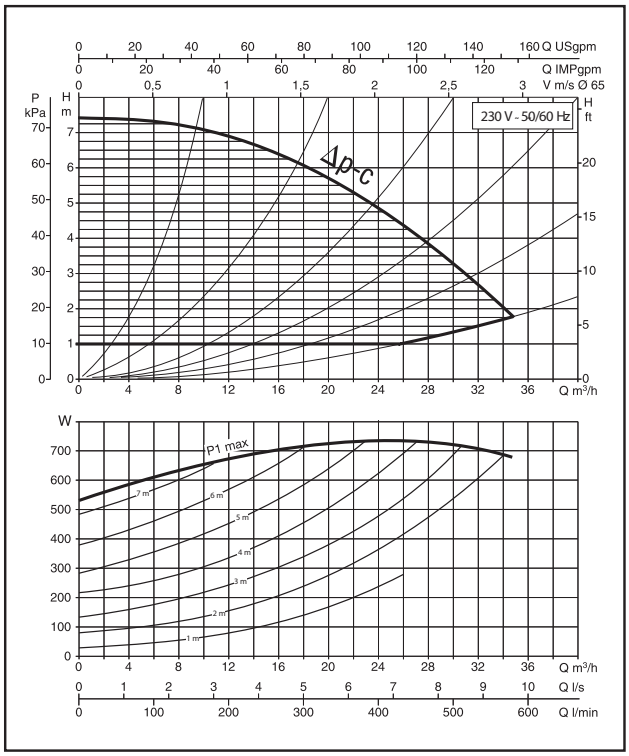
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

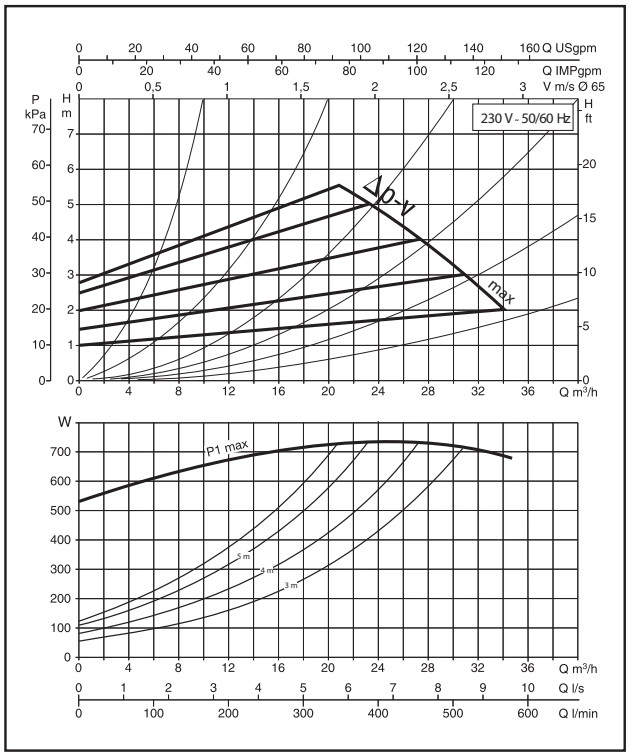


BPH-E 60/340.65 M

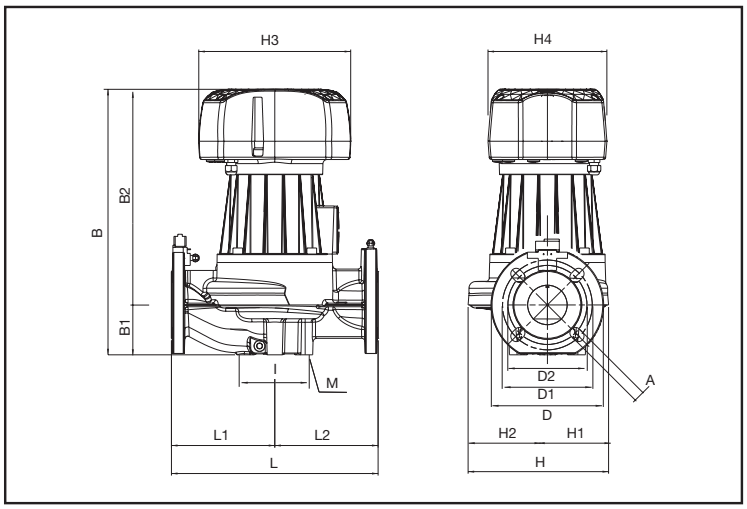
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

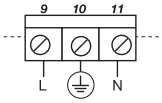


Dimensions



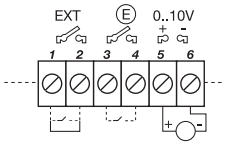
Terminals block layout

Power supply terminal block layout



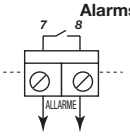
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 ((Ⓔ))
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
340	170	170	18	437	82	355	185	145	130	110	65	100	-	-	-	M12	231	100	131	250	196

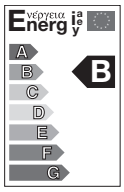
ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A	t°	75°	90°	110°	120°
BPH-E 60/340-65	230 V	340	DN 65 - PN 10	744	4,1	mt.	1	4	-	18

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

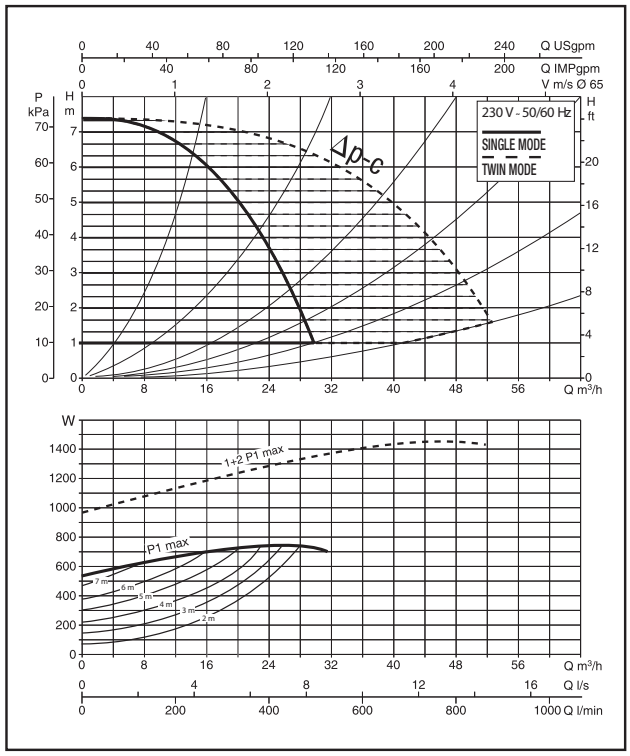
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

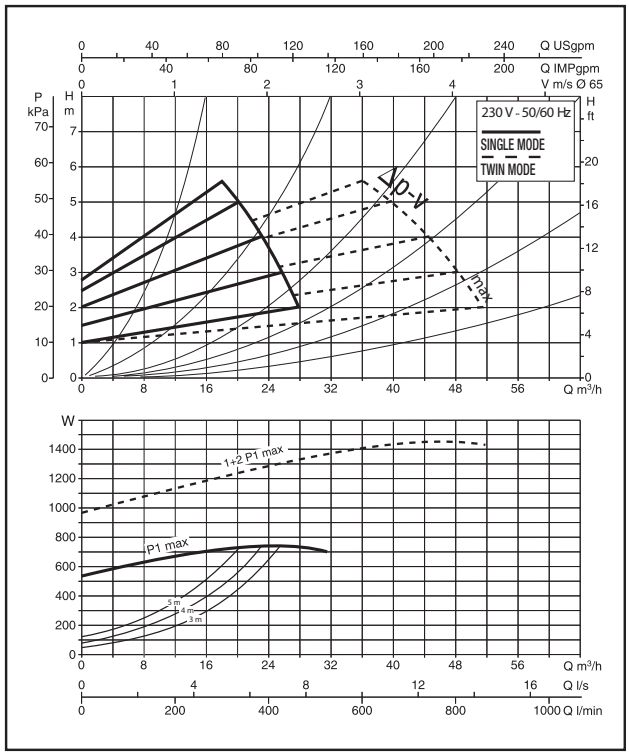


DPH-E 60/340.65 M

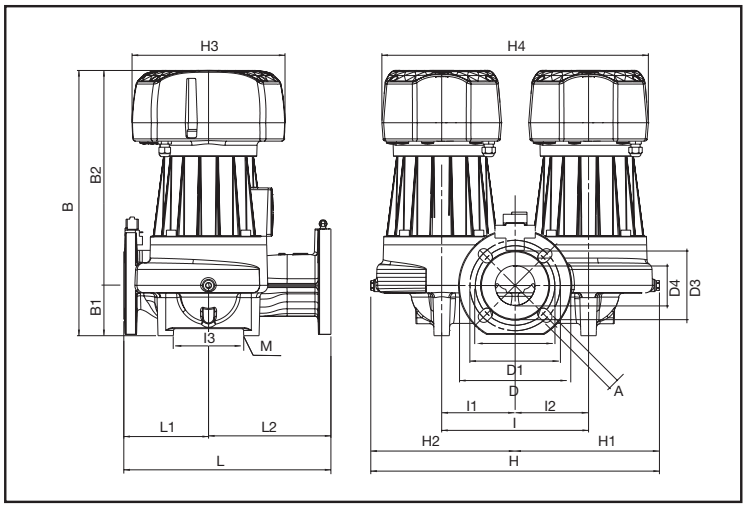
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

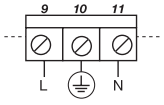


Dimensions



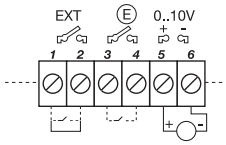
Terminals block layout

Power supply terminal block layout



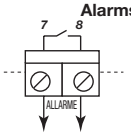
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 (Ⓔ)
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
340	138,5	201,5	18	433	82	351	185	145	130	110	65	240	120	120	140	M14	472	236	236	250	436

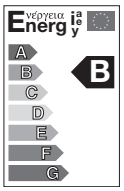
ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A	t°	75°	90°	110°	120°
DPH-E 60/340-65	230 V	340	DN 65 - PN 10	744	4,1	mt.	1	4	-	18

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

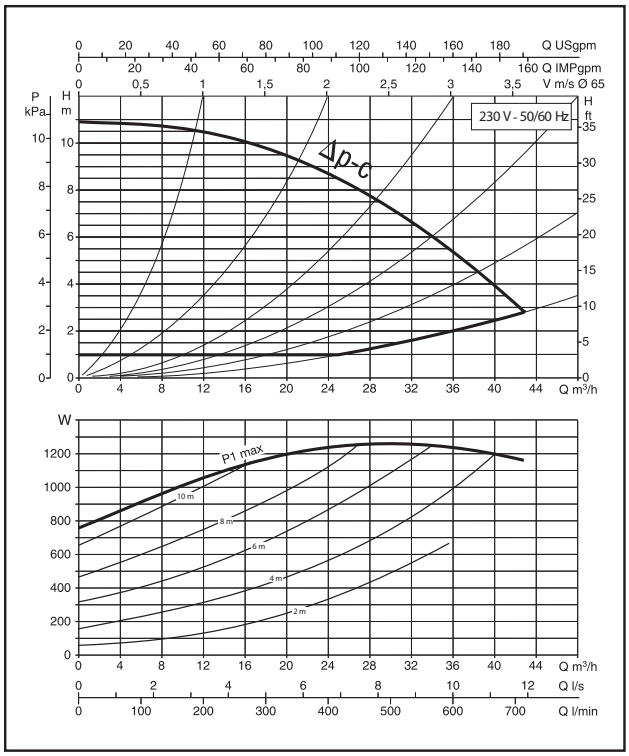
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

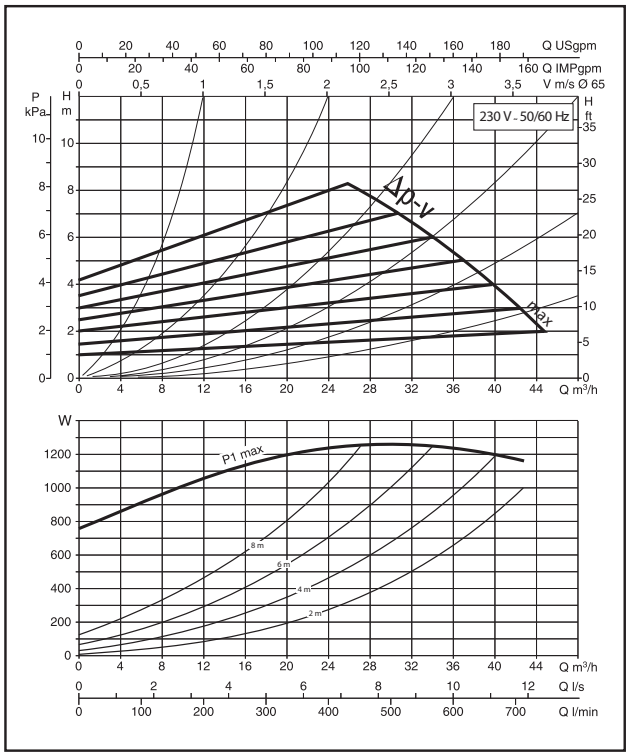


BPH-E 120/340.65 M

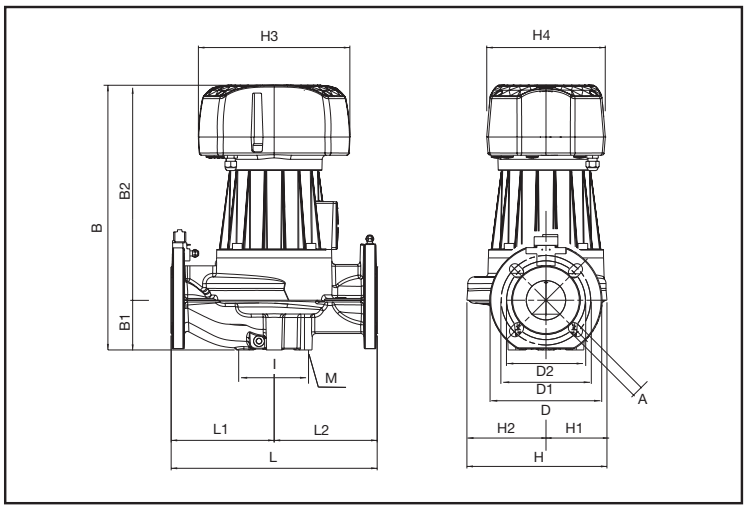
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

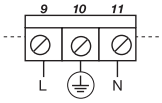


Dimensions



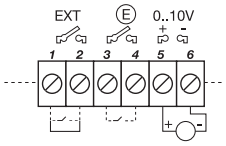
Terminals block layout

Power supply terminal block layout



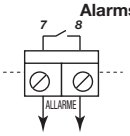
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 (Ⓔ)
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
340	170	170	18	487	82	405	185	145	130	110	65	100	-	-	-	M12	231	100	131	250	196

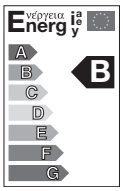
ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A					
BPH-E 120/340-65	230 V	340	DN 65 - PN 10	1262	6,72	t°	75°	90°	110°	120°
						mt.	7	11	18	-

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

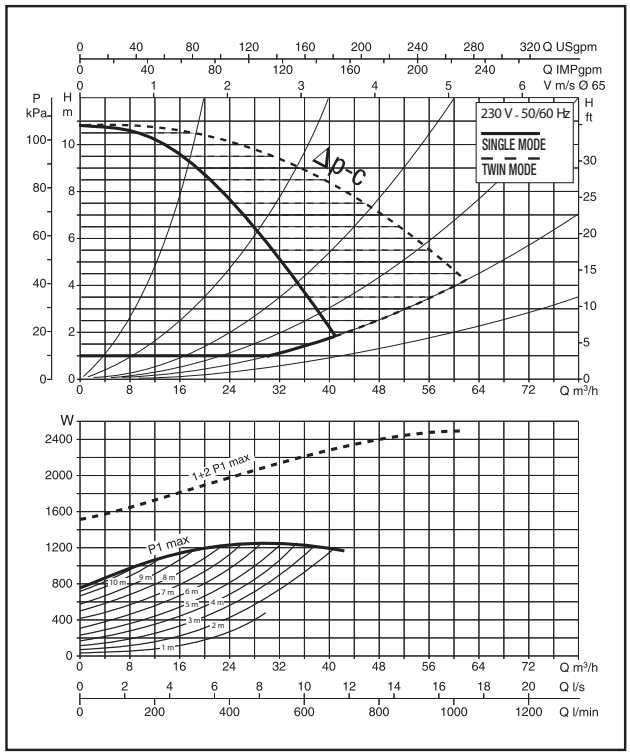
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

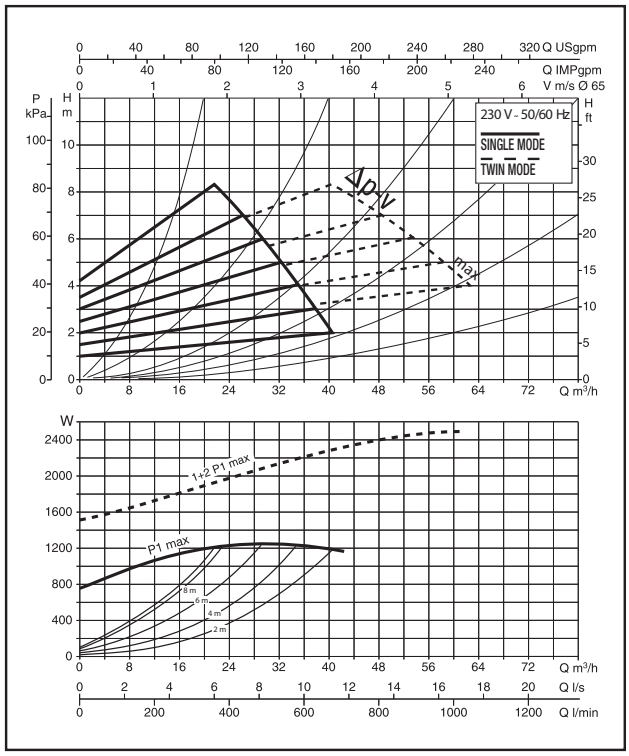


DPH-E 120/340.65 M

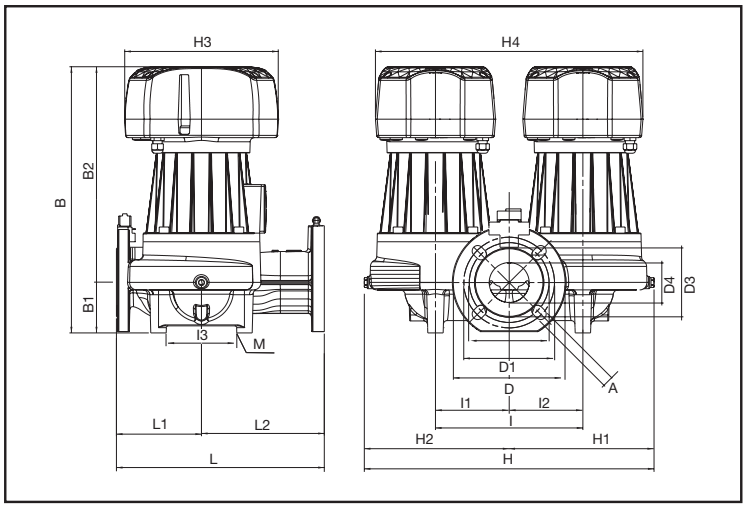
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

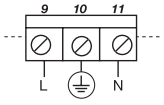


Dimensions



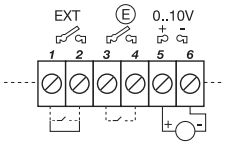
Terminals block layout

Power supply terminal block layout



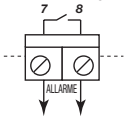
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 (Ⓔ)
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
340	138,5	201,5	18	483	82	220	185	145	130	110	65	240	120	120	140	M14	472	236	236	250	436

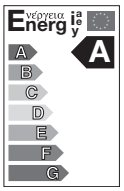
ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A	t°	75°	90°	110°	120°
DPH-E 120/340-65	230 V	340	DN 65 - PN 10	1262	6,72	mt.	7	11	18	-

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

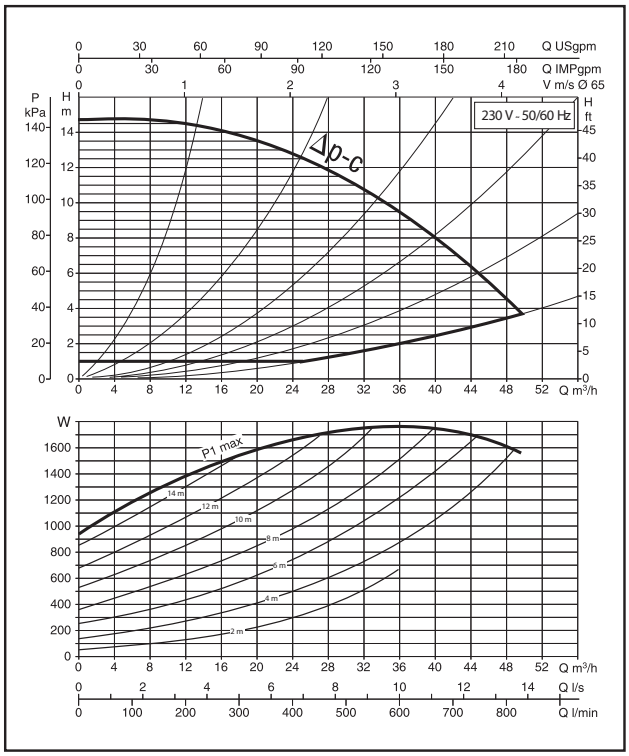
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

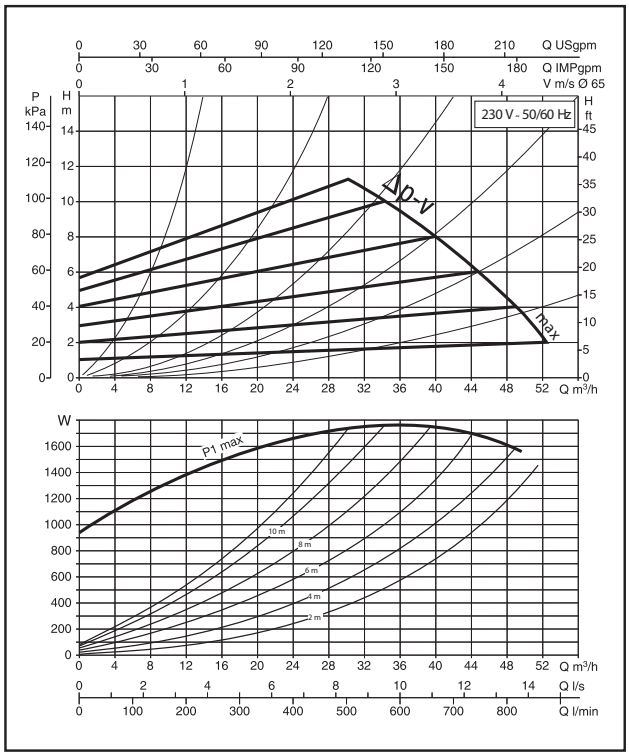


BPH-E 150/340.65 M

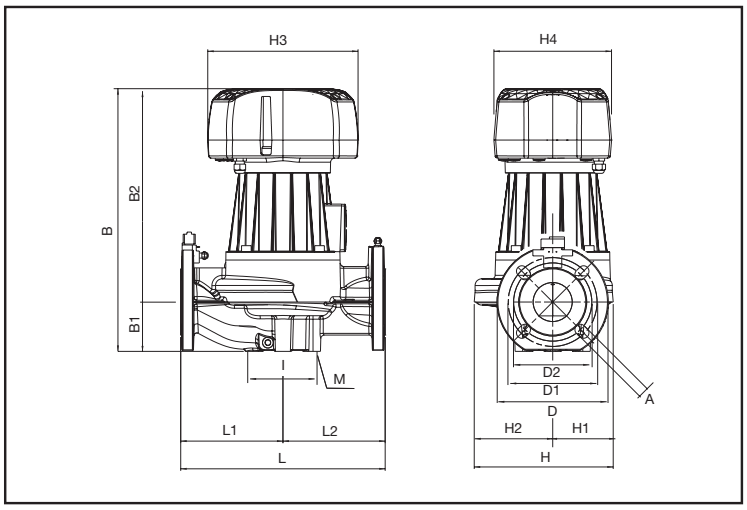
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

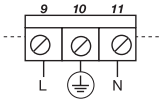


Dimensions



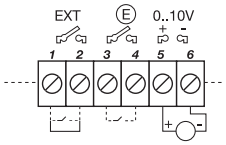
Terminals block layout

Power supply terminal block layout



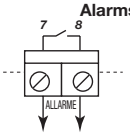
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 ((Ⓔ))
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
340	170	170	18	487	82	405	185	145	130	110	65	100	-	-	-	M12	231	100	131	250	196

ELECTRICAL DATA

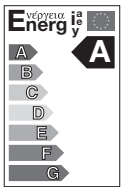
MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A					
BPH-E 150/340-65	230 V	340	DN 65 - PN 10	1767	9,2	t°	75°	90°	110°	120°
						mt.	7	11	18	-

DAB PUMP PERFORMANCE

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

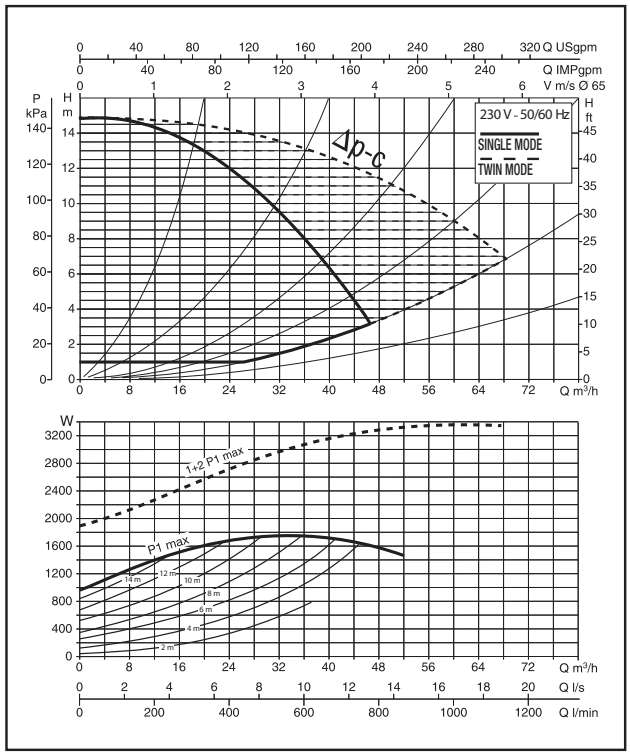
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

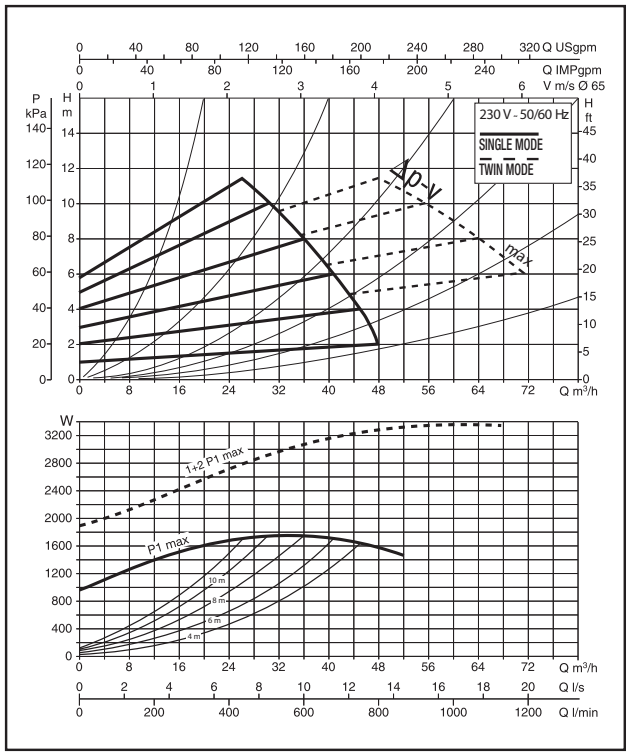


DPH-E 150/340.65 M

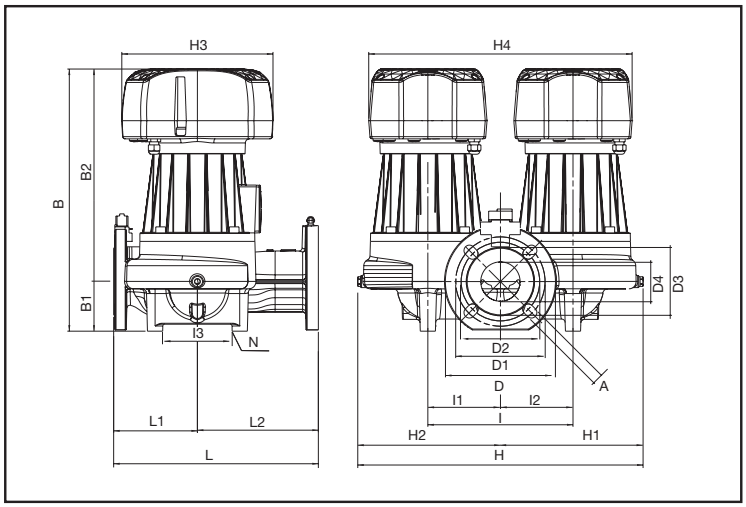
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

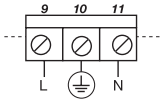


Dimensions



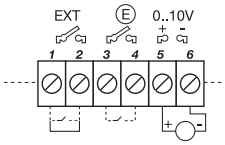
Terminals block layout

Power supply terminal block layout



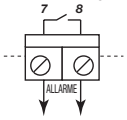
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 (Ⓔ)
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
340	138,5	201,5	18	483	82	220	185	145	130	110	65	240	120	120	140	M14	472	236	236	250	436

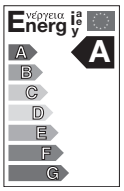
ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A					
DPH-E 150/340-65	230 V	340	DN 65 - PN 10	1767	9,2	t°	75°	90°	110°	120°
						mt.	7	11	18	-

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

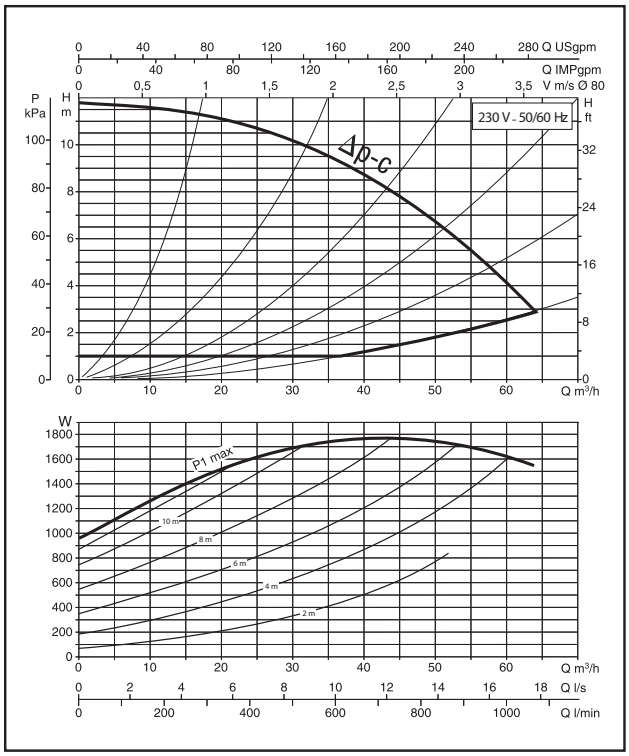
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

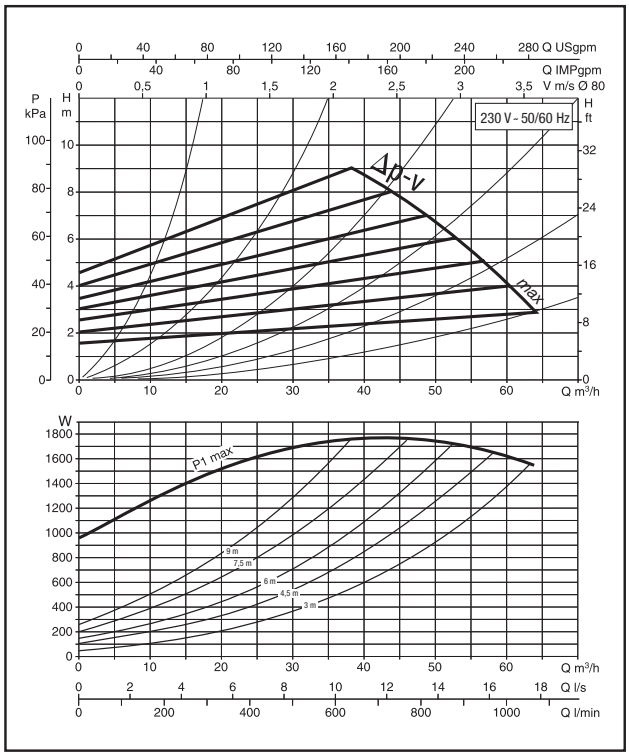


BPH-E 120/360.80 M

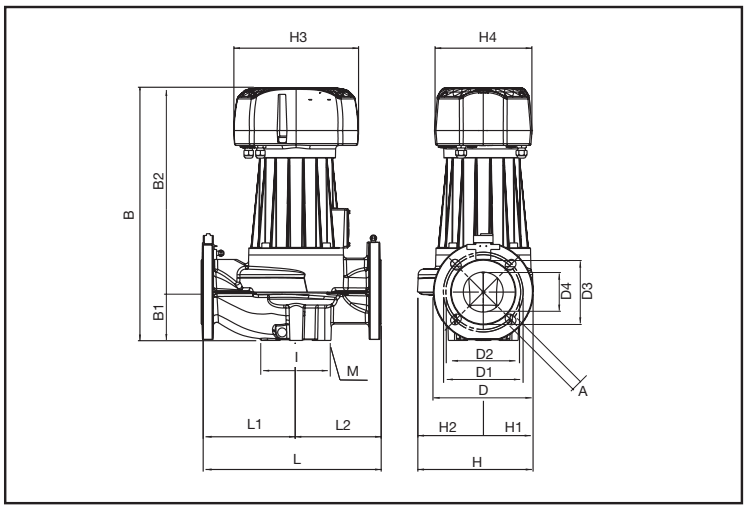
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

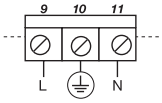


Dimensions



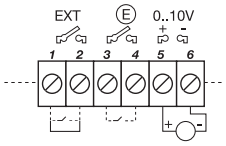
Terminals block layout

Power supply terminal block layout



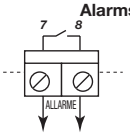
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 ((Ⓔ))
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
360	190	170	18	506	97	409	200	160	150	130	80	115	-	-	-	M12	232	100	132	250	196

ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A					
BPH-E 120/360-80	230 V	360	DN 80 - PN 10	1789	9,23	t°	75°	90°	110°	120°
						mt.	6	10	-	22

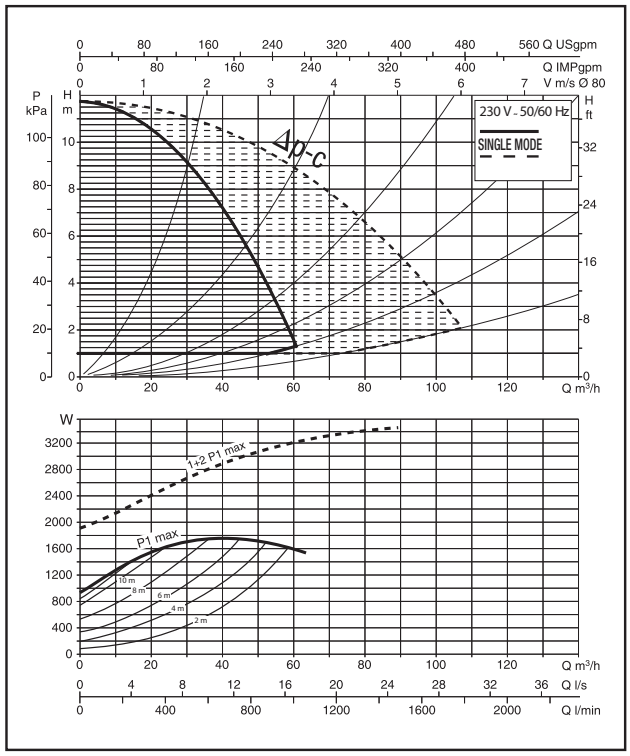
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

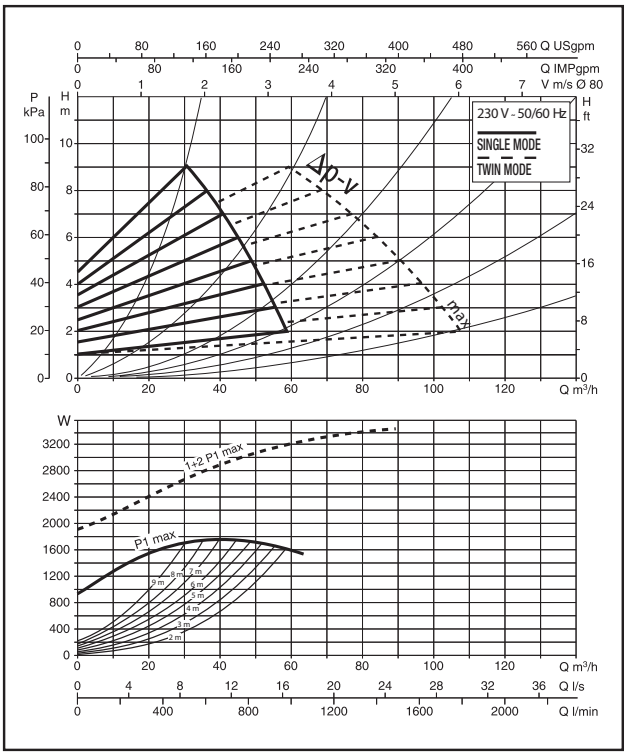
Liquid temperature range: from -10°C to +120°C
Maximum operating pressure: 10 bar (1000 kPa)

DPH-E 120/360.80 M

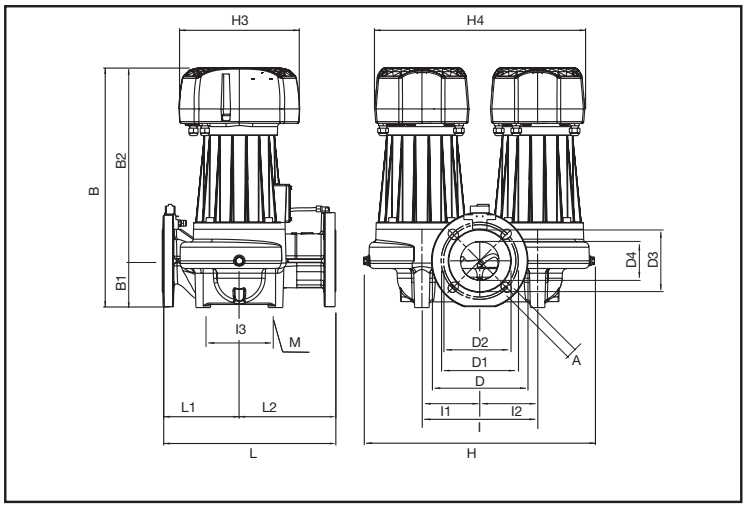
Characteristic curves Δp-c (constant)



Characteristic curves Δp-v (variable)

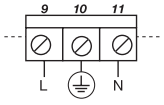


Dimensions



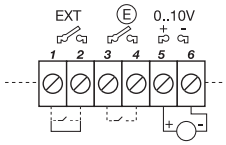
Terminals block layout

Power supply terminal block layout



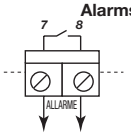
Power supply connection terminals
1x230V 50-60Hz
9 = Line
10 = Earth
11 = Neutral

Service terminal block layout



Remote control connection terminals
1 - 2 (exit)
Economy mode input connection terminals
3 - 4 (Ⓔ)
Analogue input connection terminals 0-10V dc
5 = + 10V ***6*** = 0 V

Alarms terminal block layout



Remote alarm contact connection terminals
250V ac 5A
7 - 8 (alarm)

DIMENSIONS

L	L1	L2	A	B	B1	B2	D	D1	D2	D3	D4	I	I1	I2	I3	M	H	H1	H2	H3	H4
360	160	200	18	497	97	400	200	160	150	130	80	240	120	120	150	M14	478	239	239	250	436

ELECTRICAL DATA

MODEL	VOLTAGE 50/60 Hz	CENTRE DISTANCE mm	CONTROFLANGES ON REQUEST	ELECTRICAL DATA		MINIMUM HEAD PRESSURE				
				P1 MAX W	In A	t°	75°	90°	110°	120°
DPH-E 120/360-80	230 V	360	DN 80 - PN 10	1789	9,20	mt.	6	10	-	22

ACCESSORIES UNIONS KIT AND COUNTERFLANGES KIT

MODEL	UNIONS KIT								
	3/4" F	1" F	1" 1/4 F	1" 1/4 M	1/2" F BRASS	3/4" F BRASS	1" F BRASS	COPPER TO BE WELDED F 22	COPPER TO BE WELDED F 28
VA 25/130	●	●		●					
VA 25/180	●	●		●					
VA 25/180X			●						
VA 35/130	●	●		●					
VA 35/180	●	●		●					
VA 35/180X			●						
VA 55/130	●	●		●					
VA 55/180	●	●		●					
VA 55/180X			●						
VA 65/130	●	●		●					
VA 65/180	●	●		●					
VA 65/180X			●						
VB 35/120									
VB 55/120									
VB 65/120									
VD 55/220.32									
VD 65/220.32									
VEA 35/130	●	●		●					
VEA 35/180	●	●		●					
VEA 35/180X			●						
VEA 55/130	●	●		●					
VEA 55/180	●	●		●					
VEA 55/180X			●						
VEA 65/130	●	●		●					
VEA 65/180	●	●		●					
VEA 65/180X			●						
VEA 40/190 XM			●						
VEA 80/180 XM			●						
VS 8/150					●	●	●	●	●
VS 16/150					●	●	●	●	●
VS 35/150					●	●	●	●	●
VS 65/150					●	●	●	●	●
A 50/180		●							
A 50/180X			●						
A 56/180		●							
A 56/180X			●						
A 80/180		●							
A 80/180X			●						
A 110/180		●							
A 110/180X			●						

MODEL	COUNTERFLANGES KIT						
	DIAM 1" 1/2 PN 10	DIAM 2" PN 10	DIAM 2" 1/2 PN 10	DN 32 PN 6	DN 40 PN 10	DN 80 PN 10	DN 100 PN 6
VD 55/220.32				●			
VD 65/220.32				●			
B 50/250.40					●		
B 56/250.40					●		
B 80/250.40					●		
B 110/250.40							
D 50/250.40					●		
D 56/250.40					●		
D 80/250.40					●		
D 110/250.40							
BMH 30/250.40	●						
BPH 60/250.40	●						
BPH 120/250.40	●						
BMH 30/280.50		●					
BMH 60/280.50		●					
BPH 60/280.50		●					
BPH 120/280.50		●					
BPH 150/280.50		●					
BPH 180/280.50		●					
BMH 30/340.65			●				
BMH 60/340.65			●				
BPH 60/340.65			●				
BPH 120/340.65			●				
BPH 150/340.65			●				
BPH 180/340.65			●				
BMH 30/360.80						●	
BMH 60/360.80						●	
BPH 120/360.80						●	
BPH 150/360.80						●	
BPH 180/360.80						●	
DMH 30/250.40	●						
DPH 60/250.40	●						
DPH 120/250.40	●						
DMH 30/280.50		●					
DMH 60/280.50		●					
DPH 60/280.50		●					
DPH 120/280.50		●					
DPH 150/280.50		●					
DPH 180/280.50		●					
DMH 30/340.65			●				
DMH 60/340.65			●				
DPH 60/340.65			●				
DPH 120/340.65			●				
DPH 150/340.65			●				
DPH 180/340.65			●				
DMH 30/360.80						●	
DMH 60/360.80						●	
DPH 120/360.80						●	
DPH 150/360.80						●	
DPH 180/360.80						●	
VEB 110/450.100							●
DEB 110/450.100							●
BPH-E 60/250.40					●		
BPH-E 120/250.40					●		
BPH-E 120/360.80						●	
DPH-E 60/250.40					●		
DPH-E 120/250.40					●		
DPH-E 120/360.80						●	

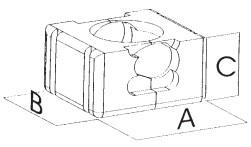
ACCESSORIES

MODEL	OVAL COUNTERFLANGES KIT				
	OVAL DN 20 3/4" F	OVAL DN 25 1" F	OVAL DN 32 1" 1/4 F	OVAL DN 40 1" 1/2 F	OVAL DN 50 2" F
VB 35/120	●	●	●	●	●
VB 55/120	●	●	●	●	●
VB 65/120	●	●	●	●	●

MODEL	COUNTERFLANGES KIT TO BE WELDED			
	DN 40 PN 6	DN 50 PN 6	DN 65 PN 6	DN 80 PN 6
BPH-E 60/250.40	●			
BPH-E120/250.40	●			
BPH-E 60/280.50		●		
BPH-E 120/280.50		●		
BPH-E 180/280.50		●		
BPH-E 60/340.65			●	
BPH-E 120/340.65			●	
BPH-E 150/340.65			●	
BPH-E 120/360.80				●
DPH-E 60/250.40	●			
DPH-E120/250.40	●			
DPH-E 60/280.50		●		
DPH-E 120/280.50		●		
DPH-E 180/280.50		●		
DPH-E 60/340.65			●	
DPH-E 120/340.65			●	
DPH-E 150/340.65			●	
DPH-E 120/360.80				●

MODEL	BLANK COUNTERFLANGES KIT		
	FOR TWIN CIRCULATORS	DN 40 TWIN	DN 50 - DN 65 - DN 80 TWIN
D 50/250.40	●		
D 56/250.40	●		
D 80/250.40	●		
DMH 30/250.40		●	
DPH 60/250.40		●	
DPH 120/250.40		●	
DMH 30/280.50			●
DMH 60/280.50			●
DPH 60/280.50			●
DPH 120/280.50			●
DPH 150/280.50			●
DPH 180/280.50			●
DMH 30/340.65			●
DMH 60/340.65			●
DPH 60/340.65			●
DPH 120/340.65			●
DPH 150/340.65			●
DPH 180/340.65			●
DMH 30/360.80			●
DMH 60/360.80			●
DPH 120/360.80			●
DPH 150/360.80			●
DPH 180/360.80			●

MODEL	PUMP BODY KIT INSULATION FOR BMH - BPH CIRCULATORS (single)				
	TO BE USED FOR CIRCULATORS TYPE	DIMENSIONS			GROSS WEIGHT KG
		A	B	C	
KIT DN 40	**BMH - BPH with pump coupling DN 40**	**260**	**212**	**140**	**0,6**
KIT DN 50	**BMH - BPH with pump coupling DN 50**	**256**	**238**	**160**	**0,6**
KIT DN 65	**BMH - BPH with pump coupling DN 65**	**300**	**298**	**180**	**1,1**
KIT DN 80	**BMH - BPH with pump coupling DN 80**	**300**	**312**	**201**	**1,2**

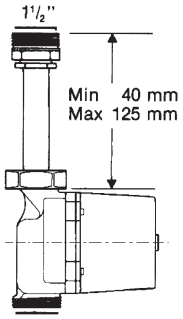


ACCESSORIES

"QUICK SERVICE" ADAPTER KIT

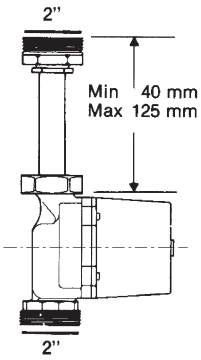
The quick service adapter kit eliminates modifications to the system piping if old circulators are replaced, with bodies or flanged DN 25 and DN 32 unions, with a different centre distance from that of modern circulators.
Suitable for use on all modern circulators with threaded mouths.

KIT A



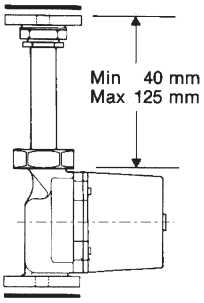
1"1/2 extension

KIT B

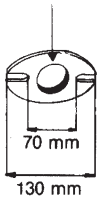


1"1/2 a 2" conversion

KIT C

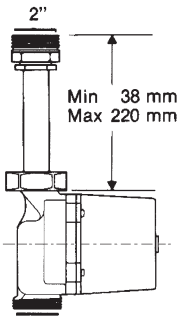


1"1/2 Internal thread



conversion from 1 1/2" body to flanged union
DN 25 - DN 32 with 2" extension

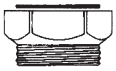
KIT D



2" extension

KIT E

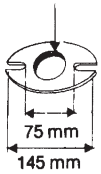
1"1/2 brass adapter



2" brass adapter

KIT AND 2" OVAL COUNTER FLANGE KIT

2"
internal thread

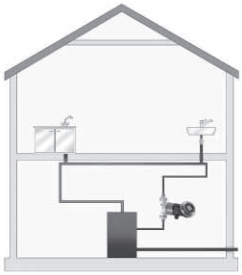


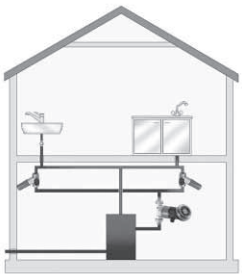
2" oval counter flanges DN 40, PN 6 / PN 10
with seals and bolts for conversion from 2" brass adapter body to 2" union to 2" flanged body DN 40

CIRCULATOR PUMPS
WITH SPHERICAL IMPELLER

CE

GENERAL DATA





Applications

It is distinguished between two types of systems:

Single circuit system:

The VORTEX sanitary hot water pumps adapt depending on the layout of the ducts on the installation in single houses or apartment blocks.

Branched system:

The VORTEX sanitary hot water pumps can be used in apartment blocks with a maximum of 12 apartments subject to the installation of VORTEX supplementary circulation regulators with automatic compensation on the lines.

Energy saving and user friendliness are of absolute priority to VORTEX.

The VORTEX regulation components and accessories enable compliance with the heating systems regulations regarding the automatic starting and stopping of the sanitary hot water pump and the hot water temperature limit.

Motor construction characteristics

The magnetic field generated in the motor acts directly on the magnetic rotor.

The liquid end is hermetically sealed from the electrical components. The motor with spherical rotor requires only a seal ring between the motor and the pump casing.

It is protected against short circuits and therefore it does not require any overload cutout. The rotor is easy to clean and replace.

- long life
- shaftless, without brushings
- low power consumption (25 W)
- silent running
- minimum risk of calcium deposits

Fastening ring nut

The ring nut allows the quick separation of the motor from the pump casing for easy cleaning and removal of calcium deposits from the parts in contact with the water.

CIRCULATOR PUMPS WITH SPHERICAL IMPELLER

Pump construction characteristics

Pump body for connector (V)

- Standard supply with unions for the fastening ring nut (nipple/welded unions, 1/2" external / 15 internal diameter)
- available on request: version without union or with different unions for ring nut, see Accessories.

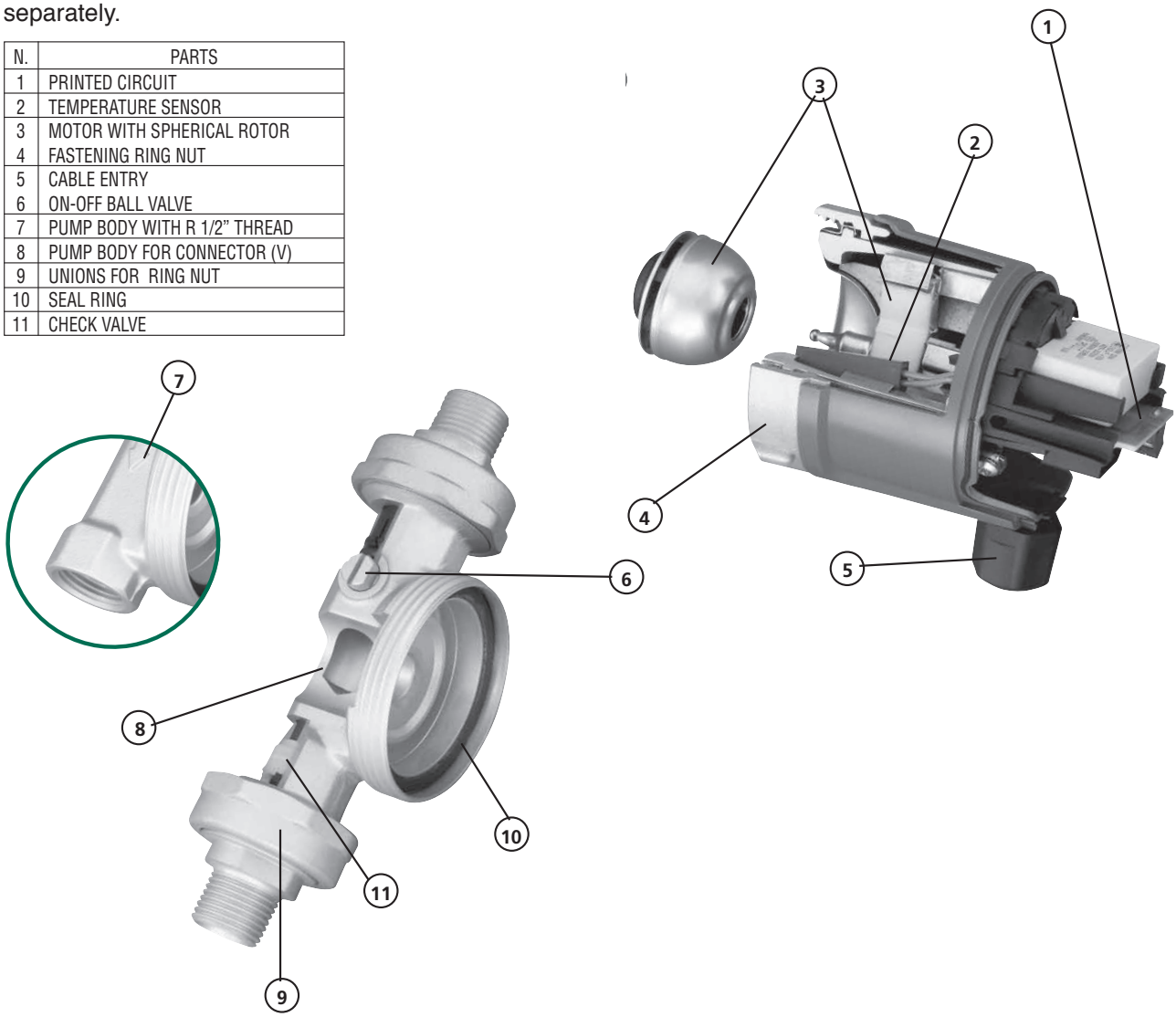
Pump body with R 1/2" thread

- internal thread
- available on request: version with set of pressed unions 1/2" external x 15 internal diameter

Check valve and on-off ball valve

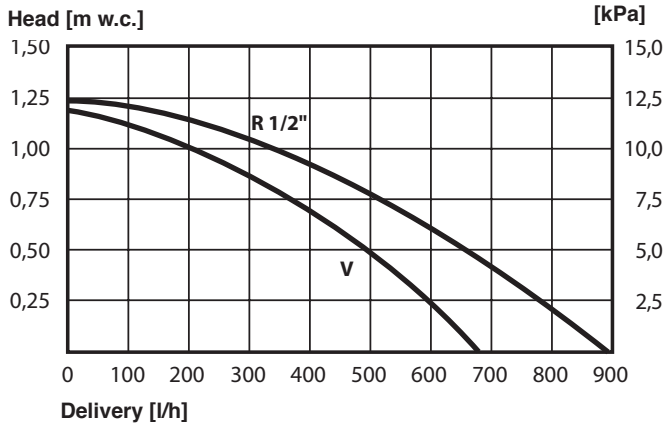
A non-return valve, in tune with the pump, must be installed in order to guarantee proper system operation. In the pump casing for the (V) unions, the non-return valve and the on-off ball valve are incorporated. For pumps featuring casing with R 1/2" thread, the non-return valve and the on-off ball valve must be installed separately.

N.	PARTS
1	PRINTED CIRCUIT
2	TEMPERATURE SENSOR
3	MOTOR WITH SPHERICAL ROTOR
4	FASTENING RING NUT
5	CABLE ENTRY
6	ON-OFF BALL VALVE
7	PUMP BODY WITH R 1/2" THREAD
8	PUMP BODY FOR CONNECTOR (V)
9	UNIONS FOR RING NUT
10	SEAL RING
11	CHECK VALVE

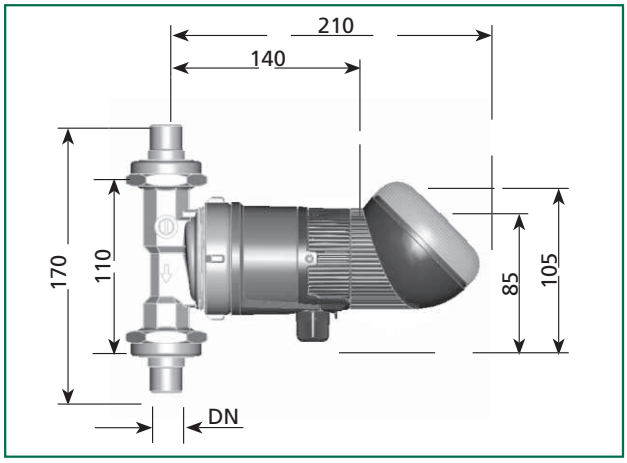


Operating range:	up to 640 l/h with head up to 1,25 m.
Maximum liquid temperature:	+95°C
Maximum operating pressure:	10 bar (1000 kPa).
Characteristics of pumped liquid:	clean, free from solids and mineral oils, not viscous, chemically neutral and close to the characteristics of water (glycol max. 30 %).

CIRCULATOR PUMPS WITH SPHERICAL IMPELLER

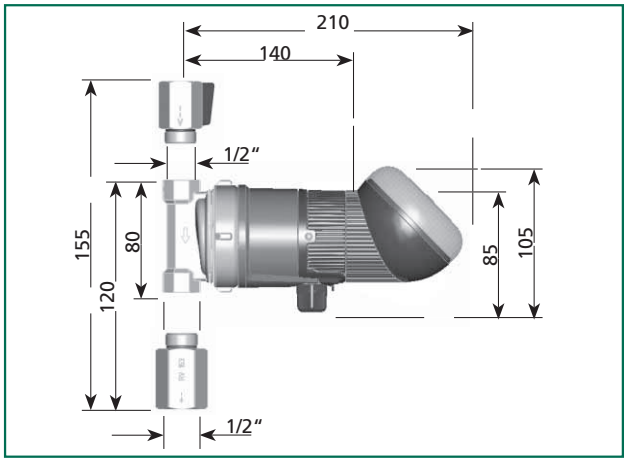


CIRCULATORS with pump body for V connections



MODEL	VERSIONS	VOLTAGE 50 Hz	PUMP COUPLINGS	CENTRE DISTANCE mm
BWZ 152 V KT	daily mechanical	1 x 230 V~	1/2"	110
BWZ 152 V o T	daily mechanical	1 x 230 V~	1/2"	110
BW 152 V KT	without timer	1 x 230 V~	1/2"	110
BW 152 V o T	without timer	1 x 230 V~	1/2"	110

CIRCULATORS with pump body featuring R 1/2" thread



MODEL	VERSIONS	VOLTAGE 50 Hz	PUMP COUPLINGS	CENTRE DISTANCE mm
BWZ 152 R 1/2" KT	daily mechanical	1 x 230 V~	1/2"	80
BWZ 152 R 1/2" o T	daily mechanical	1 x 230 V~	1/2"	80
BW 152 R 1/2" KT	without timer	1 x 230 V~	1/2"	80
BW 152 R 1/2" o T	without timer	1 x 230 V~	1/2"	80

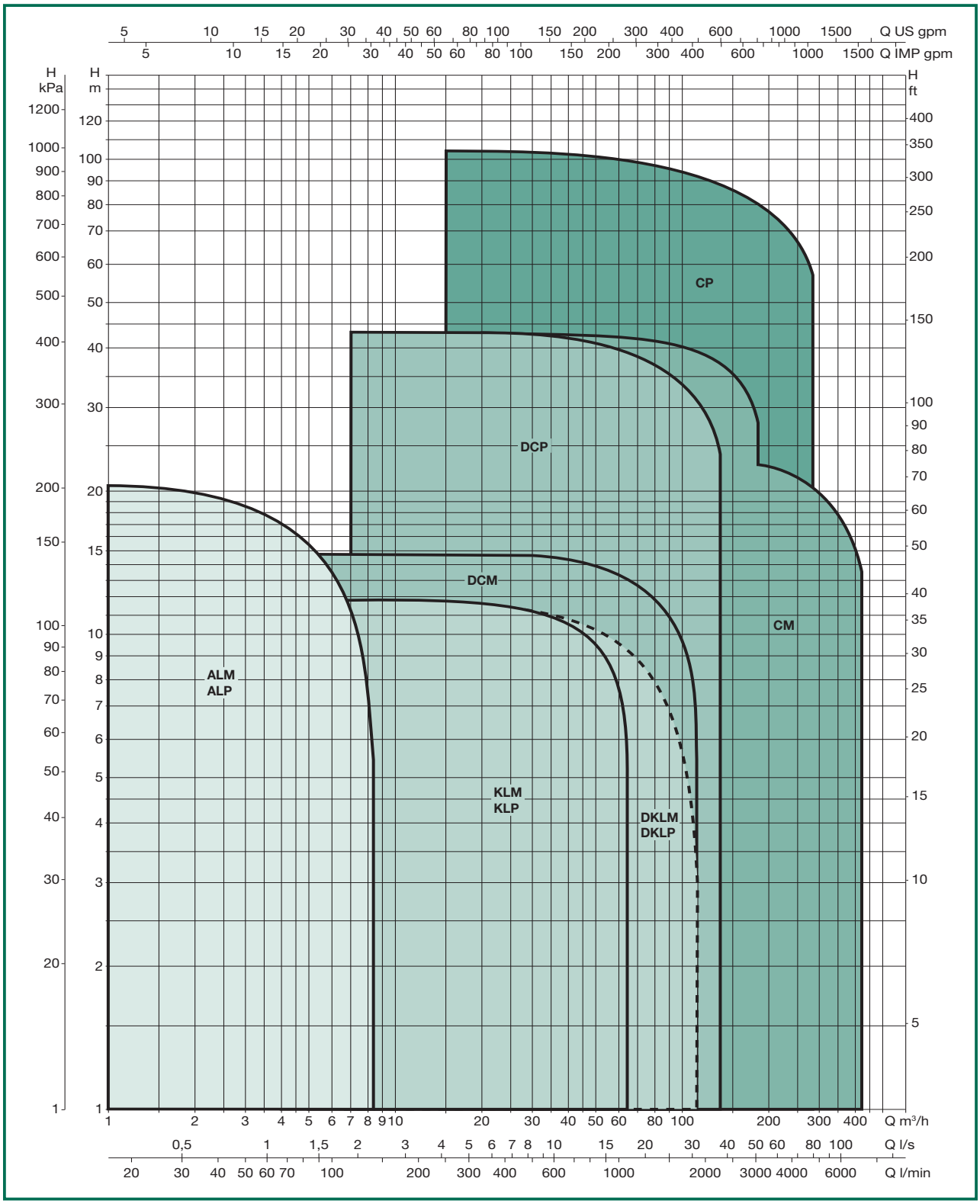
ACCESSORIES

Z 152 KT	Mechanical timer with KT thermostat
Z 152 oT	Mechanical timer without KT thermostat
BWZ 152 KT MOTOR	Mechanical timer with anti-calcium thermostat
BWZ 152 Ot MOTOR	Mechanical timer
BW 152 KT MOTOR	Anti-calcium thermostat
BW 152 Ot MOTOR	Without regulation component
ROTOR	Suitable for all sanitary hot water pumps
RV 153 CHECK VALVE	1/2" external / 1/2" internal
KV 150 ON-OFF BALL VALVE	1/2" external / 1/2" internal
VENT FLANGE EF 150	Special thread for pump body
CIRCULATOR ADJUSTER ZR 40/65	1/2" internal

PERFORMANCE RANGE

GRAPHIC SELECTION TABLE

Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.



PERFORMANCE RANGE

NUMERICAL SELECTION TABLE

SINGLE-PHASE		THREE-PHASE		P2 NOMINAL		Q (m^3/h)	0	1,2	2,4	3,6	4,8	6	7,2	8,4	9,6	12	14,4	16,8	18	24	30	36	48	60
SINGLE	TWIN	SINGLE	TWIN	kW	HP	(l/min)	0	20	40	60	80	100	120	140	160	200	240	280	300	400	500	600	800	1000
ALM 200 M	**–**	**ALM 200 T**	**–**	0,059	0,08		1,9	1,65	1															
ALP 800 M	**–**	**ALP 800 T**	**–**	0,37	0,5	H	7,7	7,2	6,3	5,8	3,9	2												
ALM 500 M	**–**	**ALM 500 T**	**–**	0,25	0,33	(m)	5,5	5,4	5,3	4,8	4,1	3	1,5											
ALP 2000 M	**–**	**ALP 2000 T**	**–**	0,55	0,75		21,1	20,6	19,6	18	16	13,8	10,5	5,3										
KLM 40/300 M	**DKLM 40/300 M**	**KLM 40/300 T**	**DKLM 40/300 T**	0,25	0,33		3,4		3,2	3	2,6	2,3	1,7											
KLP 40/600 M	**DKLP 40/600 M**	**KLP 40/600 T**	**DKLP 40/600 T**	0,37	0,5		8,2				7,8	7,4	6,9	6,3	5,7	4								
KLP 40/900 M	**DKLP 40/900 M**	**KLP 40/900 T**	**DKLP 40/900 T**	0,37	0,5		10,2				9,8	9,4	8,8	8,2	7,4	5,6								
KLP 40/1200 M	**DKLP 40/1200 M**	**KLP 40/1200 T**	**DKLP 40/1200 T**	0,55	0,75		13,7				13,2	12,6	11,9	11,2	10,4	8,4	5,9							
KLM 50/300 M	**DKLM 50/300 M**	**KLM 50/300 T**	**DKLM 50/300 T**	0,25	0,33		2,9				2,8	2,7	2,6	2,5	2,3	1,8	1,3							
KLM 50/600 M	**DKLM 50/600 M**	**KLM 50/600 T**	**DKLM 50/600 T**	0,25	0,33		5,4				5,2	4,9	4,7	4,5	4,3	3,8	3,2	2,5	2					
KLP 50/900 M	**DKLP 50/900 M**	**KLP 50/900 T**	**DKLP 50/900 T**	0,75	1		8,9					8,8	8,7	8,6	8,5	8	7,4	6,6	6,3	3,9				
KLP 50/1200 M	**DKLP 50/1200 M**	**KLP 50/1200 T**	**DKLP 50/1200 T**	0,75	1	H	12					12	11,8	11,6	11	10,5	9,8	9	8,6	6,2				
–	**–**	**KLM 65/300 T**	**DKLM 65/300 T**	0,25	0,33	(m)	3,1					3	2,9	2,8	2,7	2,6	2,4	2	1,8					
–	**–**	**KLM 65/600 T**	**DKLM 65/600 T**	0,37	0,5		5,5							5,3	5	4,7	4,6	4	3,8	2,5				
–	**–**	**KLP 65/900 T**	**DKLP 65/900 T**	1,1	1,5		9								8,8	8,6	8,5	8,1	8	7	5,5	3,5		
–	**–**	**KLP 65/1200 T**	**DKLP 65/1200 T**	1,1	1,5		12									11,6	11,4	11,2	11	10	8,8	6,7		
–	**–**	**KLM 80/300 T**	**DKLM 80/300 T**	0,25	0,33		3,3									3,2	3,1	3	2,9	2,7	2	1,2		
–	**–**	**KLM 80/600 T**	**DKLM 80/600 T**	0,75	1		5,7										5,8	5,8	5,7	5,5	5	4,3	2,5	
–	**–**	**KLP 80/900 T**	**DKLM 80/900 T**	1,84	2,5		8,8										8,7	8,6	8,5	8,4	8	7,7	6	
–	**–**	**KLP 80/1200 T**	**DKLP 80/1200 T**	1,84	2,5		11,8													11,6	11,5	11	9,7	7,2

MODEL	P2 NOMINAL		Q (m^3/h)	0	1,2	2,4	3	3,6	4,5	4,8	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	102	114	120	150	180	210	240	250	270	300	330	360	390	420
	kW	HP	(l/min)	0	20	40	50	60	75	80	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1700	1900	2000	2500	3000	3500	4000	4167	4500	5000	5500	6000	6500	7000
CM 40/440 T	0,7	1		4,4	4,4	4,3	4,3	4,2	4	3,8	3,5																											
CM 40/540 T	0,7	1		5,4	5,4	5,3	5,2	5,1	5	4,8	4,5																											
CM 40/670 T	0,7	1		6,7	6,7	6,7	6,6	6,5	6,3	6,2	5,8																											
CM 40/870 T	0,7	1		8,7	8,7	8,6	8,6	8,5	8,3	8,2	7,9																											
CM 40/1300 T	0,8	1					13	12,9	12,8	12,5	12,4	9,8	6																									
CM 40/1450 T	0,9	1,3							14,5	14,4	14,3	11,8	8																									
CM 50/510 T	0,7	1						5	4,8	4,6	4,2																											
CM 50/630 T	0,7	1						6,2	6	5,8	5,5																											
CM 50/780 T	0,7	1						7,7	7,5	7,4	7,1																											
CM 50/1000 T	0,7	1						10,1	10	9,8	9,6	6,8																										
CM 50/1270 T	1,1	1,5									12,7	11,2	8,5																									
CM 50/1420 T	1,1	1,5									14,2	13	10	6																								
CM 65-420/A/BAQE/0,25	0,25	0,34		4,2							4,1	3,7	3	2,1																								
CM 65-540/A/BAQE/0,37	0,37	0,5		5,4							5,3	5	4,4	3,5																								
CM 65-660/A/BAQE/0,55	0,55	0,75		6,6							6,5	6,2	5,7	4,8																								
CM 65-760/A/BAQE/0,55	0,55	0,75		7,6							7,7	7,6	6,7	5,5																								
CM 65-920/A/BAQE/0,75	0,75	1		9,2							9,2	9	8,4	7,4	5,7																								
CM 65-1080/A/BAQE/1,1	1,1	1,5		10,8								10,8	10,6	10,2	9,5	8,6	7,3																					
CM 65-1200/A/BAQE/1,5	1,5	2		12								12	11,9	11,5	10,8	10,1	8,9																					
CM 65-1530/A/BAQE/2,2	2,2	3		15,3								15,3	15,2	14,8	14	13,3	12,1	10,8	9,4																			
CM 65-1680/A/BAQE/3	3	4		16,8								16,8	16,5	16,1	15,5	14,6	13,6	12,4	10,9																			
CM 65-2380/A/BAQE/4	4	5,5		23,8								24	23,8	23,4	22,7	21,6	20,4	19	17,1																			
CM 80-550/A/BAQE/0,55	0,55	0,75		5,5								5,2	5	4,7	4,3	3,9	3,3	2,6																			
CM 80-650/A/BAQE/0,75	0,75	1		6,5								6,3	6,1	5,8	5,5	5	4,5	3,9																			
CM 80-740/A/BAQE/1,1	1,1	1,5		7,4								7,4	7,3	7,2	6,9	6,7	6,3	5,8	5,3	4,4																		
CM 80-890/A/BAQE/1,5	1,5	2		8,9									8,8	8,7	8,6	8,3	8	7,6	7,2	6,6	6																	
CM 80-1050/A/BAQE/2,2	2,2	3		10,5										10,4	10,3	10,2	9,9	9,6	9,2	8,8																		
CM 80-1530/A/BAQE/3	3	4		15,3										15,4	15,3	15	14,6	14,1	13,5	12,9	12,2	11,3																
CM 80-1700/A/BAQE/4	4	5,5		17										17,2	17,2	17,1	16,8	16,5	16,2	15,7	15,1	14,3	13,6	12,6														
CM 80-2410/A/BAQE/5,5	5,5	7,5	H	24,1										23,8	23,6	23,3	22,8	22,3	21,5	20,8	19,7	18,6	17,3															
CM 80-2700/A/BAQE/7,5	7,5	10		27													26	25,5	25	24,5	23,6	22,7	21,5	20,2	19												
CM 80-3420/A/BAQE/11	11	15		34,2													33,2	33	32,5	32	31,5	30,7	29,8	29	28	25	21,7										
CM 100-510/A/BAQE/0,75	0,75	1		5,1								4,9	4,8	4,7	4,7	4,4	4,2	3,8	3,4	3																	
CM 100-650/A/BAQE/1,1	1,1	1,5		6,5								6,4	6,4	6,3	6,2	6	5,8	5,5	5,1	4,6																	
CM 100-660/A/BAQE/1,5	1,5	2		6,6											6,4	6,3	6,2	6	5,8	5,6	5,3	5	4,7	4,5	4,3	3,7	3										
CM 100-865/A/BAQE/2,2	2,2	3		8,6											8,5	8,5	8,3	8,2	7,9	7,7	7,4	7,2	6,9	6,7	6,3	5,7	4,9	4,6										
CM 100-1020/A/BAQE/3	3	4		10,2											10,2	10,1	10	9,9	9,8	9,7	9,5	9,3	9	8,8	8,6	7,9	7,2	6,7										
CM 100-1320/A/BAQE/4	4	5,5		13,2													13,2	13,2	13,1	12,9	12,7	12,4	12	11,7	11,3	10,4	9,3	8,7										
CM 100-1650/A/BAQE/5,5	5,5	7,5		16,5													16,6	16,5	16,4	16,2	16,1	16	15,7	15,4	15	14,3	13,3	12,7										
CM 100-2050/A/BAQE/7,5	7,5	10		20,5													21	21	21	20,7	20,5	20	19,8	19,5	19	18	16,7	16										
CM 100-2550/A/BAQE/11	11	15		25,5													25,5	25,5	25,5	25,1	25	25	24,6	24,2	24	23	21,5	21										
CM 100-3290/A/BAQE/15	15	20		32,9															33,1	33	32,9	32,8	32,4	32	31,6	30,5	29,5	28,9	24									
CM 100-3680/A/BAQE/18,5	18,5	25		36,8															37,1	37	36,9	36,8	36,5	36,5	36,1	35,5	34,5	34	29,5									
CM 100-4100/A/BAQE/22	22	30		41															41,4	41,4	41,2	41	40,8	40,6	40,5	39,8	39	38,5	34,8	29								
CM 125-1075/A/BAQE/4	4	5,5		10,8																10,1	10,1	10	9,9	9,7	9,5	9,1	8,5	8,3	7	5,4								
CM 125-1270/A/BAQE/5,5	5,5	7,5		12,7																12,6	12,6	12,5	12,5	12,4	12,3	12	11,5	11,4	10,1	8,5								
CM 125-1560/A/BAQE/7,5	7,5	10		15,6																15,4	15,4	15,3	15,2	15,1	15	14,7	14,5	14,3	13,3	11,6	9,8						
CM 125-2100/A/BAQE/11	11	15		21																21,5	21,5	21,5	21,4	21,2	21	20,9	20	19,8	18	16								
CM 125-2550/A/BAQE/15	15	20		25,5																25,5	25,5	25,5	25,3	25,1	25,1	25	24,5	24	22,5	20,5	17,5							
CM 125-3200/A/BAQE/18,5	18,5	25		32																				31,5	31,4	31	30,5	28,8	26	23							
CM 125-3600/A/BAQE/22	22	30		36																				35,5	35,2	35	34,6	33,2	31	28	24						
CM 125-4022/A/BAQE/30	30	40		40,2																				39,7	39,3	39,1	38,7	37,1	34,6	31,3	26,8						
CM 150-955/A/BAQE/5,5	5,5	7,5		9,6																					10,1	10,1	10	10	9,8	9,6	9,4	8,6	8	7,4	5,9			
CM 150-1322/A/BAQE/7,5	7,5	10		13,2																					13	12,8	12,6	12,5	11,9	11,1	10,1	8,9	8,5					
CM 150-1600/A/BAQE/11	11	15		16																						15,5	15,5	15,4	14,8	14	13	11,8	11	10,5	9,2			
CM 150-1950/A/BAQE/15	15	20		19,5																						19,5	19,4	19,3	19,2	18,7	17,8	16,8	16	15,5	14,1	12,5	10,9	
CM 150-2200/A/BAQE/18,5	18,5	25		22																						22	21,9	21,8	21,7	21,4	20,5	19,5	19	18,5	17,2	15,6	14	12	
CM 150-2405/A/BAQE/22	22	30		24,1																						23,9	23,9	23,8	23,6	23,2	22,7	22,1	21,8	21,4	20,2	19	17,5	15,6	14

PERFORMANCE RANGE

NUMERICAL SELECTION TABLE

MODEL	P2 NOMINAL kW	P2 NOMINAL HP	Q (m^3/h) (l/min)	0 0	3,6 60	4,8 80	6 100	12 200	18 300	24 400	30 500	36 600	42 700	48 800	54 900	60 1000	66 1100	72 1200	78 1300	84 1400	90 1500	102 1700	114 1900	120 2000	150 2500	180 3000	210 3500	240 4000	270 4500	300 5000	330 5500	360 6000	390 6500	420 7000
CP 40/1900 T	0,8	1		17,6	17,6	17,4	17	14																									
CP 40/2300 T	1,1	1,5		21,8	21,8	21,3	21	18																									
CP 40/2700 T	1,5	2		26,9	26,9	26,7	26,2	23,2																									
CP 40/3500 T	2,2	3		34,8	34,9	34,7	34,2	31,7																									
CP 40/3800 T	3	4					38	35	30																								
CP 40/4700 T	4	5,5					47	44	39,5	35																							
CP 40/5500 T	5,5	7,5					55	53	48	42																							
CP 40/6200 T	7,5	10					62	59	54	49																							
CP 50/2200 T	1,1	1,5					20	16,5	11																								
CP 50/2600 T	1,5	2					25	22	16																								
CP 50/3100 T	2,2	3					31	28,5	24																								
CP 50/4100 T	4	5,5					40,7	38,5	34,5	27,7																							
CP 50/4600 T	5,5	7,5							44	41,5	37	31																					
CP 50/5100 T	7,5	10							50	47,5	42,5	37																					
CP 50/5650 T	7,5	10							55,5	53	49	44																					
CP 65-1470/A/BAQE/1,5	1,5	2		14,7							14,5	14,3	13,8	13	11,8	10,5	8,6	7															
CP 65-1900/A/BAQE/2,2	2,2	3		19								18,7	18,4	17,8	17	15,9	14,6	13	11														
CP 65-2280/A/BAQE/3	3	4		22,8								22,5	22,3	22	21,2	20,2	19	17,4	15,5	13,5													
CP 65-2640/A/BAQE/4	4	5,5		26,4								26,2	26	25,6	25	24	23	21,5	19,5	17,5	15												
CP 65-3400/A/BAQE/5,5	5,5	7,5		34										34	33,5	32,5	31	29,5	27	24													
CP 65-4100/A/BAQE/7,5	7,5	10		41										41	41	40	39	37,5	35,5	33	30	26,5											
CP 65-4700/A/BAQE/11	11	15		47												45,5	45	44,3	43,3	42	40,8	39	37	35	32,3								
CP 65-5500/A/BAQE/15	15	20		55												56	55,5	54	53,5	52	51	49	47,5	45,5	43	41							
CP 65-6150/A/BAQE/18,5	18,5	25		61,5												62	62	61,5	60,5	59	58	56,5	55	53	51	48,5	43						
CP 65-6750/A/BAQE/22	22	30		67,5												68	67,5	67	66	65,5	64	62,5	61	59,5	57	55	50						
CP 65-7350/A/BAQE/22	22	30		73,5												75	74,5	73,8	73,5	71	68,5	67	65	62,5	60	57	49						
CP 65-9250/A/BAQE/30	30	40		92,5							94	94	94	93	91	89,4	87,5	85,6	83	81,5	78	72											
CP 80-1400/A/BAQE/2,2	2,2	3	H	14			13,8	13,3	12,9	12,5	12,1	11,4	10,8	10	9,2	8,3	7,5																
CP 80-1700/A/BAQE/3	3	4		17						16,5	16	15,5	15	14,5	13,7	13	12	11	10	9													
CP 80-2050/A/BAQE/4	4	5,5		20,5						20	19,5	19,1	18,5	18	17,5	16,5	15,8	14,8	14	12,5	11,5												
CP 80-2400/A/BAQE/5,5	5,5	7,5		24						23,6	23,5	23,2	22,8	22,2	21,5	21	20	19,1	18,5	17,5	16,5	13,4											
CP 80-2770/A/BAQE/7,5	7,5	10		27,7										27,5	27,3	27,1	26,7	25,8	25,6	24,9	24,5	23	21,2	20,1									
CP 80-3250/A/BAQE/11	11	15		32,5										32,2	32	31,8	31,3	30,2	30	29,2	28,7	27	24,8	23,6									
CP 80-4000/A/BAQE/15	15	20		40										40,2	40	39,8	39,5	39	38,5	38,2	37,5	36	34,5	33,5	26,9								
CP 80-5150/A/BAQE/18,5	18,5	25		51,5										52	52	51,5	50,5	50	49	48,5	47,5	45	42,5	41									
CP 80-5650/A/BAQE/22	22	30		56,5										58	58	57,5	57	56,5	56	55	54,5	53	51	49									
CP 80-6850/A/BAQE/30	30	40		68,5										70	70	70	68,5	69	68,8	68,5	67,5	66	64	63	57								
CP-G 80-8600/A/BAQE/37	37	50		86										83	82,5	82,5	82	81,5	81	80	79	76,5	73,5	72	60								
CP-G 80-9600/A/BAQE/45	45	60		96										92,5	92	92	91,5	91,5	91	90	89,5	87,5	85	83	72,5								
CP-G 80-10200/A/BAQE/55	55	75		102								101,6	101,5	101,3	101,1	100,7	100,3	99,7	99,1	98,3	97,4	95,4	92,9	91,5	83,2								
CP 100-1600/A/BAQE/4	4	5,5		16								15	14,6	14,2	13,7	13,3	12,8	12,3	11,7	11	10,4	9,3	8										
CP 100-1950/A/BAQE/5,5	5,5	7,5		19,5								19	18,9	18,7	18,4	18,1	17,5	17,2	16,9	16,5	15,8	14,5	13	12									
CP 100-2350/A/BAQE/7,5	7,5	10		23,5								23,1	23	22,8	22,6	22,5	22	21,6	21,1	20,7	20,2	19	17,5	14,8	12								
CP 100-2400/A/BAQE/11	11	15		24																	22	21,4	20,4	20	17,4	16,8	12						
CP 100-3050/A/BAQE/15	15	20		30,5																	29	28,4	27,5	27	24,5	21,3	18,3						
CP 100-3550/A/BAQE/18,5	18,5	25		35,5																	34,3	33,6	32,6	32,3	29,8	26,8	23,6	20					
CP 100-3850/A/BAQE/22	22	30		38,5																	37,2	36,8	36	35,8	33,5	30,8	27,5	24					
CP 100-4800/A/BAQE/30	30	40		48																	48,5	48,2	47,5	47	44,7	41	36	29					
CP-G 100-5600/A/BAQE/37	37	50		56																	58	57,5	57,2	57	55	52	48	43					
CP-G 100-6300/A/BAQE/45	45	60		62																	65,5	65	64	63	60	55,5	49						
CP-G 100-8300/A/BAQE/55	55	75		83																	83,7	83,7	83,7	83,2	80,7	77,3	72,8	66,4	59,5				
CP-G 125-4750/A/BAQE/37	37	50		46,5																					45	44	42	39	37	34,5	31	28	
CP-G 125-5300/A/BAQE/45	45	60		51,5																					51	50	48,5	46	44	42	39	35	31,5
CP-G 125-5800/A/BAQE/55	55	75		57,5																					57	56	55	53	51	49	46	43	39	36

PERFORMANCE RANGE

NUMERICAL SELECTION TABLE

MODEL	P2 NOMINAL kW	P2 NOMINAL HP	Q (m^3/h)	0	0,6	1,2	1,8	2,4	3,0	4,5	6	9	10,5	12	13,5	15	18	24	27	30	36	42	48	54	60	66	72	78	90	105	120
			(l/min)	0	10	20	30	40	50	75	100	150	175	200	225	250	300	400	450	500	600	700	800	900	1000	1100	1200	1300	1500	1750	2000
DCM 40/380 T	0,3	0,3	H (m)				3,8	3,7	3,6	3,15	2,6																				
DCM 40/460 T	0,3	0,3						4,6	4,5	4,1	3,6	2,2																			
DCM 40/620 T	0,3	0,3							6,2	6	5,8	4,5	3,9	3																
DCM 50/460 T	0,3	0,3									4,6	4,3	4,1	3,9	3,6	3,3	2,4													
DCM 50/630 T	0,4	0,5									6,3	6,1	6	5,8	5,5	5,2	4,6													
DCM 50/880 T	0,5	0,7									8,8	8,3	8	7,7	7,3	6,9	5,9													
DCM 65/670 T	0,6	0,7												6,7	6,6	6,4	6,1	5,1	4,3	3,3										
DCM 65/820 T	0,8	1												8,2	8	7,9	7,7	7	6,6	6	4									
DCM 65/900 T	0,9	1,2												9	8,9	8,8	8,6	8,1	7,7	7,2	5,5									
DCM 80/630 T	0,8	1															6,3	6,1	5,9	5,6	4,9	4,1	3,2							
DCM 80/730 T	0,9	1,2															7,3	7,1	7	6,8	6,3	5,6	4,8	3,9						
DCM 80/860 T	1,1	1,5															8,6	8,4	8,3	8,2	8	7,5	6,8	6	5					
DCM 80/1020 T	1,5	2															10,2	10	9,9	9,8	9,4	9	8,5	7,7	6,5					
DCM 100/820 T	1,5	2																		8,2	7,8	7,4	7	6,5	6	5,3	4,6	4		
DCM 100/1000 T	2,2	3																			10	9,7	9,3	8,9	8,5	8	7,5	7	6	
DCM 100/1200 T	3,0	4																			12	11,7	11,5	11,3	11	10,5	10	9,5	8,5	7
DCM 100/1450 T	4	5,5																			14,5	14,2	14	13,8	13,5	13,1	12,7	12,2	11	9	6,5

MODEL	P2 NOMINAL kW	P2 NOMINAL HP	Q (m^3/h)	6	7,5	9	10,5	12	13,5	15	18	21	24	27	30	36	42	48	54	60	75	90	105	120	135	150	165	180	195	210	225	225
			(l/min)	100	125	150	175	200	225	250	300	350	400	450	500	600	700	800	900	1000	1250	1500	1750	2000	2250	2500	2750	3000	3250	3500	3750	4000
DCP 40/1250 T	**0,6**	**0,8**	H (m)	12,5	11,5	10,5	9,5	8,1	6,8	5,2																					
DCP 40/1650 T	**0,8**	**1**		16,5	15,5	14,5	13,5	12,3	11	9,5	6																					
DCP 40/2050 T	**1**	**1,4**		20,5	20	19	18	17	16	15	11,5	7,5																				
DCP 40/2450 T	**1,5**	**2**		24,5	24	23,5	23	22	21	20	16,5	13																				
DCP 50/1550 T	**1,5**	**2**								15,5	15	14,1	13	11,8	10,5	7															
DCP 50/1900 T	**2**	**2,7**								19	18,5	17,5	16,5	15,5	14,5	10,5															
DCP 50/2450 T	**3**	**4**								24,5	24	23,5	23	22	20,5	17															
DCP 50/3000 T	**3**	**4**								30	29	28	26,5	25	23	18															
DCP 50/3650 T	**4**	**5,5**								36,5	35,5	34,5	33,5	32,5	31	27															
DCP 65/2300 T	**3**	**4**										23	22,5	22	21,5	19,8	17,5	15													
DCP 65/2650 T	**4**	**5,5**											26,5	26	25,5	24,3	22,6	20,2	18												
DCP 65/3250 T	**5,5**	**7,5**											32,5	32	31,5	30,5	29,5	28	26	23,5											
DCP 65/3700 T	**7,5**	**10**											37	36,5	36	35	34	32,5	31	29											
DCP 80/2530 T	**7,5**	**10**															25,3	24,9	24,1	23,4	20,5	17	12,7								
DCP 80/3050 T	**10**	**13,5**															30,5	30	29,5	29	26,5	24	20,5	16							
DCP 80/3650 T	**12,5**	**17**															36,5	36	35,5	34,5	33	30	27	23	19						
DCP 80/4100 T	**15**	**20**															41	40,5	40	39,5	38	35,5	33	29	24						
DCP 100/3300 T	**12,5**	**17**																		33	32,3	31	29	27	24,5	22	19				
DCP 100/3750 T	**15**	**20**																			37,5	36,5	35	33	31	28,5	26				
DCP 100/2450 T	**10**	**13,5**																		24,5	23,5	22	20,5	18,5	16	13,5	10,5	7	3		
DCP 100/2750 T	**12,5**	**17**																		27,5	26,5	25,5	24	22	20	17,5	15	12	8,6	5	
DCP 100/2800 T	**15**	**20**																			28	27	25,5	23,5	21,5	19	16,5	13,8	10,8	7,5	3
DCP 100/2900 T	**15**	**20**																			29	28	26	24,5	22	20	17,5	14	11,3	7,5	3,5

ALM-ALP

CE

GENERAL DATA

Applications
Circulation pump for hot or cold water with in-line connections, suitable for installation in series directly to the piping in civil and industrial heating, conditioning and hot water plants.

Constructional features of the pump
Pump body and motor support in cast iron for ALM 500 and ALP 2000 and in bronze for ALM 200 and ALP 800.
Intake and delivery connection: 1” 1/2 M-GAS for ALM 200 and ALP 800 and 2” M-GAS for ALM 500 and ALP 2000.
Technopolymer impeller. Carbon/ceramic mechanical seal.

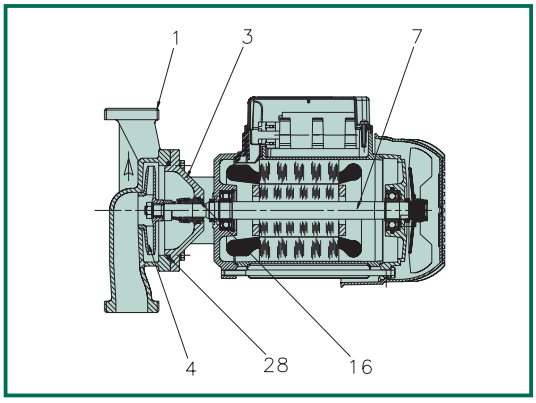
Constructional features of the motor
Induction motor, closed and cooled with external ventilation, four-pole for the ALM version and two-pole for the ALP version.
Rotor mounted on oversized, greased-for-life ball brushings to guarantee silent running and long life.
Built-in thermal and overload protection and a capacitor permanently in circuit in the single-phase version.
Three-phase motors should be protected with a suitable overload protection complying with the regulations in force.
Manufactured according to CEI 2-3 standards.
Motor protection: IP55
Insulation class: F

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

TECHNICAL DATA

N.	PARTS*	MATERIALS	MODELS
1	PUMP BODY	BRONZE G Cu Sn5 Zn5 Pb5 UNI 7013/8-72	ALM 200 - ALP 800
		CAST IRON 250 UNI ISO 185	ALM 500 - ALP 2000
3	SUPPORT	BRONZE G Cu Sn5 Zn5 Pb5 UNI 7013/8-72	ALM 200 - ALP 800
		CAST IRON 250 UNI ISO 185	ALM 500 - ALP 2000
4	IMPELLER	TECHNOPOLYMER	
7	SHAFT WITH ROTOR	STAINLESS STEEL AISI 303 X10 CrNiS 1809 UNI 6900/71	
16	MECHANICAL SEAL	CARBON/CERAMICS	
28	OR GASKET	EPDM RUBBER	

* In contact with the liquid.



- Operating range: from 0,6 to 8,4 m^3/h with head up to 21 metres
- Liquid quality requirements: clean, free from solids or abrasive substances, non viscous, non aggressive, non crystallized, chemically neutral, close to the characteristics of water.
- Liquid temperature range: from -15°C to +120°C
- Maximum ambient temperature: + 40°C
- Maximum working pressure: 10 bar (1000 kPa)
- Unions on request: see final ACCESSORIES table
- Special versions on request: different voltages and/or frequencies

- Classification index: (example)

AL P 2000 M

Serie

M = 4-pole motor
P = 2-pole motor

Maximum head in (cm)

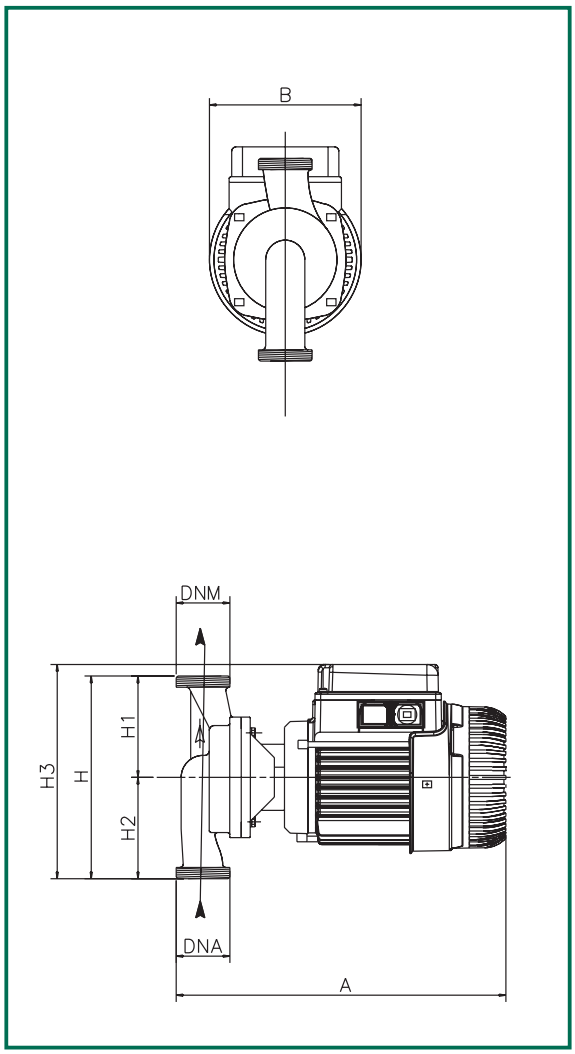
M = motor single-phase
T =motor three-phase

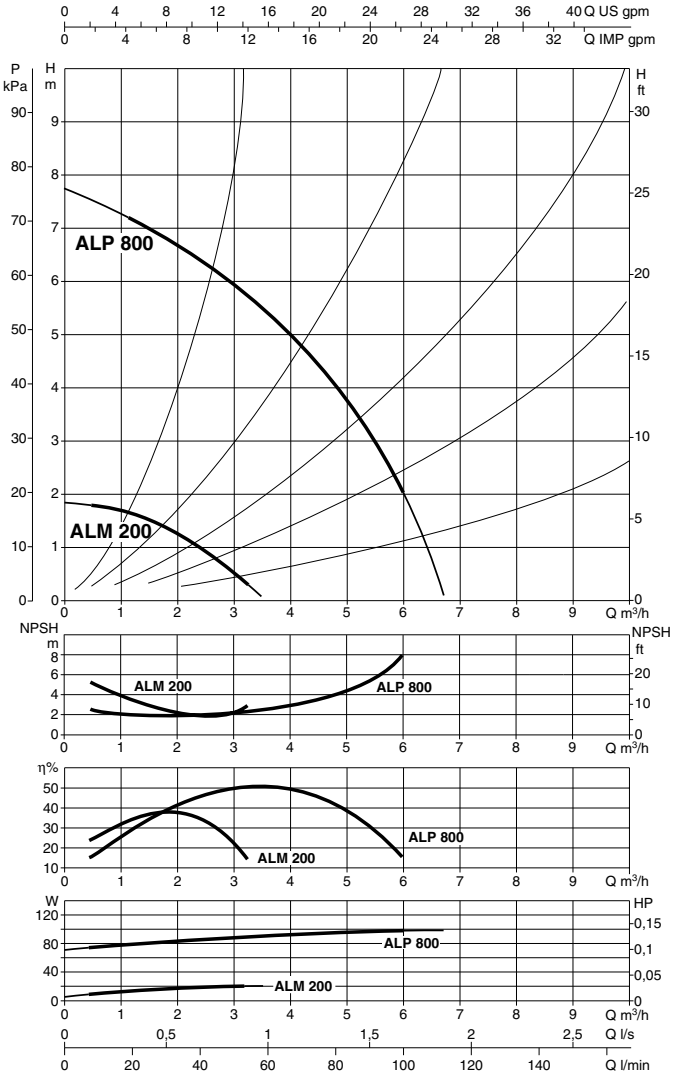
Installation: with motor in a horizontal position.

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

ALM 200 - ALP 800

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





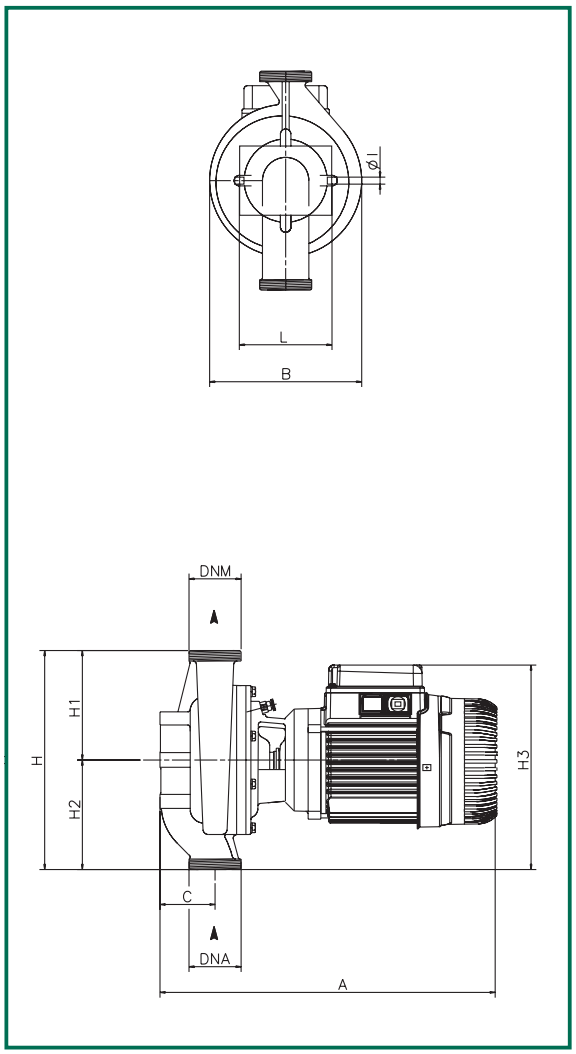
MODEL	A	B	C	L	IØ	H	H1	H2	H3	DNA	DNM	PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
ALM 200	300	136	–	–	–	180	90	90	190	1 1/2" G-M	1 1/2" G-M	332	202	257	0,017	7,5
ALP 800	300	136	–	–	–	180	90	90	190	1 1/2" G-M	1 1/2" G-M	332	202	257	0,017	7,5

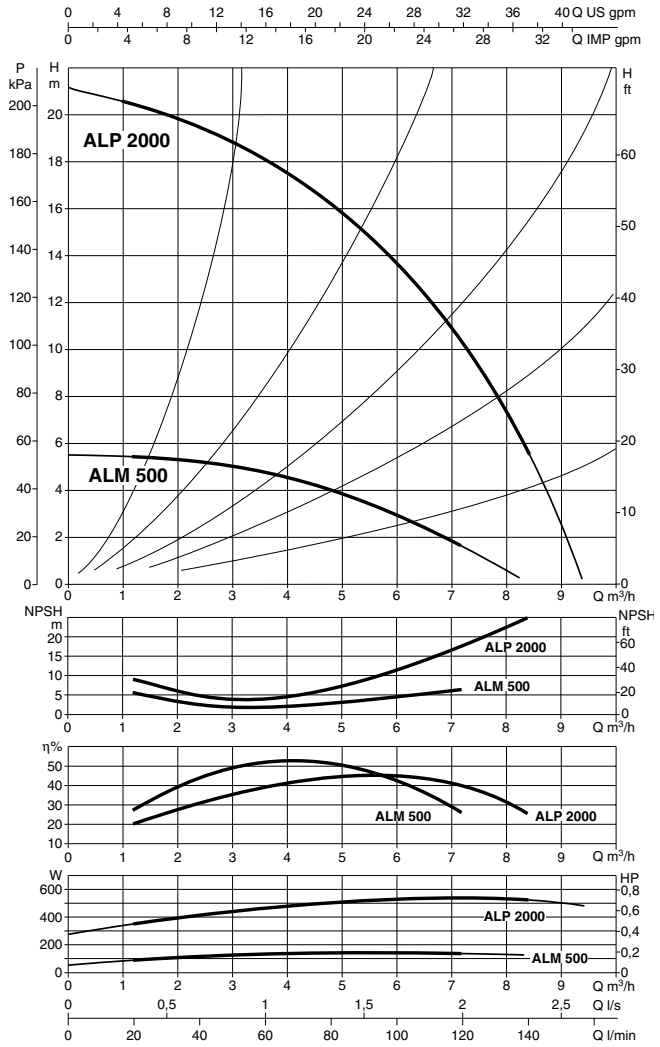
MODEL	ELECTRICAL DATA								
	VOLTAGE 50 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	CAPACITOR µF	CAPACITOR Vc
ALM 200 M	1x220-240 V ~	4 POLES	1480	0,14	0,059	0,08	0,7	8	450
ALM 200 T	3x230-400 V ~	4 POLES	1475	0,08	0,059	0,08	0,53-0,3	–	–
ALP 800 M	1x220-240 V ~	2 POLES	2925	0,24	0,37	0,5	1,4	10	450
ALP 800 T	3x230-400 V ~	2 POLES	2915	0,20	0,37	0,5	1,2-0,7	–	–

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

ALM 500 - ALP 2000

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

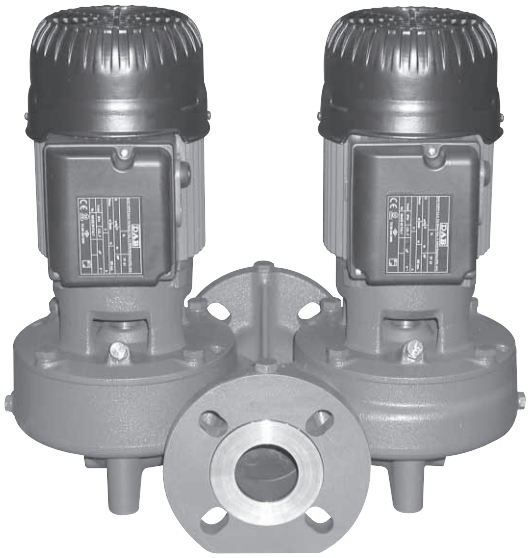




MODEL	A	B	C	L	IØ	H	H1	H2	H3	DNA	DNM	PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
ALM 500	386	174	63	95	8	250	125	125	235	2" G-M	2" G-M	492	232	292	0,033	14,5
ALP 2000	386	174	63	95	8	250	125	125	235	2" G-M	2" G-M	492	232	292	0,033	14,5

MODEL	ELECTRICAL DATA								
	VOLTAGE 50 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	CAPACITOR µF	CAPACITOR Vc
ALM 500 M	1x220-240 V ~	4 POLES	1425	0,22	0,25	0,33	1	8	450
ALM 500 T	3x230-400 V ~	4 POLES	1465	0,19	0,25	0,33	1-0,6	–	–
ALP 2000 M	1x220-240 V ~	2 POLES	2870	0,75	0,55	0,75	3,7	16	450
ALP 2000 T	3x230-400 V ~	2 POLES	2830	0,66	0,55	0,75	2,3-1,3	–	–

KLM-KLP
DKLM-DKLP



CE

GENERAL DATA

Applications
Circulation pump for hot or cold water with in-line connections, suitable for installation in series directly to the piping in civil and industrial heating, conditioning, cooling and hot water plants.

Constructional features of the pump
Pump body and motor support in cast iron.
Flanged suction and delivery connections in PN10 with threaded holes for control pressure gauges. This range can also accept counterflanges in PN6 in order to facilitate pump interchange in existing installations.
Technopolymer impeller.
Carbon/ceramic mechanical seal.
The pumps are available in the single version(KLM-KLP)and in the twin version (DKLM-DKLP).
In the twin version an automatic clapet type valve incorporated in the delivery connection is provided to prevent water from recycling when the system is at a standstill. The standard supply also includes a blank flange in case maintenance has to be carried out on one of the two motors.
The twin version allows the pumps to be used alternately where a backup unit is required or used simultaneously.

Constructional features of the motor
Induction motor, closed and cooled with external ventilation, four-pole for the KLM and DKLM versions and two-pole for the KLP and DKLP versions.

Rotor mounted on oversized, greased-for-life ball brushings to guarantee silent running and long life.
Built-in thermal and overload protection and a capacitor permanently in circuit in the single-phase version.
Three-phase motors should be protected with a suitable overload protection complying with the regulations in force.
Manufactured according to CEI 2-3 standards.
Motor protection: IP55
Insulation class: F

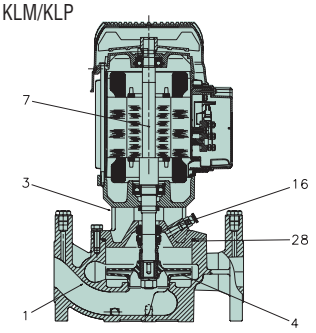
Standard voltage:	single-phase	220-240 V / 50 Hz
	three-phase	230-400 V / 50 Hz

TECHNICAL DATA

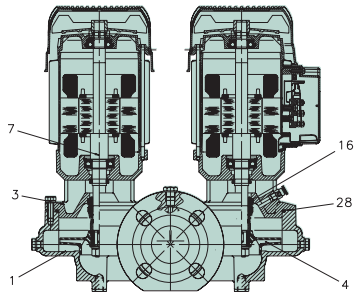
N.	PARTS*	MATERIALS
1	PUMP BODY	CAST IRON 250 UNI ISO 185
3	SUPPORT	CAST IRON 250 UNI ISO 185
4	IMPELLER	TECHNOPOLYMER B
7	SHAFT WITH ROTOR	STAINLESS STEEL AISI 303 X10 CrNis 1809 - UNI 6900/71
16	MECHANICAL SEAL	CARBON/CERAMICS
28	OR GASKET	EPDM RUBBER

* In contact with the liquid.

KLM/KLP



DKLM/DKLP



- Operating range: from 2 to 67 m^3/h with head up to 13,7 metres
- Liquid quality requirements: clean, free from solids or abrasive substances, non viscous, non aggressive, non crystallized, chemically neutral, close to the characteristics of water.
- Liquid temperature range: from -15°C to +120°C
- Maximum ambient temperature: +40°C
- Maximum working pressure: 10 bar (1000 kPa)
- Standard flanges: DN 40, DN 50, DN 65, DN 80 in PN 6/PN 10 (4 slots)
- Flanges on request: DN 80 in PN16 (8 holes)
- Counterflanges on request: threaded DN 40, DN 50, DN 65 in PN 6
  with weld-on collar DN 40, DN 50, DN 65, DN 80 in PN6
  with weld-on collar DN 40, DN 50, DN 65 in PN 10/PN 16 (4 holes)
  with weld-on collar DN 80 in PN10/PN 16 (8 holes)
- Special versions on request: different voltages and/or frequencies

- Classification index:
  (example)

D KL P 80 / 1200 T

Twin version
Series

M = 4-pole motor
P = 2-pole motor

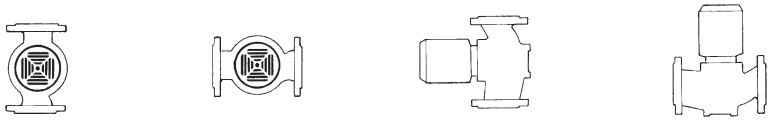
(DN) nominal diameter of the flanged connections

Maximum head in (cm)

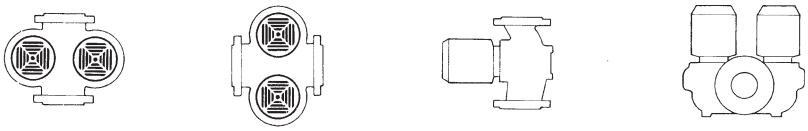
M = single-phase motor
T = three-phase motor

Installation: with motor in a horizontal or vertical position as long as it is above the pump.

KLM - KLP



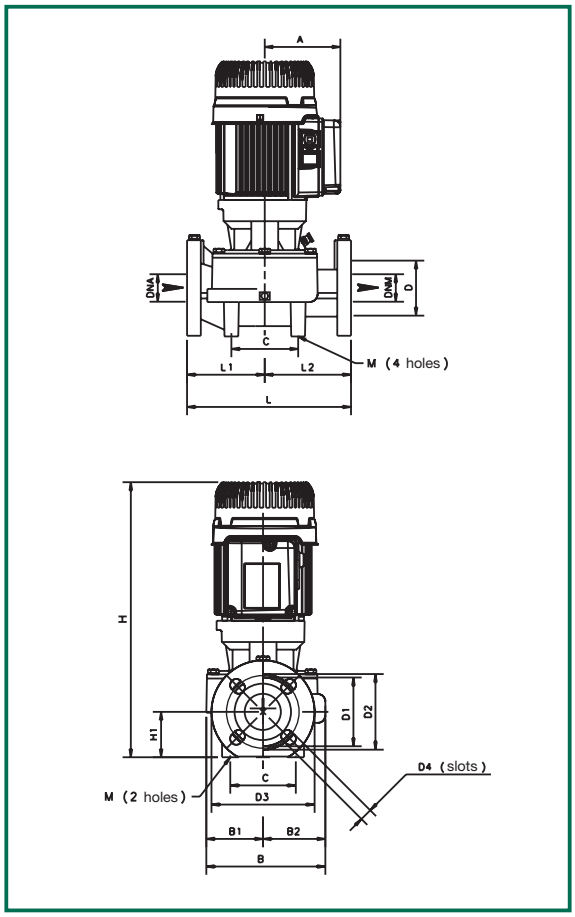
DKLM - DKLP

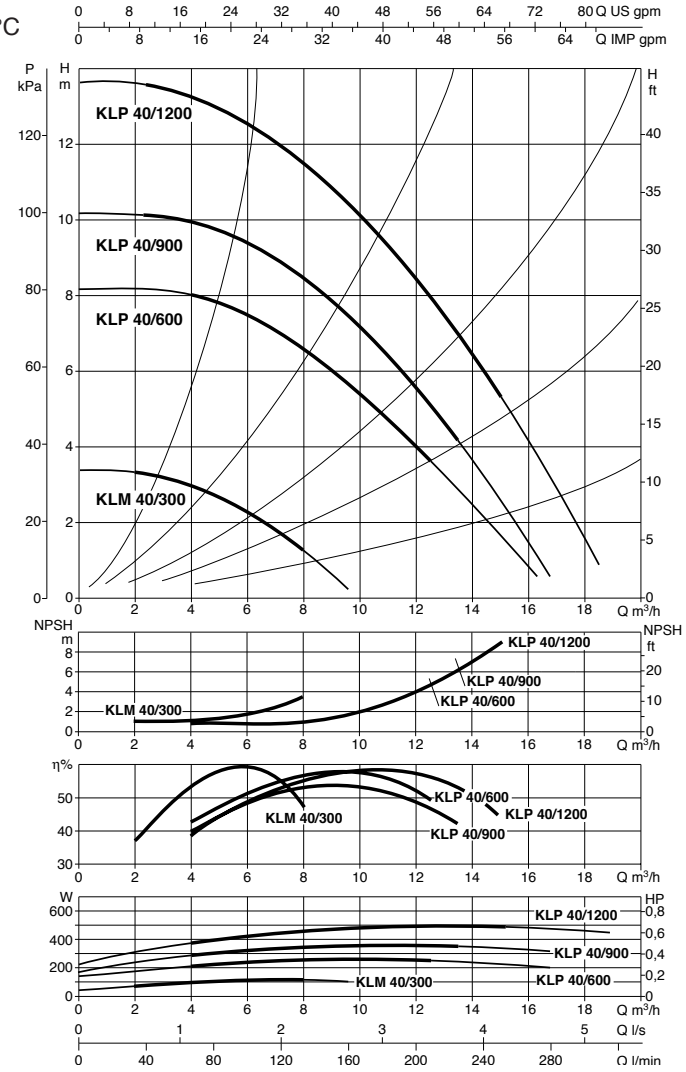


Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

KLM 40 - KLP 40

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





MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	L	L1	L2	M
KLM 40/300	110	179	82	97	100	40	40	80	100	110	150	4 slots 18x23	395	66	250	125	125	2 holes 10
KLP 40/600	110	179	82	97	100	40	40	80	100	110	150		395	66	250	125	125	
KLP 40/900	110	179	82	97	100	40	40	80	100	110	150		395	66	250	125	125	
KLP 40/1200	110	179	82	97	100	40	40	80	100	110	150		395	66	250	125	125	

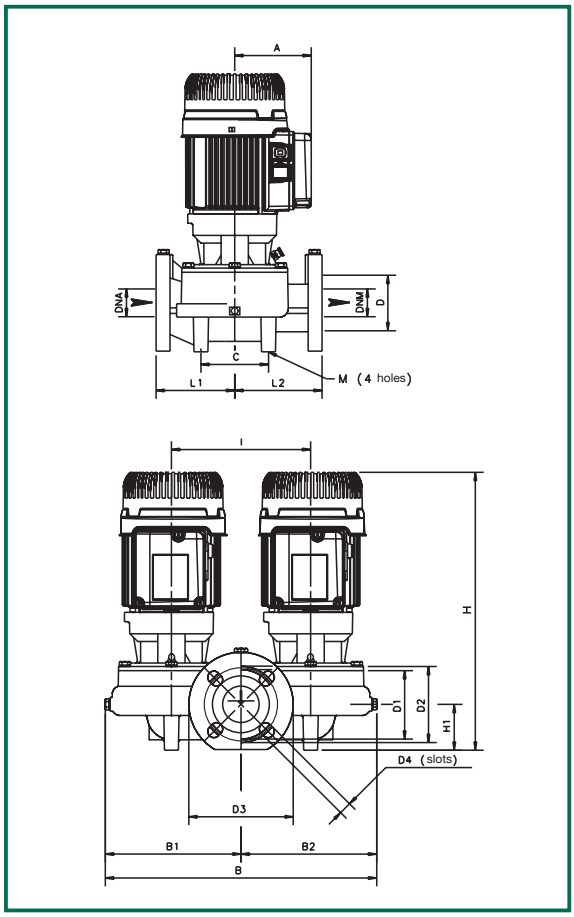
MODEL	ELECTRICAL DATA								
	VOLTAGE 50 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	CAPACITOR µF	CAPACITOR Vc
KLM 40/300 M	1x220-240 V ~	4 POLES	1450	0,17	0,25	0,33	0,9	8	450
KLM 40/300 T	3x230-400 V ~	4 POLES	1490	0,14	0,25	0,33	0,9-0,55	–	–
KLP 40/600 M	1x220-240 V ~	2 POLES	2940	0,47	0,37	0,5	3	16	450
KLP 40/600 T	3x230-400 V ~	2 POLES	2950	0,35	0,37	0,5	1,7-1	–	–
KLP 40/900 M	1x220-240 V ~	2 POLES	2920	0,54	0,37	0,5	3,2	16	450
KLP 40/900 T	3x230-400 V ~	2 POLES	2920	0,45	0,37	0,5	1,9-1,1	–	–
KLP 40/1200 M	1x220-240 V ~	2 POLES	2890	0,7	0,55	0,75	3,4	16	450
KLP 40/1200 T	3x230-400 V ~	2 POLES	2890	0,6	0,55	0,75	2-1,2	–	–

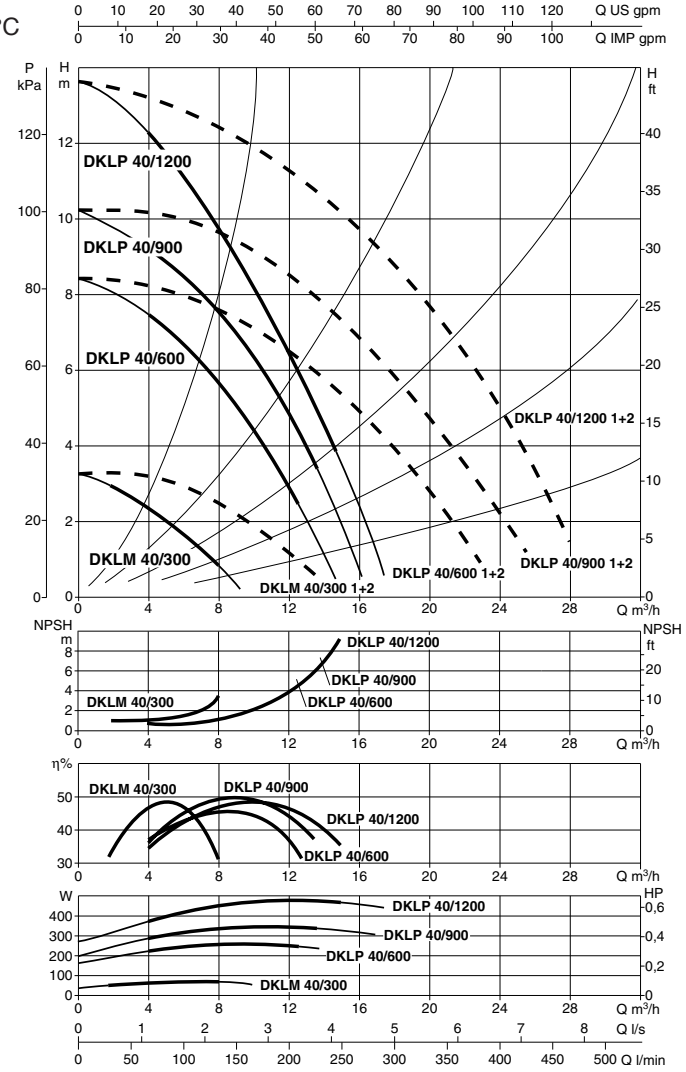
PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg single-ph.	WEIGHT Kg three-ph.
470	280	330	0,043	22,6	20,2
470	280	330	0,043	22,6	21,3
470	280	330	0,043	22,6	21,3
470	280	330	0,043	22,6	21,3

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

DKLM 40 - DKLP 40

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





MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	I	L	L1	L2	M
DKLM 40/300	110	372	185	187	100	40	40	80	100	110	150	4 slots 18x23	400	55	200	250	125	125	2 holes 10
DKLP 40/600	110	372	185	187	100	40	40	80	100	110	150		400	55	200	250	125	125	
DKLP 40/900	110	372	185	187	100	40	40	80	100	110	150		400	55	200	250	125	125	
DKLP 40/1200	110	372	185	187	100	40	40	80	100	110	150		400	55	200	250	125	125	

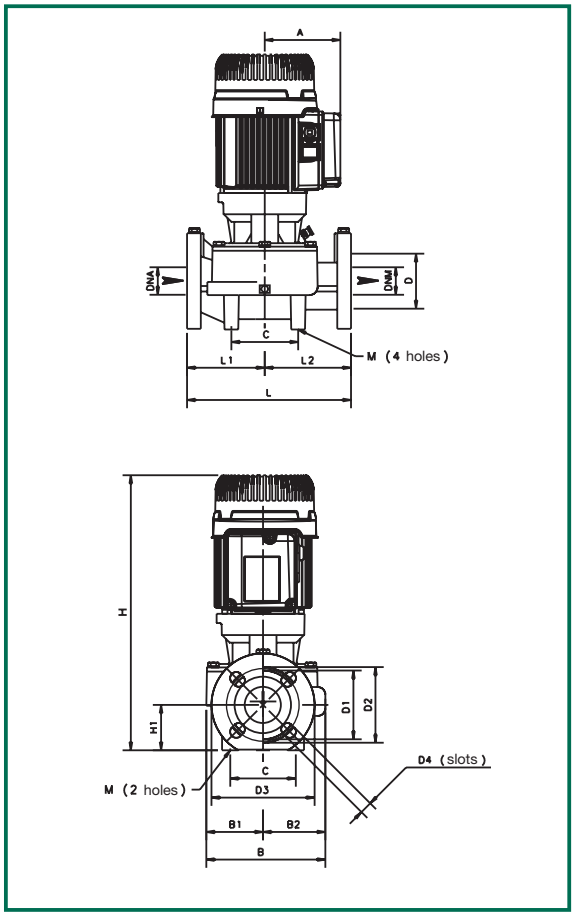
MODEL	ELECTRICAL DATA								
	VOLTAGE 50 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	CAPACITOR µF	CAPACITOR Vc
DKLM 40/300 M	1x220-240 V ~	4 POLES	1450	0,17	0,25	0,33	0,9	8	450
DKLM 40/300 T	3x230-400 V ~	4 POLES	1490	0,14	0,25	0,33	0,9-0,55	–	–
DKLP 40/600 M	1x220-240 V ~	2 POLES	2940	0,47	0,37	0,5	3	16	450
DKLP 40/600 T	3x230-400 V ~	2 POLES	2950	0,35	0,37	0,5	1,7-1	–	–
DKLP 40/900 M	1x220-240 V ~	2 POLES	2920	0,54	0,37	0,5	3,2	16	450
DKLP 40/900 T	3x230-400 V ~	2 POLES	2920	0,45	0,37	0,5	1,9-1,1	–	–
DKLP 40/1200 M	1x220-240 V ~	2 POLES	2890	0,7	0,55	0,75	3,4	16	450
DKLP 40/1200 T	3x230-400 V ~	2 POLES	2890	0,6	0,55	0,75	2-1,2	–	–

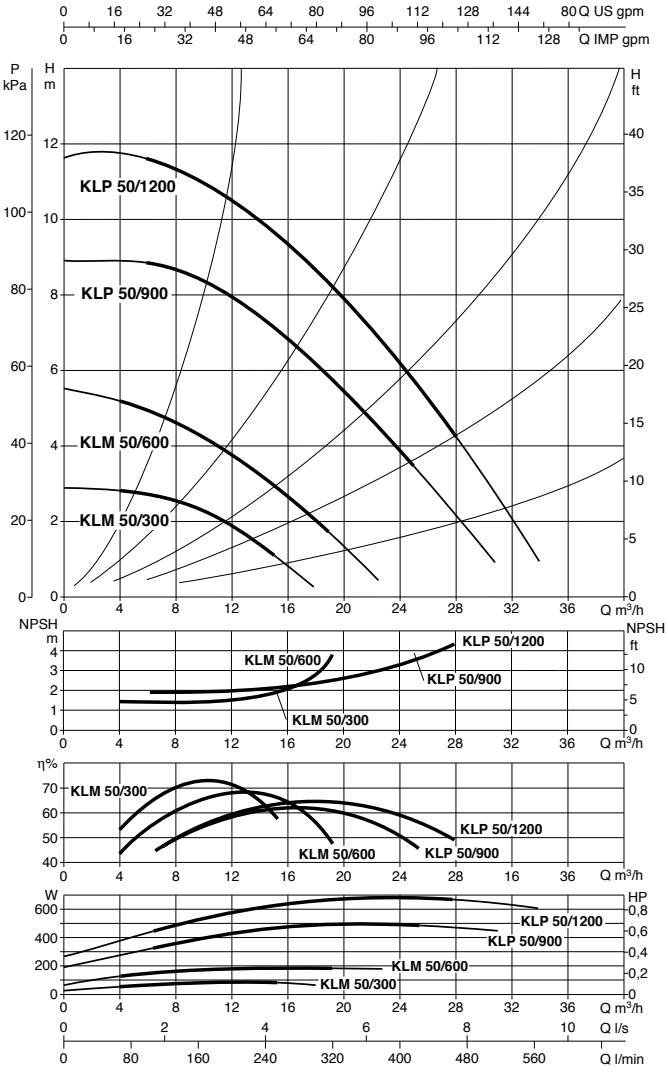
PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg single-ph.	WEIGHT Kg three-ph
530	280	470	0,07	38,3	37,4
530	280	470	0,07	37,1	38,1
530	280	470	0,07	41,9	43,3
530	280	470	0,07	41,9	43,3

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

KLM 50 - KLP 50

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





MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	L	L1	L2	M
KLM 50/300	110	204	94	110	100	50	50	90	110	125	165	4 slots 18x23	414	73	280	140	170	2 holes 10
KLP 50/600	110	204	94	110	100	50	50	90	110	125	165		414	73	280	140	170	
KLP 50/900	110	204	94	110	100	50	50	90	110	125	165		414	73	280	140	170	
KLP 50/1200	110	204	94	110	100	50	50	90	110	125	165		414	73	280	140	170	

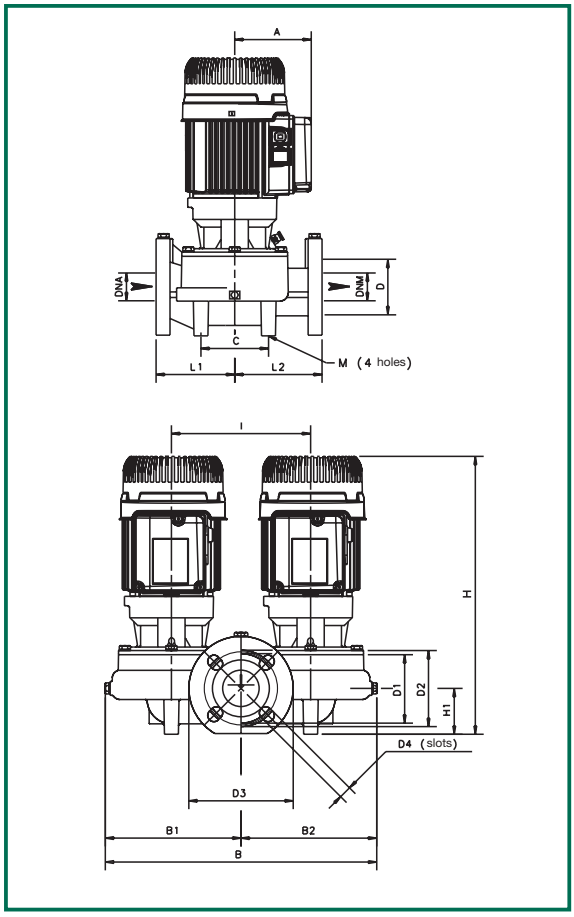
MODEL	ELECTRICAL DATA								
	VOLTAGE 50 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	CAPACITOR µF	CAPACITOR Vc
KLM 50/300 M	1x220-240 V ~	4 POLES	1430	0,19	0,25	0,33	0,9	8	450
KLM 50/300 T	3x230-400 V ~	4 POLES	1470	0,16	0,25	0,33	1-0,6	–	–
KLM 50/600 M	1x220-240 V ~	4 POLES	1340	0,3	0,25	0,33	1,4	8	450
KLM 50/600 T	3x230-400 V ~	4 POLES	1420	0,32	0,25	0,33	1,2-0,7	–	–
KLP 50/900 M	1x220-240 V ~	2 POLES	2900	0,7	0,75	1	3,3	16	450
KLP 50/900 T	3x230-400 V ~	2 POLES	2920	0,7	0,75	1	2,8-1,6	–	–
KLP 50/1200 M	1x220-240 V ~	2 POLES	2850	0,9	0,75	1	4,2	16	450
KLP 50/1200 T	3x230-400 V ~	2 POLES	2890	0,86	0,75	1	3,2-1,8	–	–

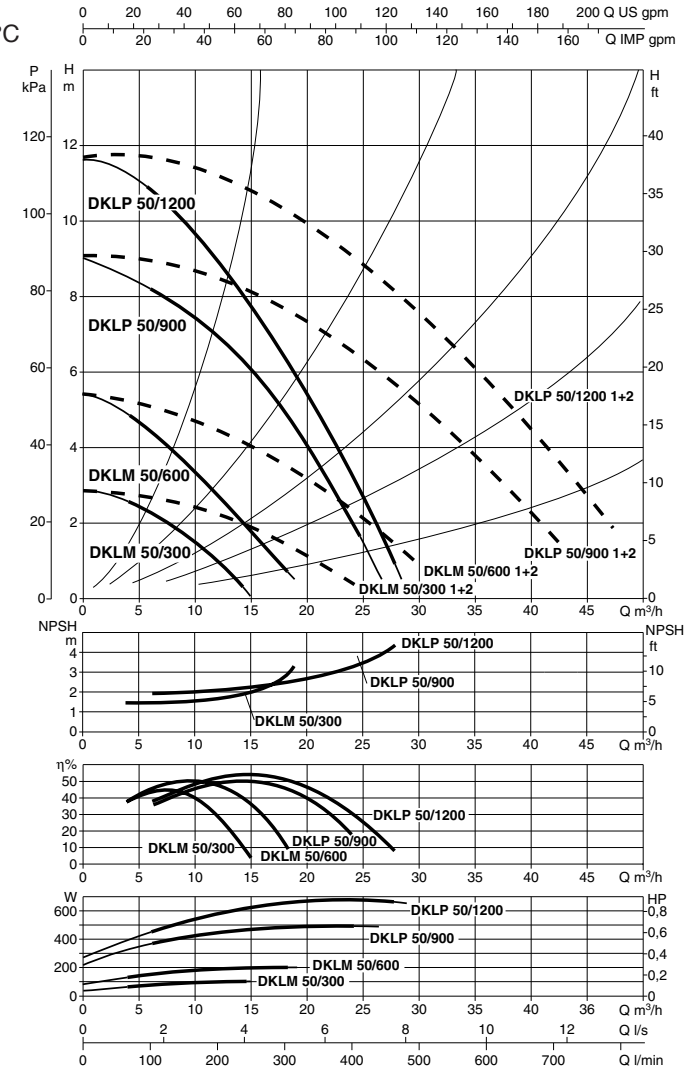
PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg single-ph.	WEIGHT Kg three-ph
470	280	330	0,043	27,6	27
470	280	330	0,043	27,6	27
470	280	330	0,043	29,6	28,3
470	280	330	0,043	29,6	28,3

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

DKLM 50 - DKLP 50

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





MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	I	L	L1	L2	M
DKLM 50/300	110	434	217	217	120	50	50	90	110	125	165	4 slots 18x23	410	73	240	280	140	140	2 holes 10
DKLP 50/600	110	434	217	217	120	50	50	90	110	125	165		410	73	240	280	140	140	
DKLP 50/900	110	434	217	217	120	50	50	90	110	125	165		410	73	240	280	140	140	
DKLP 50/1200	110	434	217	217	120	50	50	90	110	125	165		410	73	240	280	140	140	

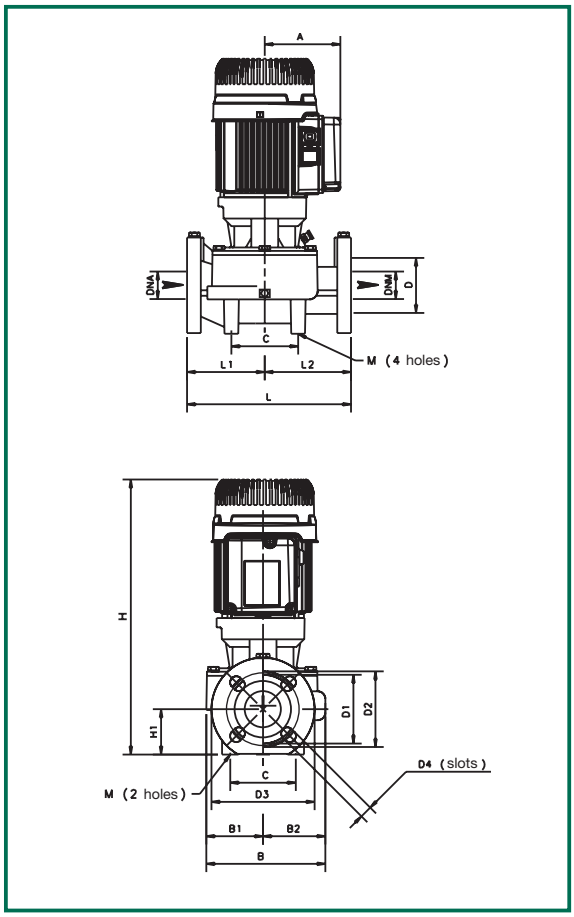
MODEL	ELECTRICAL DATA								
	VOLTAGE 50 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	CAPACITOR µF	CAPACITOR Vc
DKLM 50/300 M	1x220-240 V ~	4 POLES	1430	0,19	0,25	0,33	0,9	8	450
DKLM 50/300 T	3x230-400 V ~	4 POLES	1470	0,16	0,25	0,33	1-0,6	–	–
DKLM 50/600 M	1x220-240 V ~	4 POLES	1340	0,3	0,25	0,33	1,4	8	450
DKLM 50/600 T	3x230-400 V ~	4 POLES	1420	0,32	0,25	0,33	1,2-0,7	–	–
DKLP 50/900 M	1x220-240 V ~	2 POLES	2900	0,7	0,75	1	3,3	16	450
DKLP 50/900 T	3x230-400 V ~	2 POLES	2920	0,7	0,75	1	2,8-1,6	–	–
DKLP 50/1200 M	1x220-240 V ~	2 POLES	2850	0,9	0,75	1	4,2	16	450
DKLP 50/1200 T	3x230-400 V ~	2 POLES	2890	0,86	0,75	1	3,2-1,8	–	–

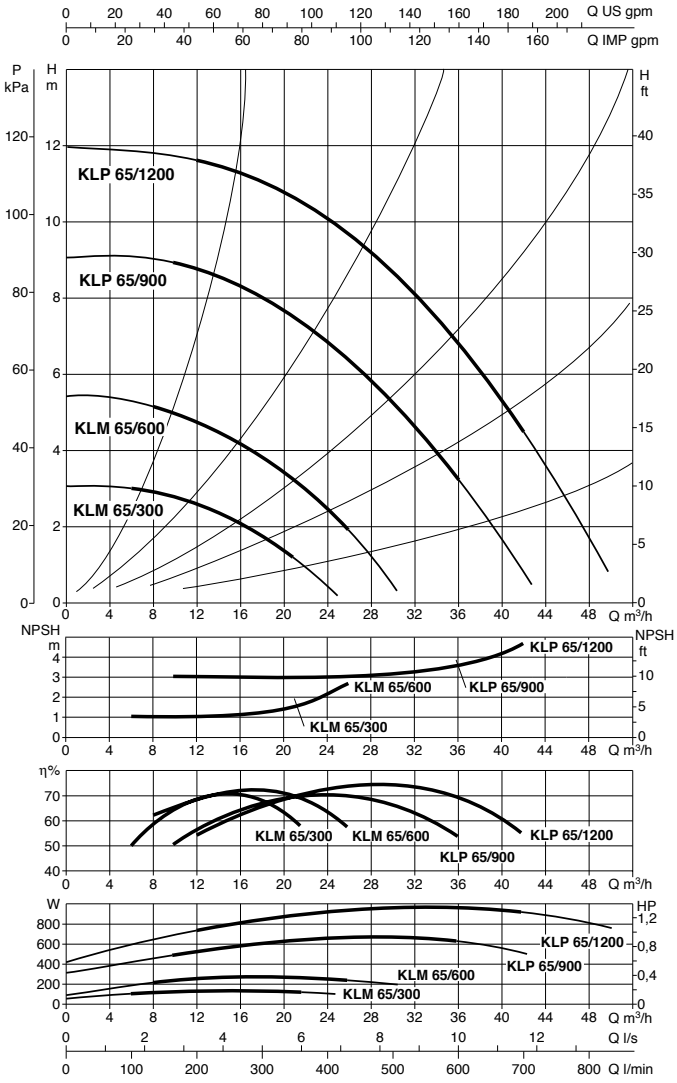
PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg single-ph.	WEIGHT Kg three-ph
540	420	610	0,138	57,1	54,1
540	420	610	0,138	57,1	54,9
540	420	610	0,138	69	57,5
540	420	610	0,138	69	57

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

KLM 65 - KLP 65

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





MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	L	L1	L2	M
KLM 65/300	110	228	99	129	100	65	65	110	130	145	185		433	82	340	170	170	
KLP 65/600	110	228	99	129	100	65	65	110	130	145	185	4 slots 18x23	433	82	340	170	170	2 holes 10
KLP 65/900	115	228	99	129	100	65	65	110	130	145	185		433	82	340	170	170	
KLP 65/1200	115	228	99	129	100	65	65	110	130	145	185		433	82	340	170	170	

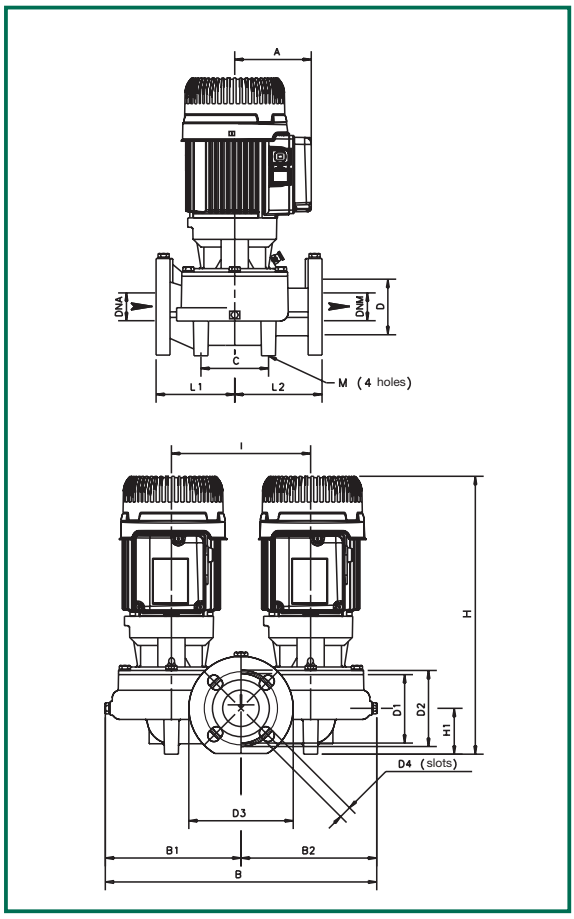
MODEL	ELECTRICAL DATA						
	VOLTAGE 50 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
KLM 65/300 T	3x230-400 V ~	4 POLES	1460	0,2	0,25	0,33	1-0,6
KLM 65/600 T	3x230-400 V ~	4 POLES	1400	0,36	0,37	0,5	1,2-0,7
KLP 65/900 T	3x230-400 V ~	2 POLES	2920	0,98	1,1	1,5	4-2,35
KLP 65/1200 T	3x230-400 V ~	2 POLES	2880	1,3	1,1	1,5	4,7-2,7

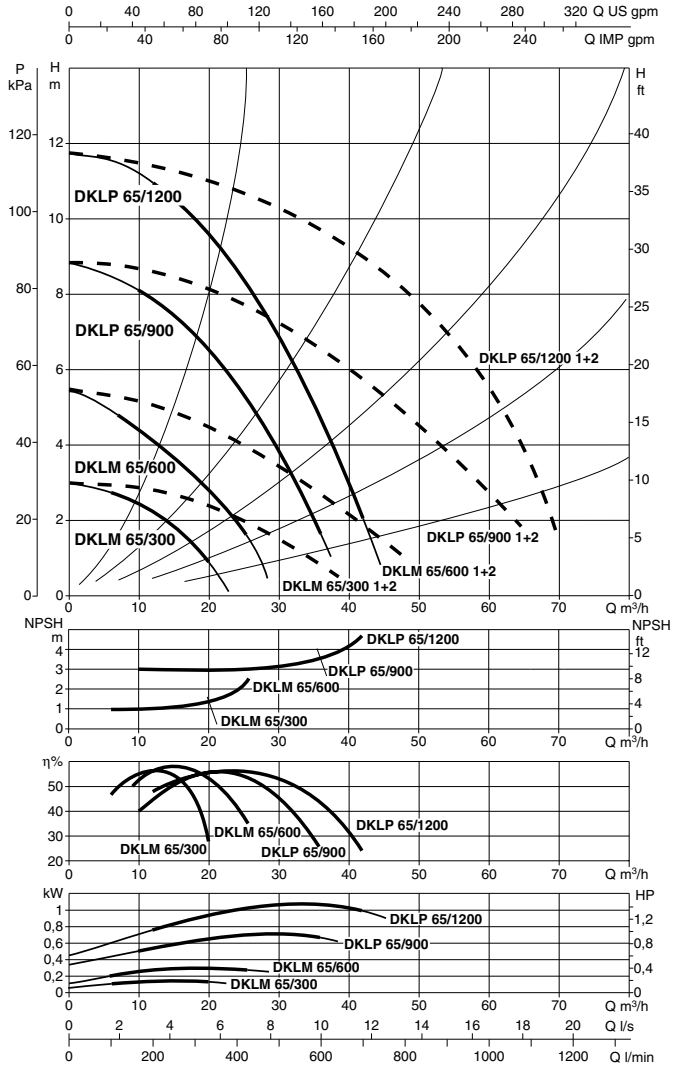
PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg single-ph.	WEIGHT Kg three-ph
510	310	470	0,074	–	32,7
510	310	470	0,074	–	32,7
510	310	470	0,074	–	38,2
510	310	470	0,074	–	38,5

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

DKLM 65 - DKLP 65

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





MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	I	L	L1	L2	M
DKLM 65/300	110	455	226	229	140	65	65	110	130	145	185	4 slots 18x23	433	82	240	340	170	170	2 holes 10
DKLP 65/600	115	455	226	229	140	65	65	110	130	145	185		433	82	240	340	170	170	
DKLP 65/900	115	455	226	229	140	65	65	110	130	145	185		433	82	240	340	170	170	
DKLP 65/1200	115	455	226	229	140	65	65	110	130	145	185		433	82	240	340	170	170	

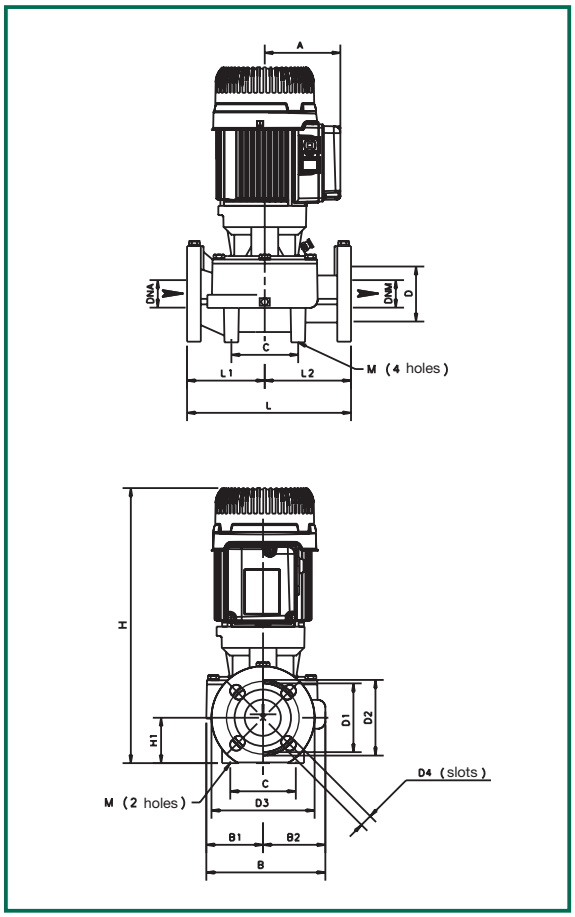
MODEL	ELECTRICAL DATA						
	VOLTAGE 50 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
DKLM 65/300 T	3x230-400 V ~	4 POLES	1460	0,2	0,25	0,33	1-0,6
DKLM 65/600 T	3x230-400 V ~	4 POLES	1400	0,36	0,37	0,5	1,2-0,7
DKLP 65/900 T	3x230-400 V ~	2 POLES	2920	0,98	1,1	1,5	4-2,35
DKLP 65/1200 T	3x230-400 V ~	2 POLES	2880	1,3	1,1	1,5	4,7-2,7

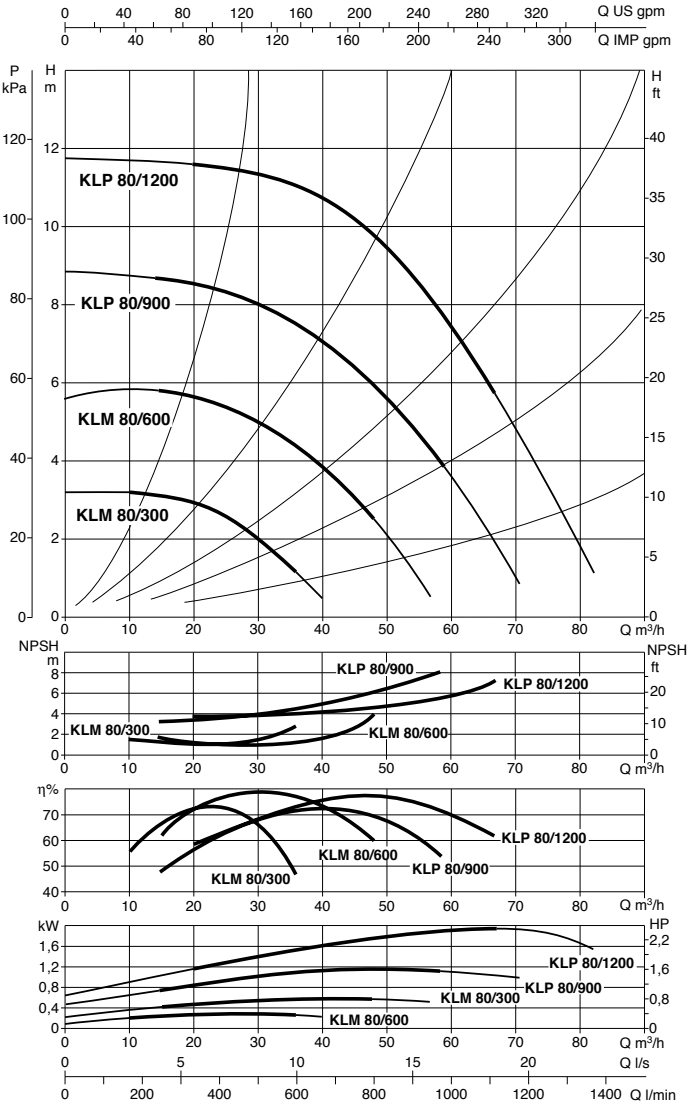
PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg single-ph.	WEIGHT Kg three-ph
540	420	610	0,138	–	59,1
540	420	610	0,138	–	51,7
540	420	610	0,138	–	73,4
540	420	610	0,138	–	79,7

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

KLM 80- KLP 80

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





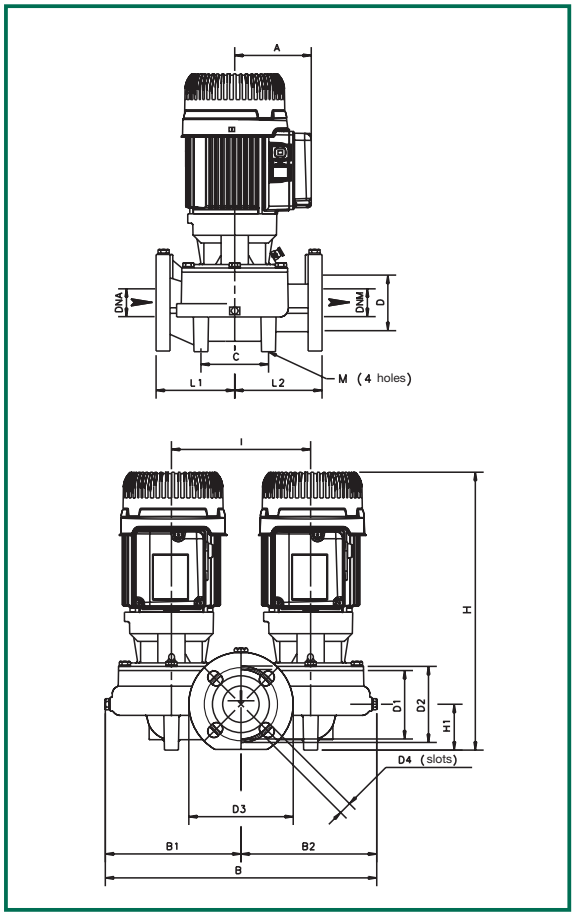
MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	L	L1	L2	M
KLM 80/300	110	229	99	130	115	80	80	128	150	160	200	4 slots 18x23	450	97	360	190	170	2 holes 10
KLM 80/600	115	229	99	130	115	80	80	128	150	160	200		463	97	360	190	170	
KLP 80/900	115	229	99	130	115	80	80	128	150	160	200		463	97	360	190	170	
KLP 80/1200	115	229	99	130	115	80	80	128	150	160	200		463	97	360	190	170	

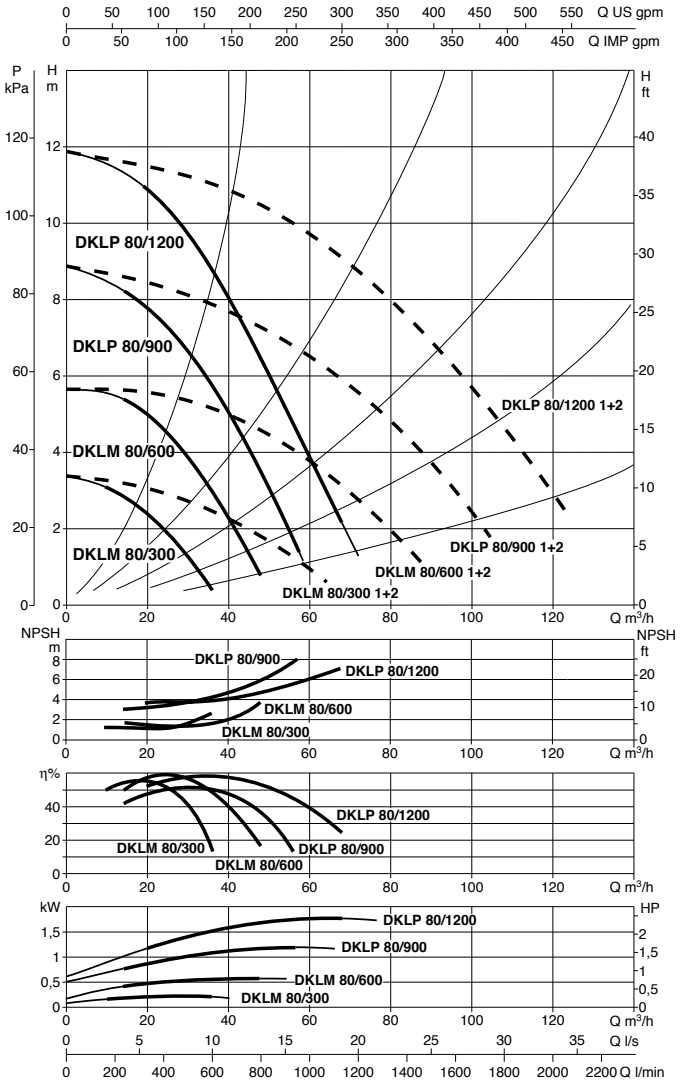
MODEL	ELECTRICAL DATA							PACKING DIMENSIONS			VOLUME	WEIGHT
	VOLTAGE 50 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	L/A	L/B	H	m³	Kg
KLM 80/300 T	3x230-400 V ~	4 POLES	1400	0,36	0,25	0,33	1,2-0,7	510	310	470	0,074	35,1
KLM 80/600 T	3x230-400 V ~	4 POLES	1440	0,75	0,75	1	2,8-1,6	510	310	470	0,074	42,4
KLP 80/900 T	3x230-400 V ~	2 POLES	2920	1,4	1,84	2,5	5,2-3	510	310	470	0,074	43,4
KLP 80/1200 T	3x230-400 V ~	2 POLES	2840	2,1	1,84	2,5	6,6-3,8	510	310	470	0,074	43,4

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

DKLM 80 - DKLP 80

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

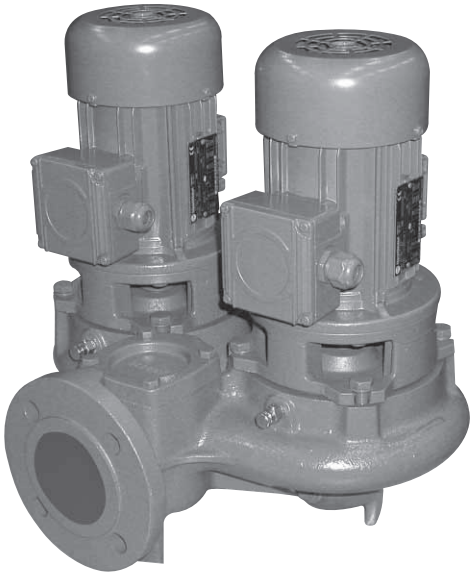




MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	I	L	L1	L2	M
DKLM 80/300	110	463	230	233	150	80	80	128	150	150	200	4 slots 18x23	450	97	240	360	190	170	2 holes 10
DKLM 80/600	115	463	230	233	150	80	80	128	150	150	200		463	97	240	360	190	170	
DKLP 80/900	115	463	230	233	150	80	80	128	150	150	200		463	97	240	360	190	170	
DKLP 80/1200	115	463	230	233	150	80	80	128	150	150	200		463	97	240	360	190	170	

MODEL	ELECTRICAL DATA							PACKING DIMENSIONS			VOLUME	WEIGHT
	VOLTAGE 50 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	L/A	L/B	H	m³	Kg
DKLM 80/300 T	3x230-400 V ~	4 POLES	1400	0,36	0,25	0,33	1,2-0,7	540	420	610	0,138	76,6
DKLM 80/600 T	3x230-400 V ~	4 POLES	1440	0,75	0,75	1	2,8-1,6	540	420	610	0,138	77,5
DKLP 80/900 T	3x230-400 V ~	2 POLES	2920	1,4	1,84	2,5	5,2-3	540	420	610	0,138	78,8
DKLP 80/1200 T	3x230-400 V ~	2 POLES	2840	2,1	1,84	2,5	6,6-3,8	540	420	610	0,138	79,5

CM - DCM



CE

GENERAL DATA

Applications

Circulating pumps with IN-LINE connections, suitable for civil and industrial installations for heating, conditioning, refrigeration and clean and safe water.
Available in single and twin version.

Constructions features

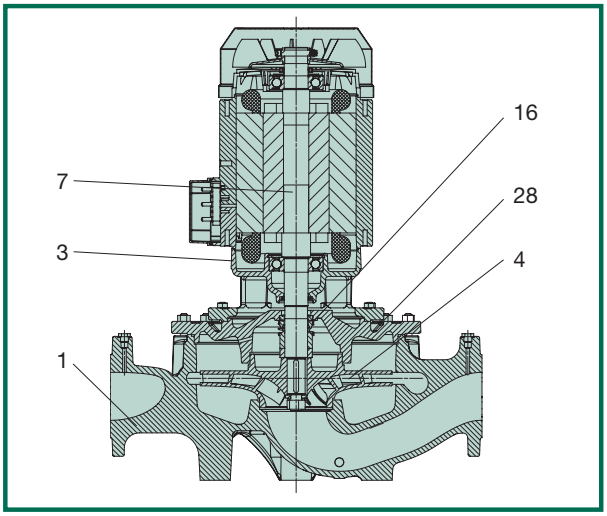
Flanged suction and delivery connections in PN 10 - PN 16 with threaded holes for control pressure gauges.
Cast iron pump casing and motor support, cast iron or technopolymer impeller. Stainless steel motor shaft.
Asynchronous threephase motor, 4 poles, closed and cooled with external ventilation.
Three-phase motors should be protected with a suitable overload protection complying with the regulations in force.

Protection: IP 54 - IP 55
Insulation class: F

TECHNICAL DATA

N.	PARTS*	MATERIALS
1	PUMP BODY	CAST IRON 250 ISO UNI 185
3	SUPPORT	CAST IRON 250 ISO UNI 185
4	IMPELLER	CAST IRON 250 ISO UNI 185 x CM 65-80-100-125-150 TECHNOPOLYMER B x CM 40-50
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.

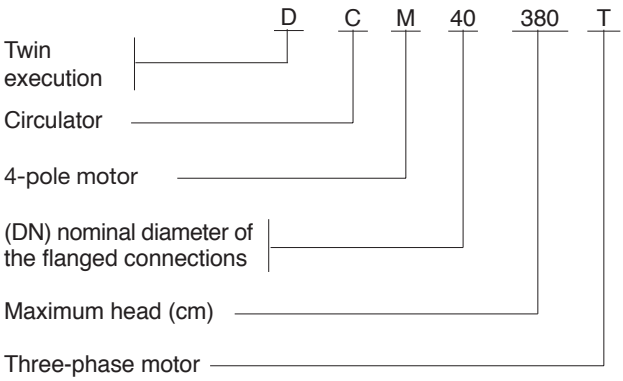


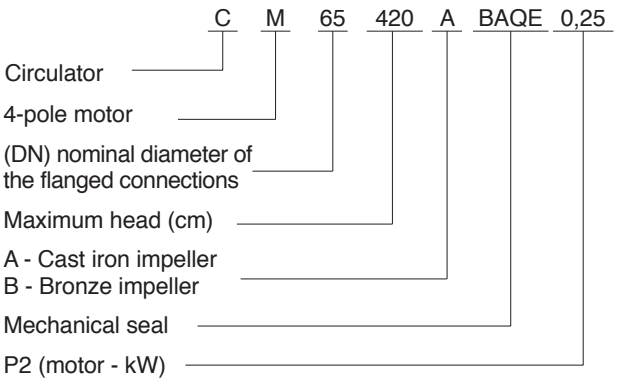
- Operating range: from 1,2 to 420 m^3/h with head up to 41 meters.
- Liquid quality requirements: clean, free from solids or abrasive substances, non viscous, non aggressive, non crystallized, chemically neutral, close to the characteristics of water.
- Liquid temperature range: -10 °C ÷ +140 °C (CM)
  -10 °C ÷ +130 °C (DCM)
- Maximum ambient temperature: +40°C
- Maximum working pressure:

PN 10	CM 40/1300T - CM 40/1450T - CM 50/1270T - CM 50/1420T DCM
PN 16	the rest of the range

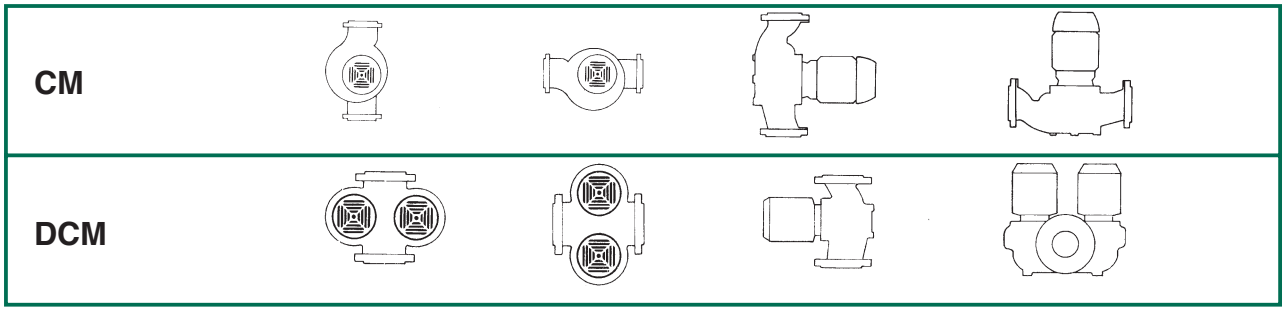
- Flanging: PN 16
- Special versions on request: different voltages and/or frequencies

- Classification index: (example)





- Installation: with motor fitted horizontally or vertically as long as it's always above the pump.

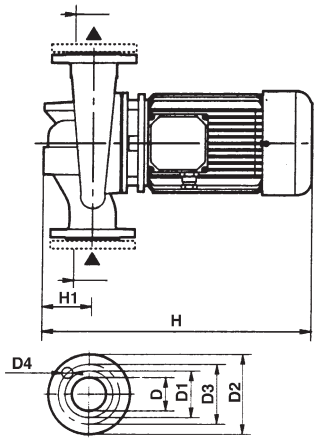


Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

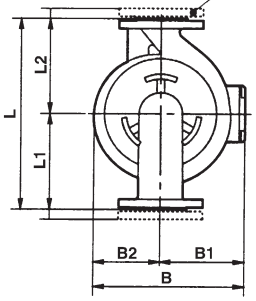
CM 40

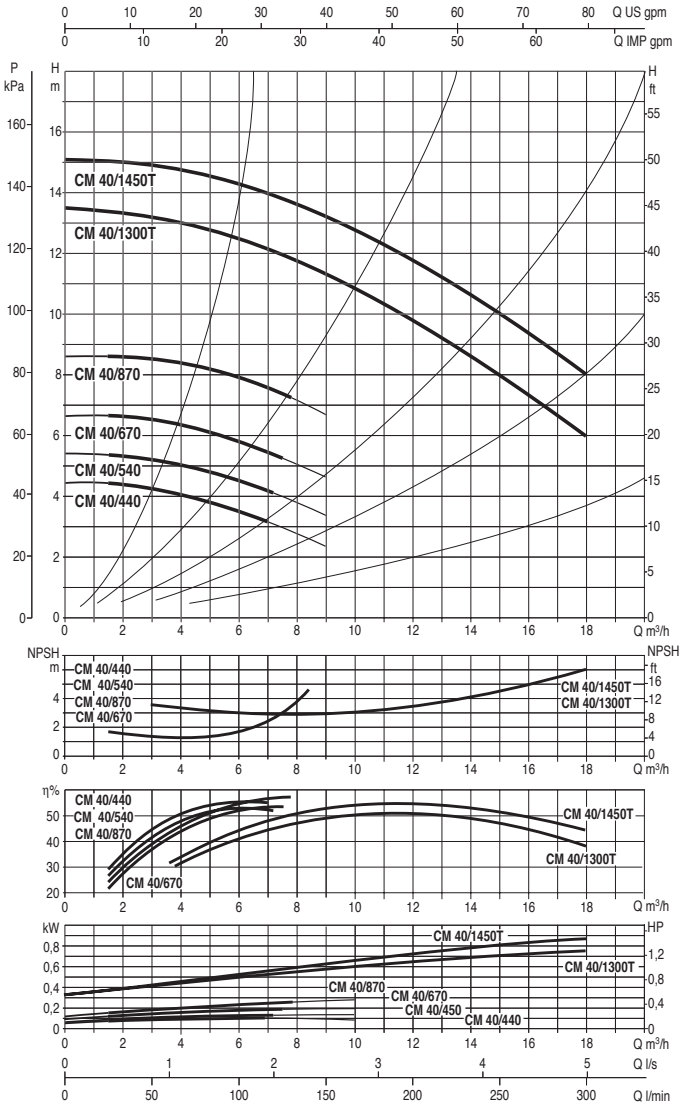
Liquid temperature range: [1] from -15°C to +120°C
[2] from -10°C to +130°C

Maximum temperature operating: +40°C



Counterflanges on request





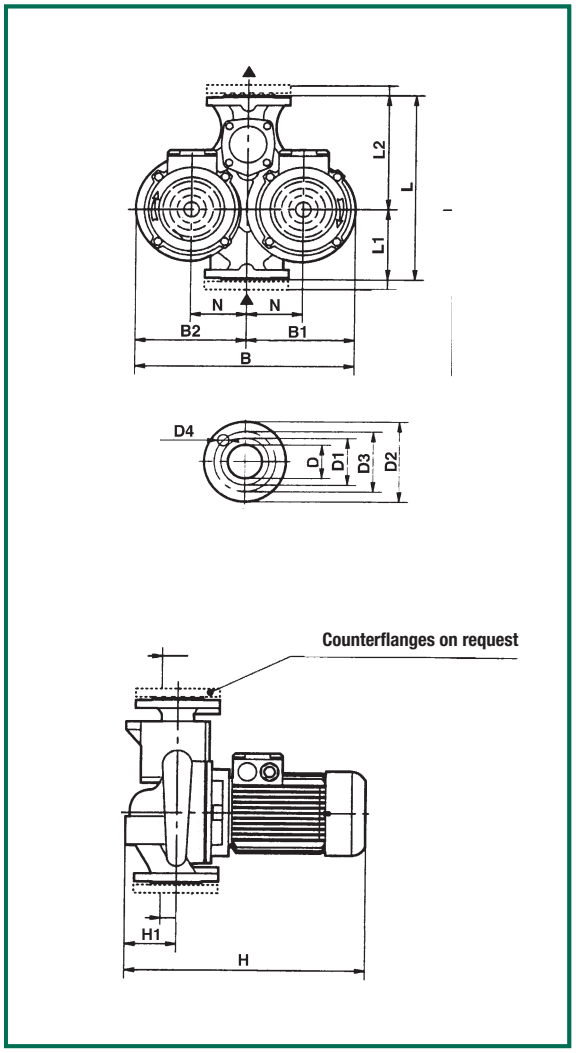
MODEL	L	L1	L2	B	B1	B2	H	H1	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m³	WEIGHT Kg
CM 40/440 T	390	200	190	231	118	113	453	95	40 PN16	88	150	110	4 fori Ø 18	680	330	580	0,13	41
CM 40/540 T	390	200	190	231	118	113	453	95	40 PN16	88	150	110		680	330	580	0,13	41
CM 40/670 T	390	200	190	231	118	113	453	95	40 PN16	88	150	110		680	330	580	0,13	41
CM 40/870 T	390	200	190	231	118	113	453	95	40 PN16	88	150	110		680	330	580	0,13	41
CM 40/1300 T	380	200	180	245	118	127	445	100	40 PN16	88	150	110		450	270	465	0,04	30
CM 40/1450 T	380	200	180	245	118	127	445	100	40 PN16	88	150	110		450	270	465	0,04	31

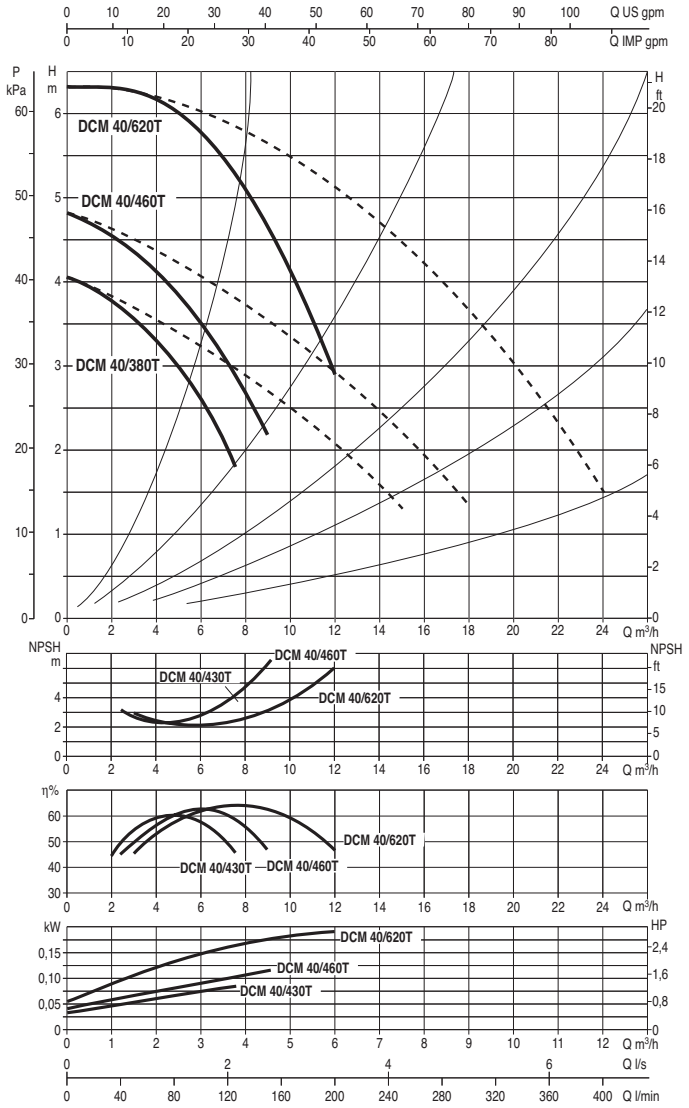
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m³/h / l/min	0 / 0	1,2 / 20	2,4 / 40	3 / 50	3,6 / 60	4,5 / 75	4,8 / 80	6 / 100	7,2 / 120	8,4 / 140	9 / 150	10,5 / 175	12 / 200	13,5 / 225	14,4 / 240	15 / 250	16,8 / 280	18 / 300
CM 40/440 T [1]	3x230-400 V ~	1480	0,28	0,7	1,0	2,1-1,2	H (m)	4,4	4,4	4,3	4,3	4,2	4,0	3,8	3,5	3,0									
CM 40/540 T [1]	3x230-400 V ~	1480	0,33	0,7	1,0	2,1-1,2		5,4	5,4	5,3	5,2	5,1	5,0	4,8	4,5	4,0									
CM 40/670 T [1]	3x230-400 V ~	1480	0,39	0,7	1,0	2,2-1,3		6,7	6,7	6,7	6,6	6,5	6,3	6,2	5,8	5,3									
CM 40/870 T [1]	3x230-400 V ~	1480	0,51	0,7	1,0	2,2-1,3		8,7	8,7	8,6	8,6	8,5	8,3	8,2	7,9	7,5									
CM 40/1300 T [2]	3x230-400 V ~	1450	1,1	0,8	1,0	3,5-2					13,0	12,9	12,8	12,5	12,4	12,2	11,5	11,3	10,6	9,8	9,0	9,5	8,0	7,5	6,0
CM 40/1450 T [2]	3x230-400 V ~	1450	1,2	0,9	1,3	4,2-2,4							14,5	14,4	14,3	14,2	13,5	13,3	12,7	11,8	10,9	10,5	10,0	9,0	8,0

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

DCM 40

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C





MODEL	L	L1	L2	B	B1	B2	H	H1	N	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m³	WEIGHT Kg
DCM 40/380 T	340	130	210	397	197	200	425	100	100	40 PN16	88	150	110	4 fori Ø 18	520	320	535	0,06	41
DCM 40/460 T	340	130	210	397	197	200	425	100	100	40 PN16	88	150	110		520	320	535	0,06	41
DCM 40/620 T	340	130	210	397	197	200	425	100	100	40 PN16	88	150	110		520	320	535	0,06	41

MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m³/h	1,8	2,4	3	4,5	6	9	10,5	12
							l/min	30	40	50	75	100	150	175	200
DCM 40/380 T	3x230-400 V ~	1450	0,41	0,25	0,33	1,46-0,85	H (m)	3,8	3,7	3,6	3,15	2,6			
DCM 40/460 T	3x230-400 V ~	1450	0,41	0,25	0,33	1,46-0,85			4,6	4,5	4,1	3,6	2,2		
DCM 40/620 T	3x230-400 V ~	1450	0,41	0,25	0,33	1,46-0,85				6,2	6,0	5,8	4,5	3,9	3,0

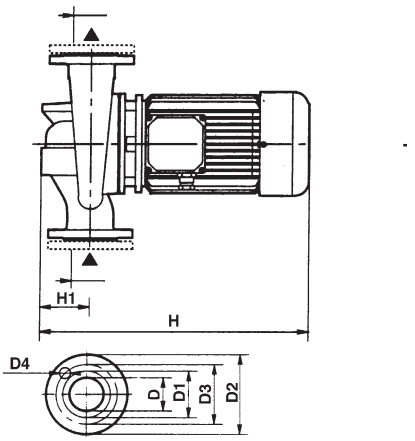
DAB PUMP PERFORMANCE

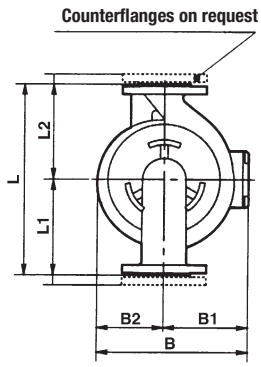
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

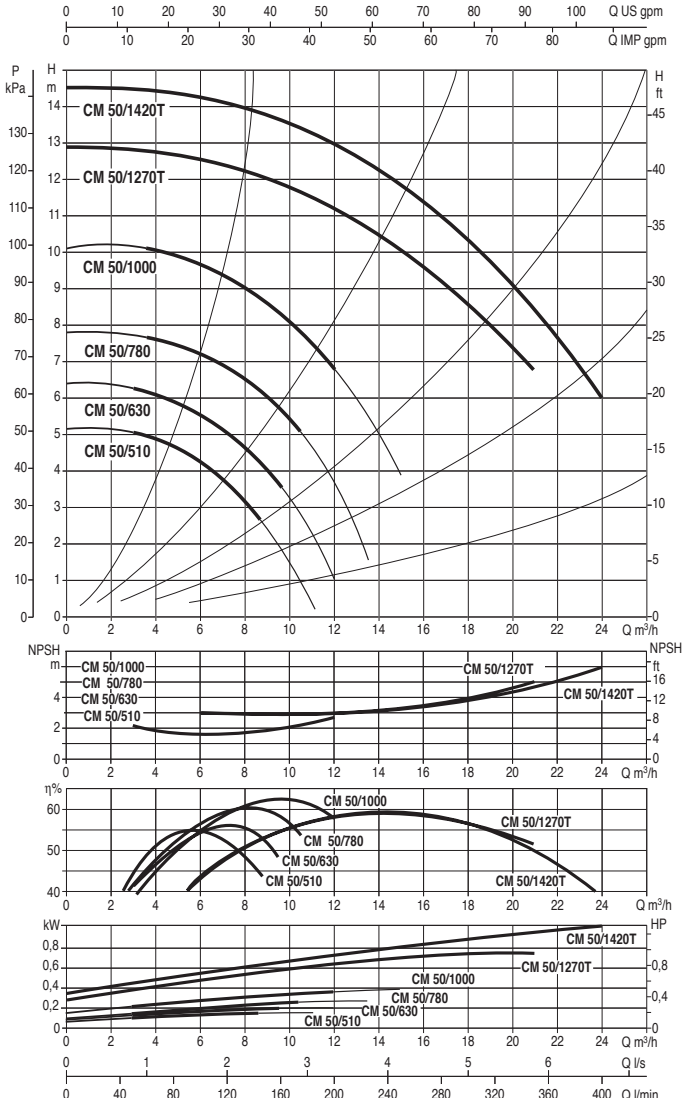
CM 50

Liquid temperature range: [1] from -15°C to +120°C
[2] from -10°C to +130°C

Maximum temperature operating: +40°C







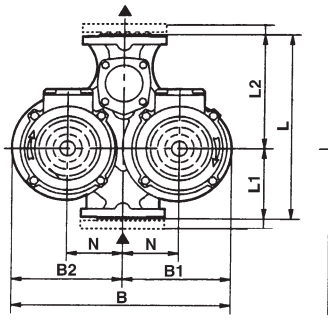
MODEL	L	L1	L2	B	B1	B2	H	H1	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m³	WEIGHT Kg
CM 50/510 T	425	225	200	233	120	113	463	105	50 PN16	102	165	125	4 fori Ø 18	680	330	580	0,13	46,6
CM 50/630 T	425	225	200	233	120	113	463	105	50 PN16	102	165	125		680	330	580	0,13	46,6
CM 50/780 T	425	225	200	233	120	113	463	105	50 PN16	102	165	125		680	330	580	0,13	46,6
CM 50/1000 T	425	225	200	233	120	113	463	105	50 PN16	102	165	125		680	330	580	0,13	46,6
CM 50/1270 T	400	220	180	280	149	131	495	110	50 PN16	102	165	125		520	320	535	0,06	36
CM 50/1420 T	400	220	180	280	149	131	495	110	50 PN16	102	165	125		520	320	535	0,06	36

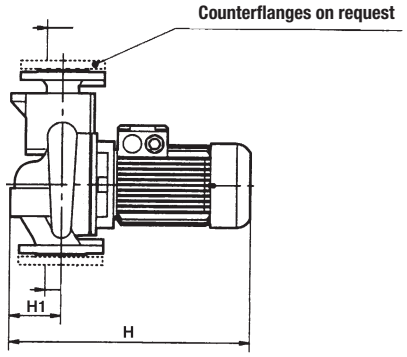
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m³/h / l/min	3,6 / 60	4,5 / 75	4,8 / 80	6 / 100	7,2 / 120	8,4 / 140	9 / 150	10,5 / 175	12 / 200	13,5 / 225	14,4 / 240	15 / 250	16,8 / 280	18 / 300	24 / 400
CM 50/510 T [1]	3x230-400 V ~	1480	0,35	0,7	1,0	2,1-1,2	H (m)	5,0	4,8	4,6	4,2	3,6	2,8									
CM 50/630 T [1]	3x230-400 V ~	1480	0,5	0,7	1,0	2,2-1,3		6,2	6,0	5,8	5,5	5,0	4,4	4,0								
CM 50/780 T [1]	3x230-400 V ~	1470	0,5	0,7	1,0	2,2-1,3		7,7	7,5	7,4	7,1	6,8	6,3	6,0								
CM 50/1000 T [1]	3x230-400 V ~	1470	0,64	0,7	1,0	2,4-1,4		10,1	10,0	9,8	9,6	9,2	8,8	8,6	7,0	6,8						
CM 50/1270 T [2]	3x230-400 V ~	1450	1,4	1,1	1,5	4,5-2,6					12,7	12,4	12,3	12,1	11,7	11,2	10,7	10,5	10,1	9,0	8,5	
CM 50/1420 T [2]	3x230-400 V ~	1450	1,4	1,1	1,5	4,5-2,6					14,3	14,1	13,9	13,7	13,4	13,0	12,4	12,0	11,7	11,0	10,3	06,0

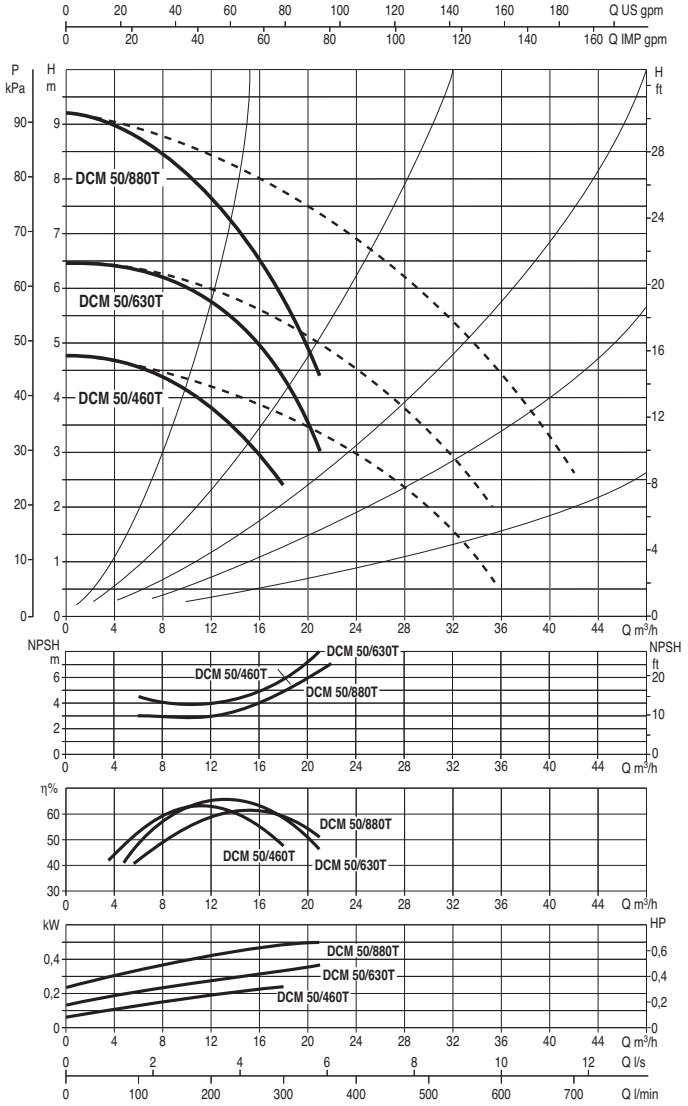
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO 9906.

DCM 50

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C







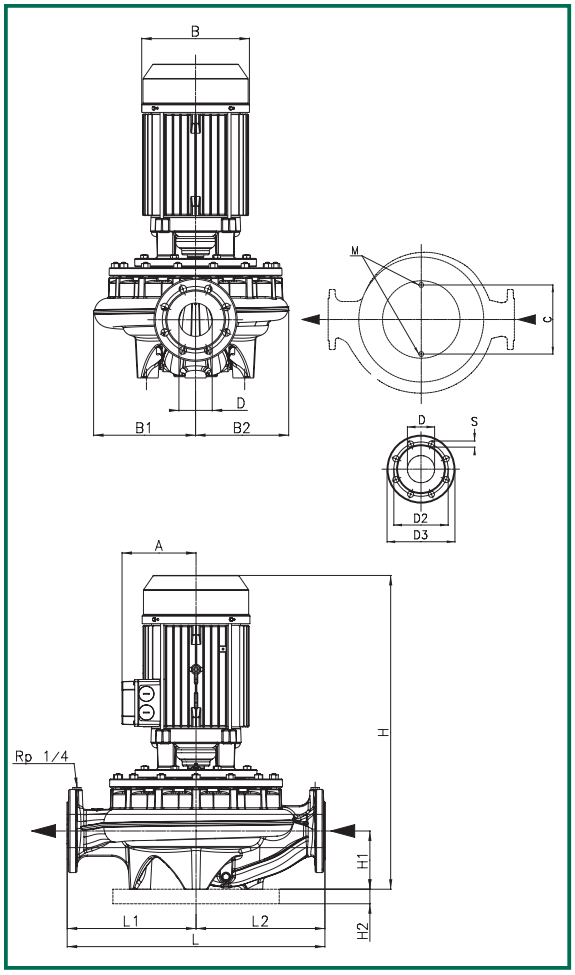
MODEL	L	L1	L2	B	B1	B2	H	H1	N	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m^3	WEIGHT Kg
DCM 50/460 T	365	145	220	427	210	217	435	110	105	50 PN16	102	165	125	4 holes Ø 18	520	320	535	0,07	46
DCM 50/630 T	365	145	220	427	210	217	435	110	105	50 PN16	102	165	125		520	320	535	0,07	46
DCM 50/880 T	410	170	240	480	235	245	435	110	120	50 PN16	102	165	125		580	360	585	0,09	52

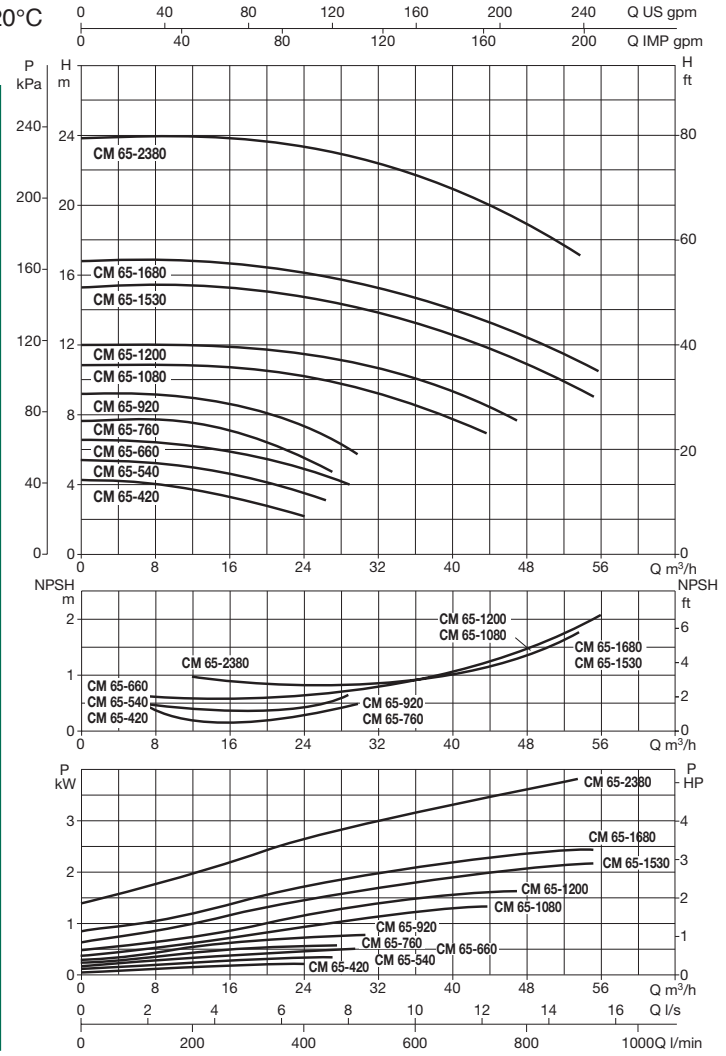
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m^3/h / l/min	6 / 100	9 / 150	10,5 / 175	12 / 200	13,5 / 225	15 / 250	18 / 300
DCM 50/460 T	3x230-400 V ~	1450	0,41	0,25	0,33	1,46-0,85	H (m)	4,6	4,3	4,1	3,9	3,6	3,3	2,4
DCM 50/630 T	3x230-400 V ~	1450	0,57	0,37	0,5	2-1,15		6,3	6,1	6,0	5,8	5,5	5,2	4,6
DCM 50/880 T	3x230-400 V ~	1450	0,79	0,5	0,7	2,8-1,6		8,8	8,3	8,0	7,7	7,3	6,9	5,9

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CM 65

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





MODEL	DIMENSIONS																	PACKING DIM.			VOLUME	WEIGHT
	A	B	B1	B2	C	D	D2	D3	S	holes	H	H1	H2	L	L1	L2	M	L\A	L\B	H		
CM 65-420/A/BAQE/0,25	105	141	144	126	144	65	145	185	18	4	467	105	35	360	180	180	M16	670	390	710	0,186	46,0
CM 65-540/A/BAQE/0,37	105	141	144	126	144	65	145	185	18		467	105	35	360	180	180	M16	670	390	710	0,186	46,1
CM 65-660/A/BAQE/0,55	127	160	144	126	144	65	145	185	18		492	105	35	360	180	180	M16	670	390	710	0,186	57,9
CM 65-760/A/BAQE/0,55	127	160	144	126	144	65	145	185	18		492	105	35	360	180	180	M16	670	390	710	0,186	57,6
CM 65-920/A/BAQE/0,75	127	160	144	126	144	65	145	185	18		492	105	35	360	180	180	M16	670	390	710	0,186	59,7
CM 65-1080/A/BAQE/1,1	127	160	180	164	144	65	145	185	18		505	125	35	475	237,5	237,5	M16	670	390	710	0,186	84,3
CM 65-1200/A/BAQE/1,5	129	176	180	164	144	65	145	185	18		529	125	35	475	237,5	237,5	M16	670	390	710	0,186	86,9
CM 65-1530/A/BAQE/2,2	129	176	180	164	144	65	145	185	18		529	125	35	475	237,5	237,5	M16	670	390	710	0,186	89,6
CM 65-1680/A/BAQE/3	144	193	180	164	144	65	145	185	18		575	125	35	475	237,5	237,5	M16	670	390	710	0,186	92,2
CM 65-2380/A/BAQE/4	144	193	180	164	144	65	145	185	18		575	125	35	475	237,5	237,5	M16	670	390	710	0,186	105,7

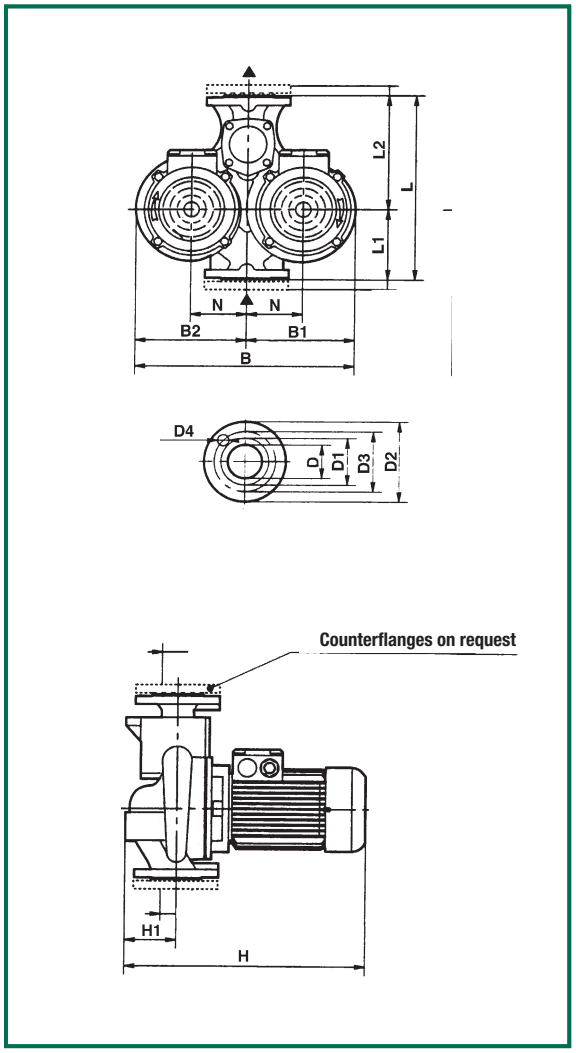
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min	P1 MAX kW	P2 NOMINAL		MOTOR SIZE	In A	I st. A	η max %	cos φ
				kW	HP					
CM 65-420/A/BAQE/0,25	3x230-400 V ~	1400	0,4	0,25	0,34	MEC 71	1,46-0,84	4,6-2,7	63	0,71
CM 65-540/A/BAQE/0,37	3x230-400 V ~	1380	0,6	0,37	0,5	MEC 71	1,86-1,07	6,5-3,7	66,4	0,72
CM 65-660/A/BAQE/0,55	3x230-400 V ~	1400	0,8	0,55	0,75	MEC 80	2,54-1,47	11,4-6,4	66,4	0,73
CM 65-760/A/BAQE/0,55	3x230-400 V ~	1390	0,8	0,55	0,75	MEC 80	2,64-1,53	11,4-6,4	65,8	0,73
CM 65-920/A/BAQE/0,75	3x230-400 V ~	1390	1,1	0,75	1	MEC 80	3,55-2,05	15,1-6	67	0,73
CM 65-1080/A/BAQE/1,1	3x230-400 V ~	1400	1,5	1,1	1,5	MEC 80	5,10-3	21,9-12,9	73	0,77
CM 65-1200/A/BAQE/1,5	3x230-400 V ~	1400	1,9	1,5	2	MEC 90L	6,4-3,7	30-17,4	78	0,78
CM 65-1530/A/BAQE/2,2	3x230-400 V ~	1400	2,6	2,2	3	MEC 90L	8,73-5,04	47-27	72	0,78
CM 65-1680/A/BAQE/3	3x400 V ~ Δ[1]	1420	3,2	3	4	MEC 100	6	37,6	72	0,79
CM 65-2380/A/BAQE/4	3x400 V ~ Δ[1]	1416	4,7	4	5,5	MEC 100	10	52,8	68,3	0,8

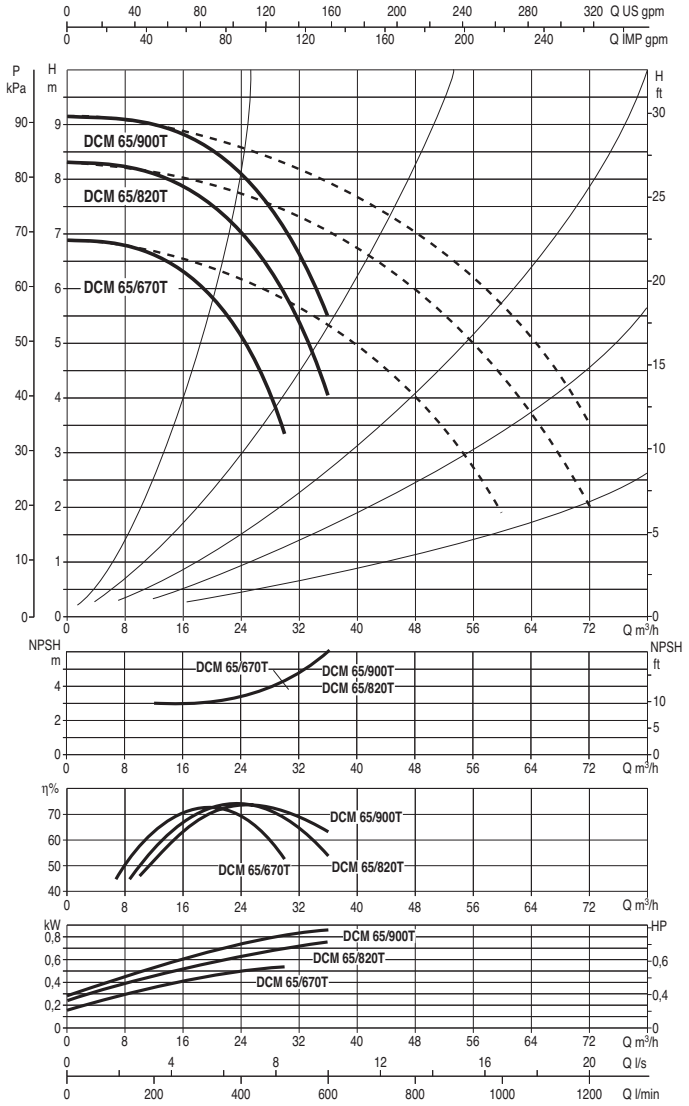
[1] Star start (⅄) is possible

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

DCM 65

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C





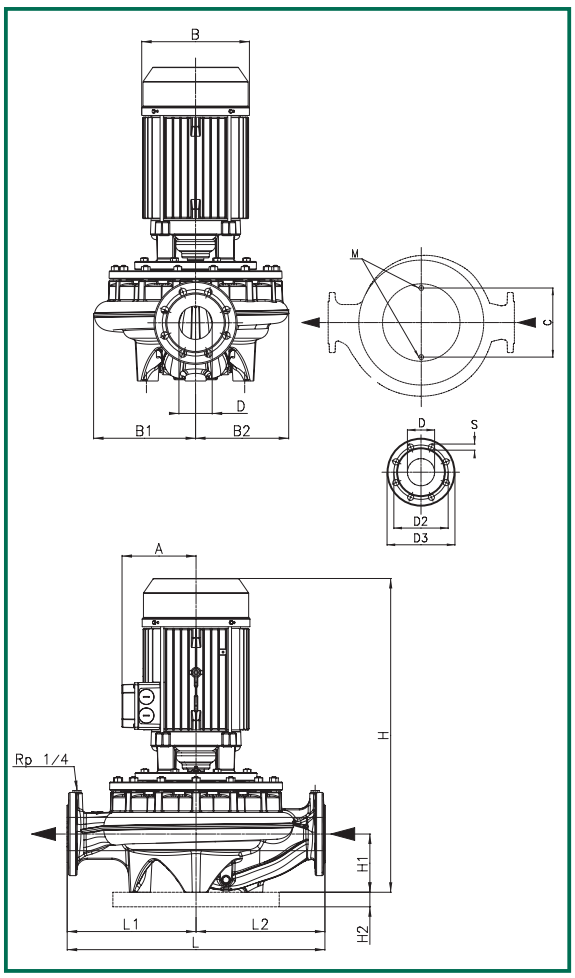
MODEL	L	L1	L2	B	B1	B2	H	H1	N	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m³	WEIGHT Kg
DCM 65/670 T	450	180	270	543	268	275	475	130	140	65 PN16	122	185	145	4 holes Ø 18	–	–	–	0,12	65
DCM 65/820 T	450	180	270	543	268	275	475	130	140	65 PN16	122	185	145		–	–	–	0,12	65
DCM 65/900 T	450	180	270	543	268	275	475	130	140	65 PN16	122	185	145		–	–	–	0,12	67

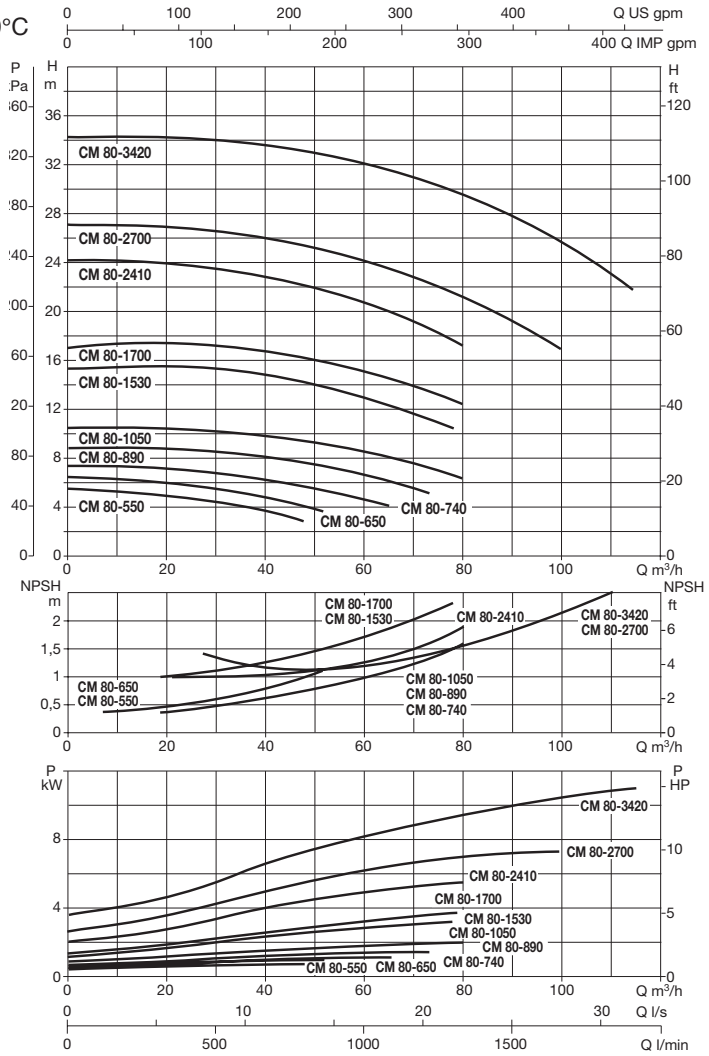
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m³/h / l/min	12 / 200	13,5 / 225	15 / 250	18 / 300	24 / 400	27 / 450	30 / 500	36 / 600
DCM 65/670 T	3x230-400 V ~	1450	0,79	0,55	0,75	2,8-1,6	H (m)	6,7	6,6	6,4	6,1	5,1	4,3	3,3	
DCM 65/820 T	3x230-400 V ~	1450	1,1	0,75	1	3,5-2		8,2	8,0	7,9	7,7	7,0	6,6	6,0	4,0
DCM 65/900 T	3x230-400 V ~	1450	1,2	0,9	1,25	4,2-2,4		9,0	8,9	8,8	8,6	8,1	7,7	7,2	5,5

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CM 80

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





MODEL	DIMENSIONS																	PACKING DIM.			VOLUME	WEIGHT
	A	B	B1	B2	C	D	D2	D3	S	holes	H	H1	H2	L	L1	L2	M	L\A	L\B	H		
CM 80-550/A/BAQE/0,55	127	160	135	117	144	80	160	200	18	8	495	105	35	360	180	180	M16	520	290	700	0,106	61,3
CM 80-650/A/BAQE/0,75	127	160	135	117	144	80	160	200	18		495	105	35	360	180	180	M16	520	290	700	0,106	62,8
CM 80-740/A/BAQE/1,1	127	160	178	146	144	80	160	200	18		505	115	35	440	220	220	M16	670	390	710	0,186	90,0
CM 80-890/A/BAQE/1,5	129	176	178	146	144	80	160	200	18		530	115	35	440	220	220	M16	670	390	710	0,186	94,0
CM 80-1050/A/BAQE/2,2	129	176	178	146	144	80	160	200	18		530	115	35	440	220	220	M16	670	390	710	0,186	78,8
CM 80-1530/A/BAQE/3	144	193	190	164	144	80	160	200	18		576	115	35	500	250	250	M16	670	390	710	0,186	125,4
CM 80-1700/A/BAQE/4	144	193	190	164	144	80	160	200	18		576	115	35	500	250	250	M16	670	390	710	0,186	138,6
CM 80-2410/A/BAQE/5,5	150	220	245	224	230	80	160	200	18		663	140	35	620	310	310	M16	900	550	1060	0,525	166,2
CM 80-2700/A/BAQE/7,5	178	259	245	224	230	80	160	200	18		755	140	35	620	310	310	M16	900	550	1060	0,525	192,4
CM 80-3420/A/BAQE/11	178	259	245	224	230	80	160	200	18		755	140	35	620	310	310	M16	900	550	1060	0,525	209,5

MODEL	VOLTAGE 50 Hz	r.p.m. 1/min	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	MOTOR SIZE	In A	I st. A	η max %	cos φ
CM 80-550/A/BAQE/0,55	3x230-400 V ~	1390	0,8	0,55	0,75	MEC 80	2,62-1,51	11,4-6,4	73	0,73
CM 80-650/A/BAQE/0,75	3x230-400 V ~	1396	1,1	0,75	1	MEC 80	3,48-2	15,1-6	74,2	0,73
CM 80-740/A/BAQE/1,1	3x230-400 V ~	1400	1,5	1,1	1,5	MEC 80	5,10-3	21,9-12,9	73	0,77
CM 80-890/A/BAQE/1,5	3x230-400 V ~	1400	1,9	1,5	2	MEC 90L	6,4-3,7	30-17,4	78	0,78
CM 80-1050/A/BAQE/2,2	3x230-400 V ~	1400	3	2,2	3	MEC 90L	8,73-5,04	47-27	72	0,78
CM 80-1530/A/BAQE/3	3x400 V ~ Δ[1]	1400	4	3	4	MEC 100	6	37,6	72	0,79
CM 80-1700/A/BAQE/4	3x400 V ~ Δ[1]	1400	5,8	4	5,5	MEC 100	10	52,8	68,3	0,803
CM 80-2410/A/BAQE/5,5	3x400 V ~ Δ[1]	1420	6,7	5,5	7,5	MEC 112	12,7	76,2	82	0,81
CM 80-2700/A/BAQE/7,5	3x400 V ~ Δ[1]	1450	8,9	7,5	10	MEC 132M	16	108,8	84	0,83
CM 80-3420/A/BAQE/11	3x400 V ~ Δ[1]	1450	13	11	15	MEC 132M	24	168	85	0,83

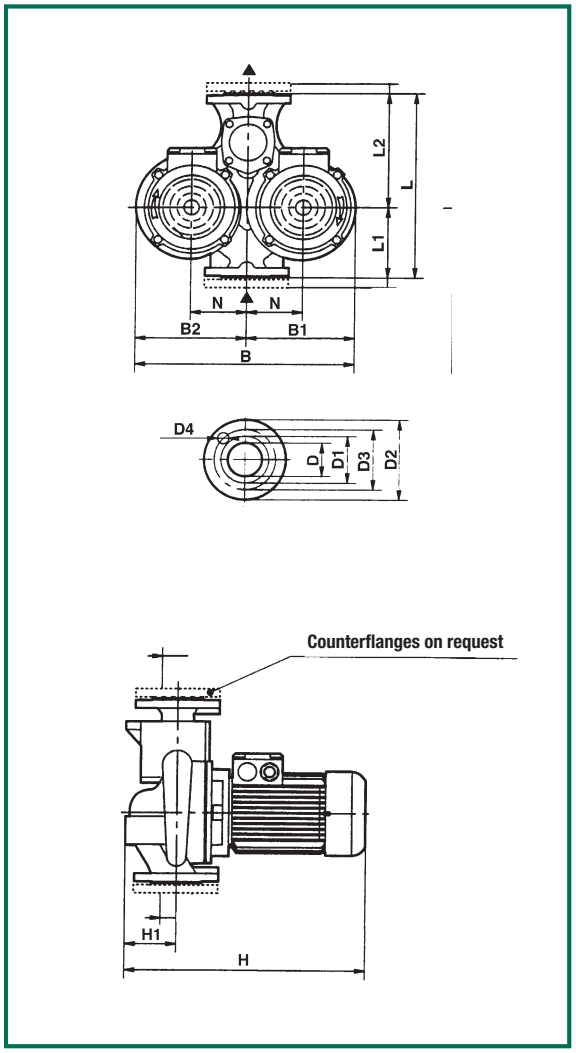
[1] Star start is possible

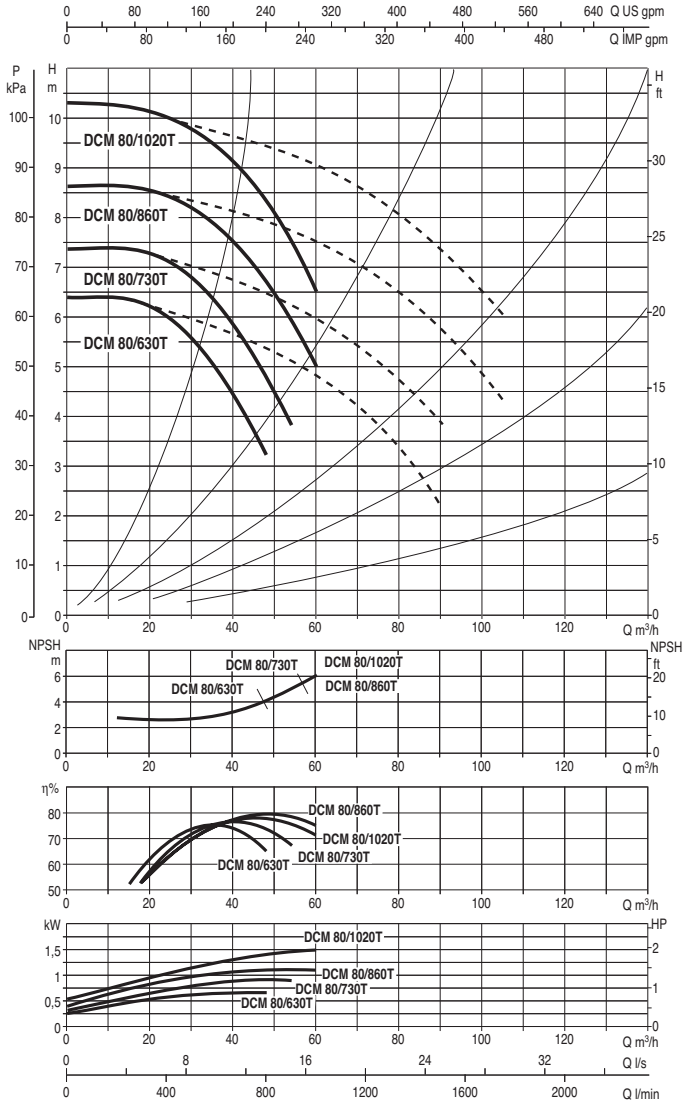
DAB PUMP PERFORMANCE

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

DCM 80

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C





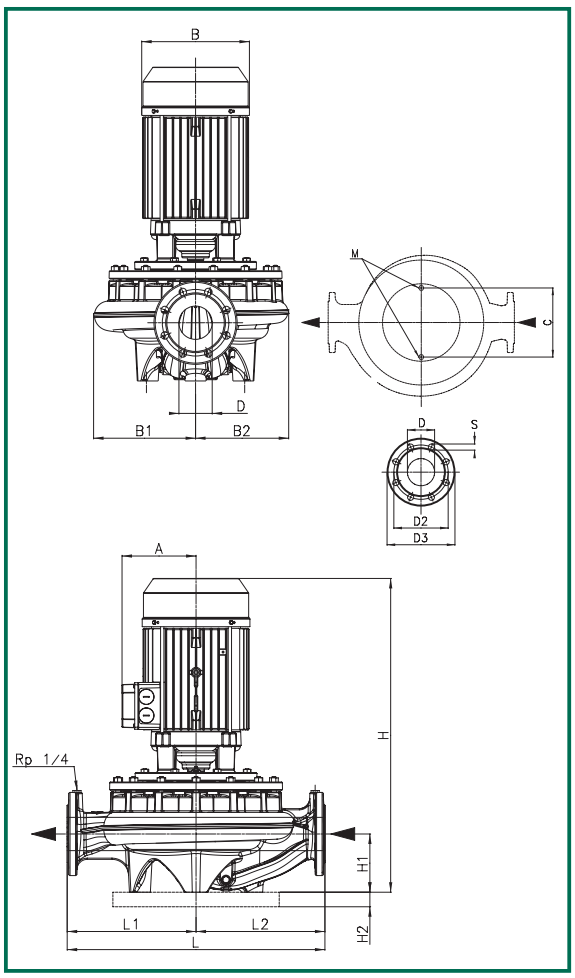
MODEL	L	L1	L2	B	B1	B2	H	H1	N	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m^3	WEIGHT Kg
DCM 80/630 T	510	205	305	550	270	280	485	150	135	80 PN16	138	200	160	8 holes Ø 18	–	–	–	0,14	72
DCM 80/730 T	510	205	305	550	270	280	485	150	135	80 PN16	138	200	160		–	–	–	0,14	74
DCM 80/860 T	510	205	305	550	270	280	535	150	135	80 PN16	138	200	160		–	–	–	0,15	79
DCM 80/1020 T	510	205	305	550	270	280	535	150	135	80 PN16	138	200	160		–	–	–	0,15	88

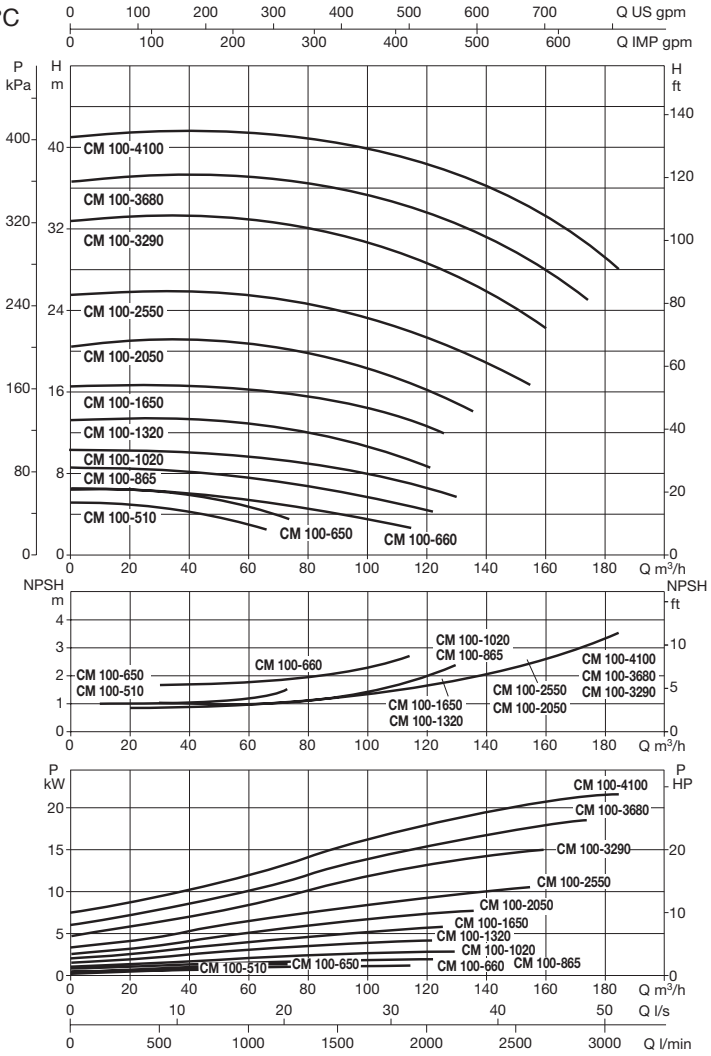
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m^3/h / l/min	18 / 300	24 / 400	27 / 450	30 / 500	36 / 600	42 / 700	48 / 800	54 / 900	60 / 1000
DCM 80/630 T	3x230-400 V ~	1450	1,1	0,75	1	3,5-2	H (m)	6,3	6,1	5,9	5,6	4,9	4,1	3,2		
DCM 80/730 T	3x230-400 V ~	1450	1,2	0,9	1,25	4,2-2,4		7,3	7,1	7	6,8	6,3	5,6	4,8	3,9	
DCM 80/860 T	3x230-400 V ~	1450	1,4	1,1	1,5	4,5-2,6		8,6	8,4	8,3	8,2	8,0	7,5	6,8	6,0	5,0
DCM 80/1020 T	3x230-400 V ~	1450	1,9	1,5	2	6,1-3,5		10,2	10	9,9	9,8	9,4	9,0	8,5	7,7	6,5

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CM 100

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





MODEL	DIMENSIONS																	PACKING DIM.			VOLUME	WEIGHT
	A	B	B1	B2	C	D	D2	D3	S	holes	H	H1	H2	L	L1	L2	M	L\A	L\B	H		
CM 100-510/A/BAQE/0,75	127	160	158	126	144	100	180	220	18	8	532	140	35	500	250	250	M16	670	390	710	0,186	99,9
CM 100-650/A/BAQE/1,1	127	160	158	126	144	100	180	220	18		532	140	35	500	250	250	M16	670	390	710	0,186	104,7
CM 100-660/A/BAQE/1,5	129	176	193	153	230	100	180	220	18		552	140	35	550	275	275	M16	670	390	710	0,186	108,8
CM 100-865/A/BAQE/2,2	129	176	193	153	230	100	180	220	18		552	140	35	550	275	275	M16	670	390	710	0,186	104,0
CM 100-1020/A/BAQE/3	144	193	193	153	230	100	180	220	18		598	140	35	550	275	275	M16	670	390	710	0,186	109,3
CM 100-1320/A/BAQE/4	144	193	204	174	230	100	180	220	18		635	140	35	550	275	275	M16	780	460	860	0,309	141,0
CM 100-1650/A/BAQE/5,5	150	220	204	174	230	100	180	220	18		667	140	35	550	275	275	M16	780	460	860	0,309	162,8
CM 100-2050/A/BAQE/7,5	178	259	293	252	230	100	180	220	18		795	175	35	670	335	335	M16	900	550	1060	0,525	239,1
CM 100-2550/A/BAQE/11	178	259	293	252	230	100	180	220	18		795	175	35	670	335	335	M16	900	550	1060	0,525	242,2
CM 100-3290/A/BAQE/15	223	309	293	252	230	100	180	220	18		935	175	35	670	335	335	M16	900	550	1060	0,525	336,6
CM 100-3680/A/BAQE/18,5	223	309	293	252	230	100	180	220	18		935	175	35	670	335	335	M16	900	550	1060	0,525	230,0
CM 100-4100/A/BAQE/22	223	309	293	252	230	100	180	220	18		935	175	35	670	335	335	M16	900	550	1060	0,525	330,3

MODEL	VOLTAGE 50 Hz	r.p.m. 1/min	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	MOTOR SIZE	In A	I st. A	η max %	cos φ
CM 100-510/A/BAQE/0,75	3x230-400 V ~	1400	1	0,75	1	MEC 80	3,48-2	15,1-6	74,2	0
CM 100-650/A/BAQE/1,1	3x230-400 V ~	1400	1,5	1,1	1,5	MEC 80	5,10-3	21,9-12,9	73	0,77
CM 100-660/A/BAQE/1,5	3x230-400 V ~	1400	1,9	1,5	2	MEC 90L	6,4-3,7	30-17,4	78	0,78
CM 100-865/A/BAQE/2,2	3x230-400 V ~	1400	3	2,2	3	MEC 90L	8,73-5,04	47-27	72	0,78
CM 100-1020/A/BAQE/3	3x400 V ~ Δ[1]	1400	4	3	4	MEC 100	6	37,6	72	0,79
CM 100-1320/A/BAQE/4	3x400 V ~ Δ[1]	1400	5,8	4	5,5	MEC 100	10	52,8	68,3	0,803
CM 100-1650/A/BAQE/5,5	3x400 V ~ Δ[1]	1420	6,7	5,5	7,5	MEC 112	12,7	76,2	82	0,81
CM 100-2050/A/BAQE/7,5	3x400 V ~ Δ[1]	1450	8,9	7,5	10	MEC 132M	16	108,8	84	0,83
CM 100-2550/A/BAQE/11	3x400 V ~ Δ[1]	1450	13	11	15	MEC 132M	24	168	85	0,83
CM 100-3290/A/BAQE/15	3x400 V ~ Δ[1]	1460	17	15	20	MEC 160L	31	207,7	89	0,83
CM 100-3680/A/BAQE/18,5	3x400 V ~ Δ[1]	1460	21	18,5	25	MEC 160L	38	254,6	89	0,83
CM 100-4100/A/BAQE/22	3x400 V ~ Δ[1]	1460	25	22	30	MEC 160L	44	299,2	88	0,83

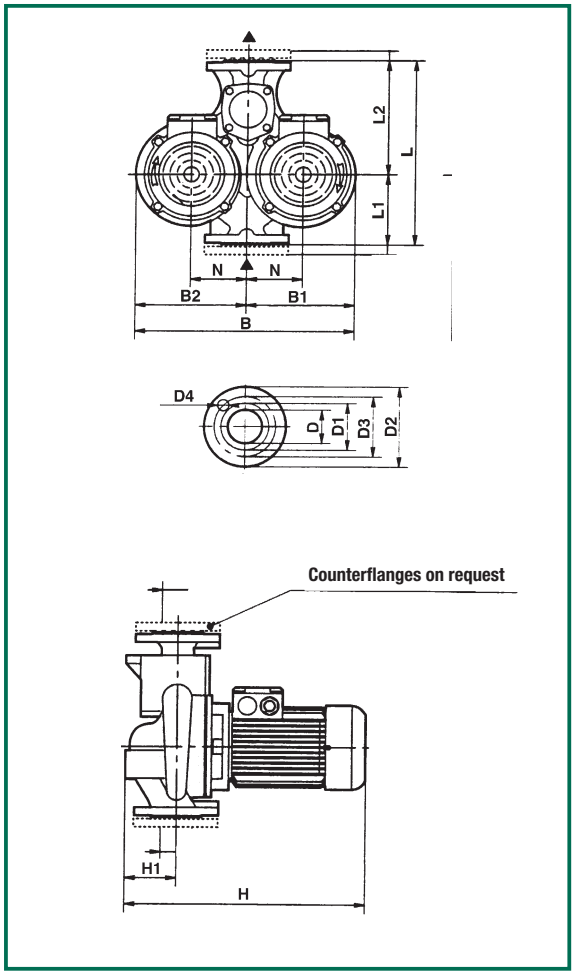
[1] Star start is possible

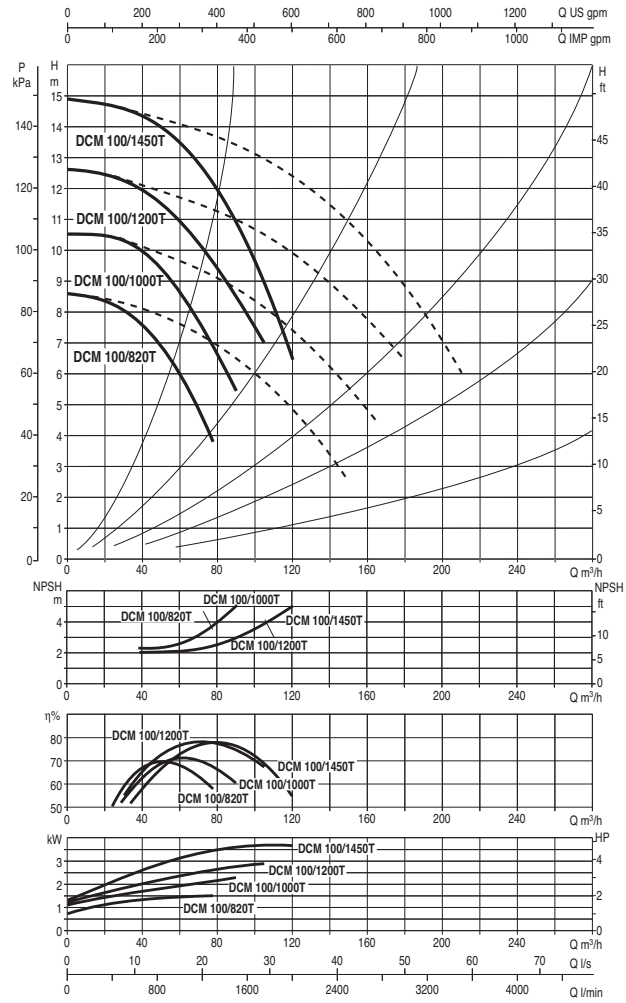
DAB PUMP PERFORMANCE

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

DCM 100

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C





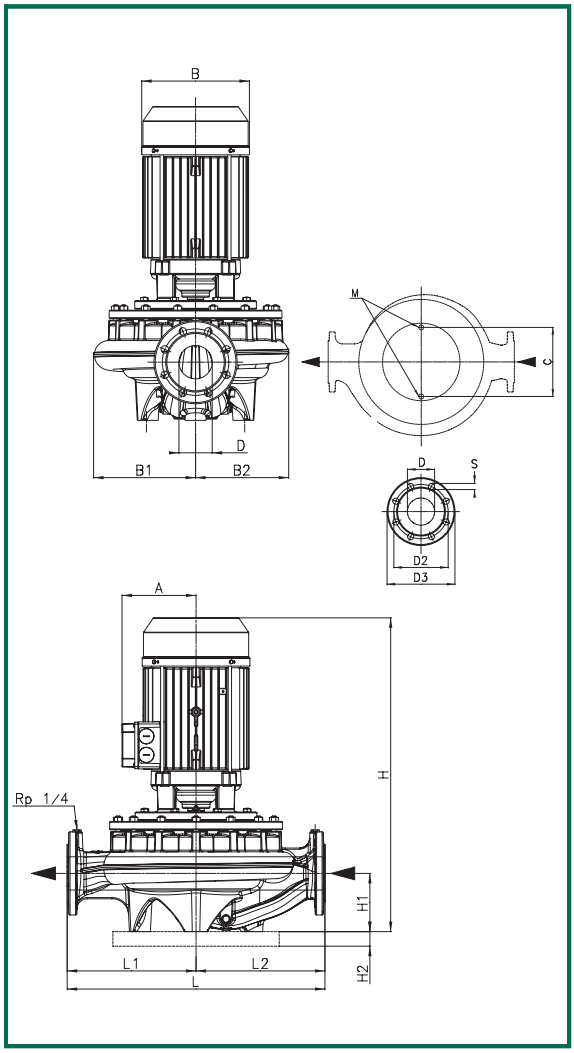
MODEL	L	L1	L2	B	B1	B2	H	H1	N	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m^3	WEIGHT Kg
DCM 100/820 T	630	240	390	670	345	325	605	180	165	100 PN16	158	220	180	8 holes Ø 18	–	–	–	0,26	110
DCM 100/1000 T	630	240	390	670	345	325	605	180	165	100 PN16	158	220	180		–	–	–	0,26	130
DCM 100/1200 T	630	240	390	670	345	325	515	180	165	100 PN16	158	220	180		–	–	–	0,22	138
DCM 100/1450 T	630	240	390	670	345	325	535	180	165	100 PN16	158	220	180		–	–	–	0,23	150

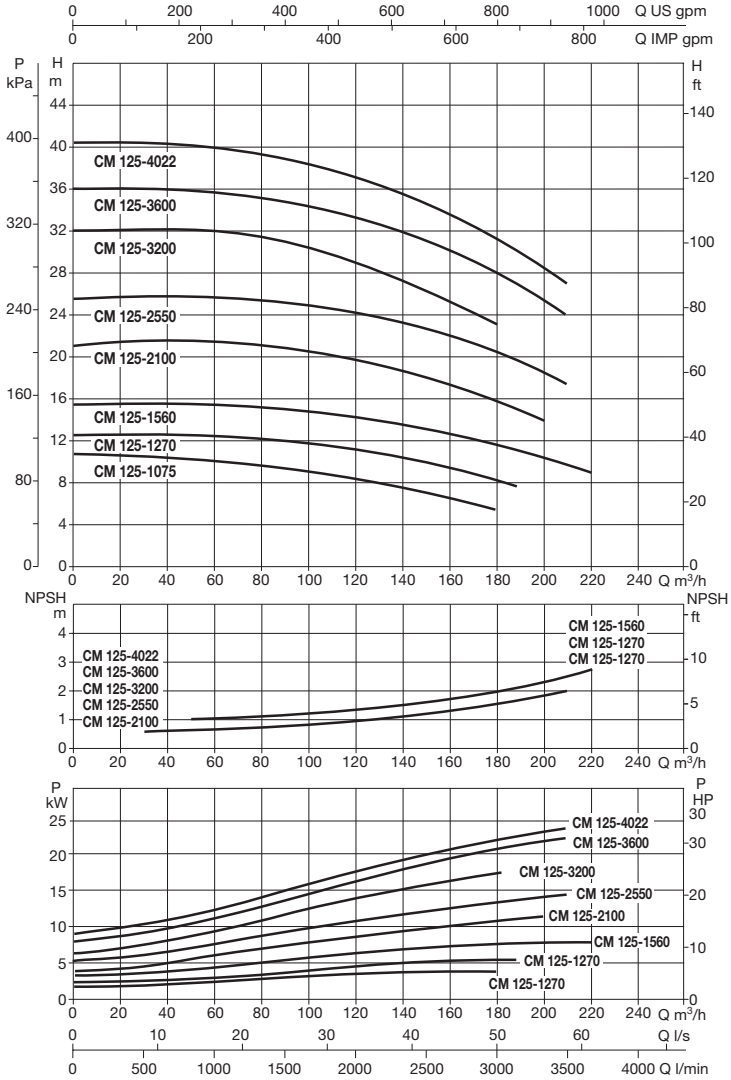
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m^3/h / l/min	30 / 500	36 / 600	42 / 700	48 / 800	54 / 900	60 / 1000	66 / 1100	72 / 1200	78 / 1300	90 / 1500	105 / 1750	120 / 2000
DCM 100/820 T	3x230-400 V ~	1450	1,9	1,5	2	6,1-3,5	H (m)	8,2	7,8	7,4	7	6,5	6	5,3	4,6	4			
DCM 100/1000 T	3x230-400 V ~	1450	2,61	2,2	3	8,9-5,1			10	9,7	9,3	8,9	8,5	8,0	7,5	7,0	6,0		
DCM 100/1200 T	3x230-400 V ~	1450	3,58	3	4	12-6,9			12	11,7	11,5	11,3	11	10,5	10	9,5	8,5	7	
DCM 100/1450 T	3x230-400 V ~	1450	5,16	4	5,5	16-9,2			14,5	14,2	14	13,8	13,5	13,1	12,7	12,2	11	9	6,5

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CM 125

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





MODEL	DIMENSIONS																	PACKING DIM.			VOLUME	WEIGHT
	A	B	B1	B2	C	D	D2	D3	S	holes	H	H1	H2	L	L1	L2	M	L\A	L\B	H		
CM 125-1075/A/BAQE/4	144	193	252	205	230	125	210	250	18	8	716	215	35	620	310	310	M16	900	550	1060	0,525	198,5
CM 125-1270/A/BAQE/5,5	150	220	252	205	230	125	210	250	18		747	215	35	620	310	310	M16	900	550	1060	0,525	199,9
CM 125-1560/A/BAQE/7,5	178	259	252	205	230	125	210	250	18		839	215	35	620	310	310	M16	900	550	1060	0,525	214,9
CM 125-2100/A/BAQE/11	178	259	274	245	230	125	210	250	18		845	215	35	800	400	400	M16	900	550	1060	0,525	294,4
CM 125-2550/A/BAQE/15	223	309	274	245	230	125	210	250	18		985	215	35	800	400	400	M16	900	550	1200	0,594	350,4
CM 125-3200/A/BAQE/18,5	223	309	274	245	230	125	210	250	18		985	215	35	800	400	400	M16	900	550	1200	0,594	379,2
CM 125-3600/A/BAQE/22	223	309	274	245	230	125	210	250	18		985	215	35	800	400	400	M16	900	550	1200	0,594	401,3
CM 125-4022/A/BAQE/30	237	350	274	245	230	125	210	250	18		980	215	35	800	400	400	M16	900	550	1200	0,594	350,9

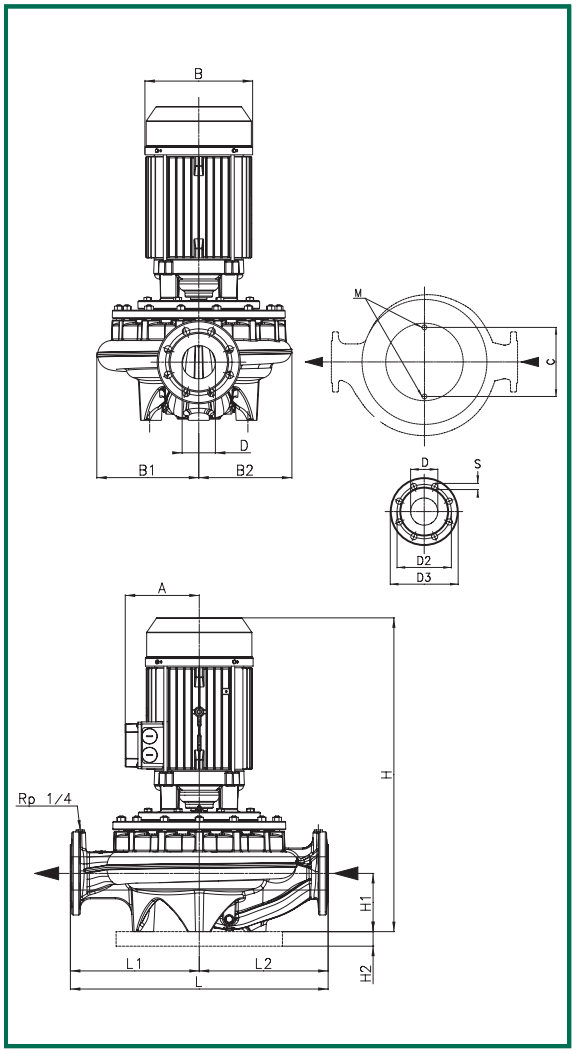
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min	P1 MAX kW	P2 NOMINAL		MOTOR SIZE	In A	I st. A	η max %	cos φ
				kW	HP					
CM 125-1075/A/BAQE/4	3x400 V ~ Δ[1]	1400	5,8	4	5,5	MEC 100	10	52,8	68,3	0,803
CM 125-1270/A/BAQE/5,5	3x400 V ~ Δ[1]	1420	6,7	5,5	7,5	MEC 112	12,7	76,2	82	0,81
CM 125-1560/A/BAQE/7,5	3x400 V ~ Δ[1]	1450	8,9	7,5	10	MEC 132M	16	108,8	84	0,83
CM 125-2100/A/BAQE/11	3x400 V ~ Δ[1]	1450	13	11	15	MEC 132M	24	168	85	0,83
CM 125-2550/A/BAQE/15	3x400 V ~ Δ[1]	1460	17	15	20	MEC 160L	31	207,7	89	0,83
CM 125-3200/A/BAQE/18,5	3x400 V ~ Δ[1]	1460	21	18,5	25	MEC 160L	38	254,6	89	0,83
CM 125-3600/A/BAQE/22	3x400 V ~ Δ[1]	1460	25	22	30	MEC 160L	44	299,2	88	0,83
CM 125-4022/A/BAQE/30	3x400 V ~ Δ[1]	1465	34	30	40	MEC 160L	58	388,6	89	0,84

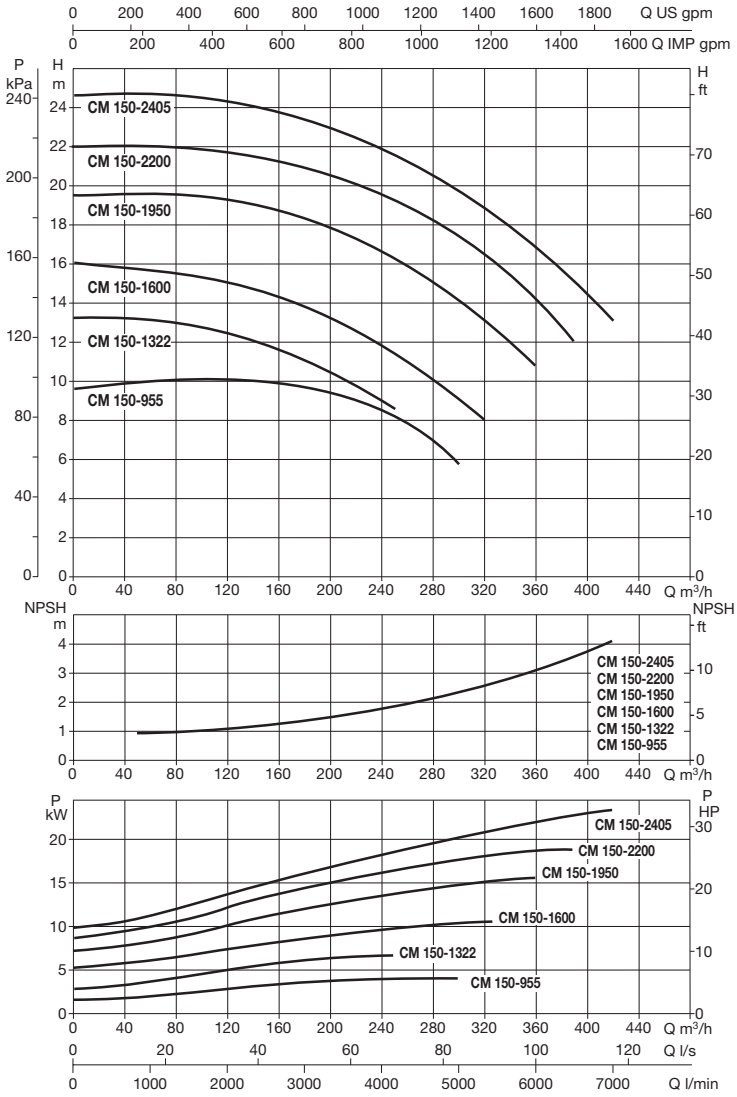
[1] Star start is possible

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CM 150

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



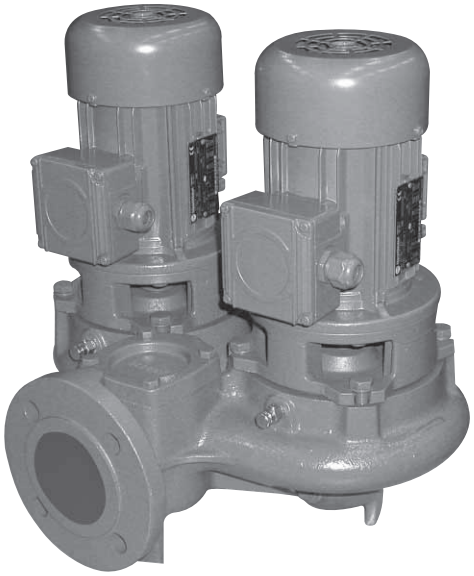


MODEL	DIMENSIONS																	PACKING DIM.			VOLUME	WEIGHT
	A	B	B1	B2	C	D	D2	D3	S	holes	H	H1	H2	L	L1	L2	M	L\A	L\B	H		
CM 150-955/A/BAQE/5,5	150	220	299	239	230	150	240	285	22	8	756	215	35	800	400	400	M16	900	550	1060	0,5247	265,6
CM 150-1322/A/BAQE/7,5	178	259	299	239	230	150	240	285	22		848	215	35	800	400	400	M16	900	550	1060	0,5247	280,6
CM 150-1600/A/BAQE/11	178	259	299	239	230	150	240	285	22		848	215	35	800	400	400	M16	900	550	1060	0,5247	293,2
CM 150-1950/A/BAQE/15	223	309	299	239	230	150	240	285	22		989	215	35	800	400	400	M16	900	550	1200	0,594	343,1
CM 150-2200/A/BAQE/18,5	223	309	299	239	230	150	240	285	22		989	215	35	800	400	400	M16	900	550	1200	0,594	357,1
CM 150-2405/A/BAQE/22	223	309	299	239	230	150	240	285	22		989	215	35	800	400	400	M16	900	550	1200	0,594	423,459

MODEL	VOLTAGE 50 Hz	r.p.m. 1/min	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	MOTOR SIZE	In A	I st. A	η max %	cos φ
CM 150-955/A/BAQE/5,5	3x400 V ~ Δ[1]	1420	6,7	5,5	7,5	MEC 112	12,7	76,2	82	0,81
CM 150-1322/A/BAQE/7,5	3x400 V ~ Δ[1]	1450	9	7,5	10	MEC 132M	16	108,8	84	0,83
CM 150-1600/A/BAQE/11	3x400 V ~ Δ[1]	1450	13	11	15	MEC 132M	24	168	85	0,83
CM 150-1950/A/BAQE/15	3x400 V ~ Δ[1]	1460	17	15	20	MEC 160L	31	207,7	89	0,83
CM 150-2200/A/BAQE/18,5	3x400 V ~ Δ[1]	1460	21	18,5	25	MEC 160L	38	254,6	89	0,83
CM 150-2405/A/BAQE/22	3x400 V ~ Δ[1]	1460	25	22	30	MEC 160L	44	299,2	88	0,83

[1] Star start is possible

CP - DCP



CE

GENERAL DATA

Applications

Circulating pumps with IN-LINE connections, suitable for civil and industrial installations for heating, conditioning, refrigeration and clean and safe water.
Available in single and twin version.

Constructions features

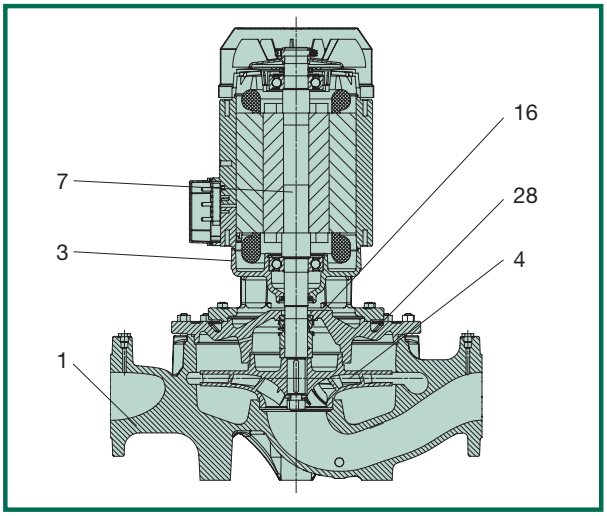
Flanged suction and delivery connections in PN 10 - PN 16 with threaded holes for control pressure gauges.
Cast iron pump casing and motor support, cast iron or technopolymer impeller. Stainless steel motor shaft.
Asynchronous threephase motor, 2 poles, closed and cooled with external ventilation.
Three-phase motors should be protected with a suitable overload protection complying with the regulations in force.

Protection: IP 54 - IP 55
Insulation class: F

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 x PN 16 CAST IRON FOR THE REST OF THE RANGE
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.

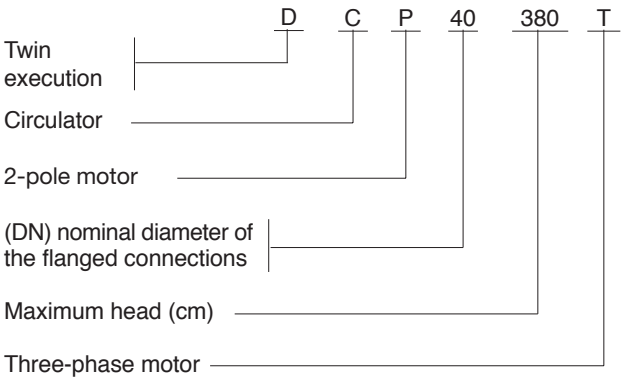


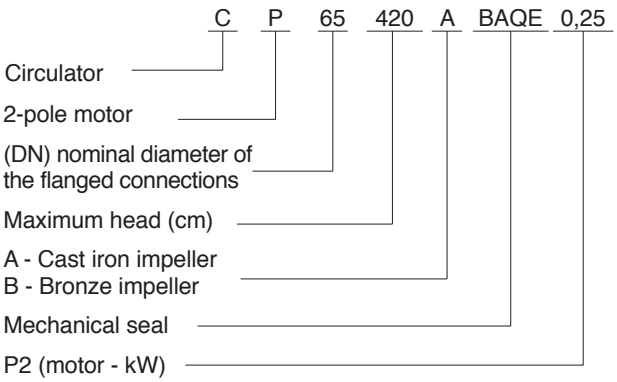
- Operating range: from 3,6 to 420 m^3/h with head up to 102 meters.
- Liquid quality requirements: clean, free from solids or abrasive substances, non viscous, non aggressive, non crystallized, chemically neutral, close to the characteristics of water.
- Liquid temperature range: -10 °C ÷ +140 °C (CP)
  -10 °C ÷ +130 °C (DCP)
- Maximum ambient temperature: +40°C
- Maximum working pressure:

PN 10	CP 40/3800T - CP 40/4700T - CP 440/5500T - CP 40/6200T - CP 50/4600T - CP 50/5100T - CP 50/5650T - DCP
PN 16	the rest of the range

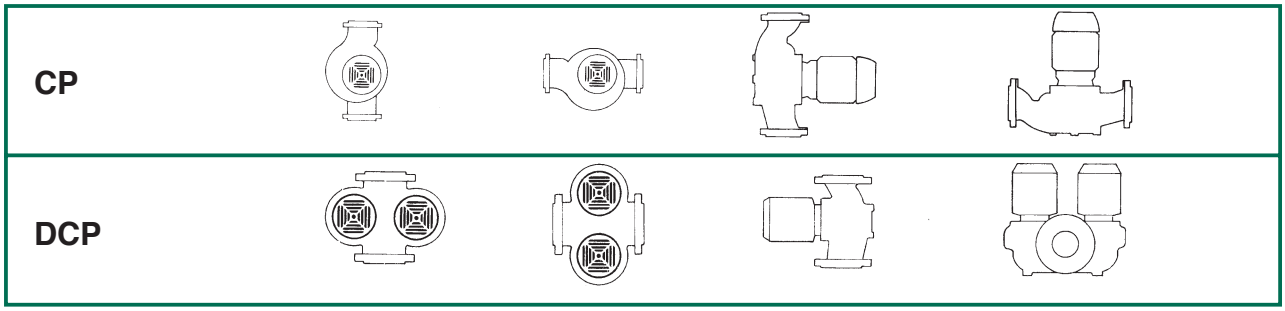
- Flanging: PN 16
- Special versions on request: different voltages and/or frequencies

- Classification index: (example)





- Installation: with motor fitted horizontally or vertically as long as it's always above the pump.

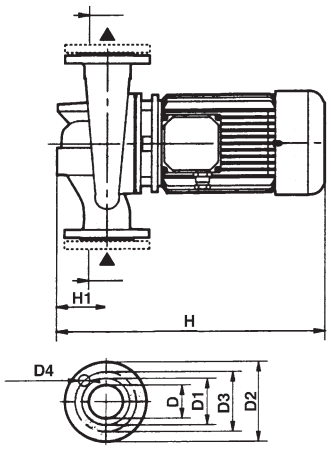


Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

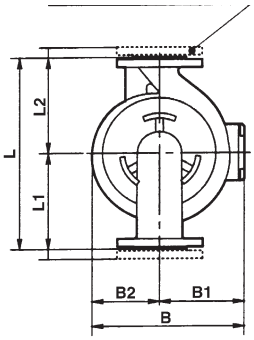
CP 40

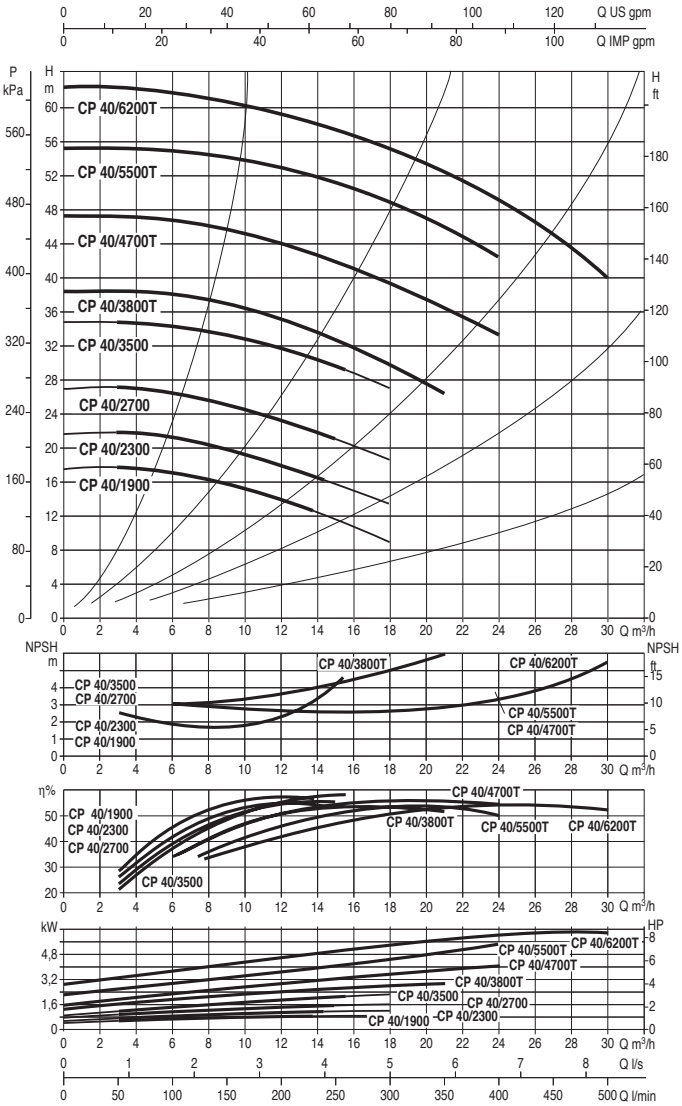
Liquid temperature range: [1] from -15°C to +120°C
[2] from -10°C to +130°C

Maximum temperature operating: +40°C



Counterflanges on request





MODEL	L	L1	L2	B	B1	B2	H	H1	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m³	WEIGHT Kg
CP 40/1900 T	390	200	190	231	118	113	453	95	40 PN16	88	150	110	4 holes Ø 18	680	330	580	0,13	41
CP 40/2300 T	390	200	190	231	118	113	453	95	40 PN16	88	150	110		680	330	580	0,13	41
CP 40/2700 T	390	200	190	231	118	113	453	95	40 PN16	88	150	110		680	330	580	0,13	39
CP 40/3500 T	390	200	190	231	118	113	453	95	40 PN16	88	150	110		680	330	580	0,13	44
CP 40/3800 T	320	170	150	257	149	108	485	100	40 PN16	88	150	110		450	270	465	0,04	37
CP 40/4700 T	380	200	180	286	159	127	535	100	40 PN16	88	150	110		450	270	465	0,04	50
CP 40/5500 T	380	200	180	286	159	127	535	100	40 PN16	88	150	110		450	270	465	0,04	55
CP 40/6200 T	380	200	180	286	159	127	535	100	40 PN16	88	150	110		450	270	465	0,04	56

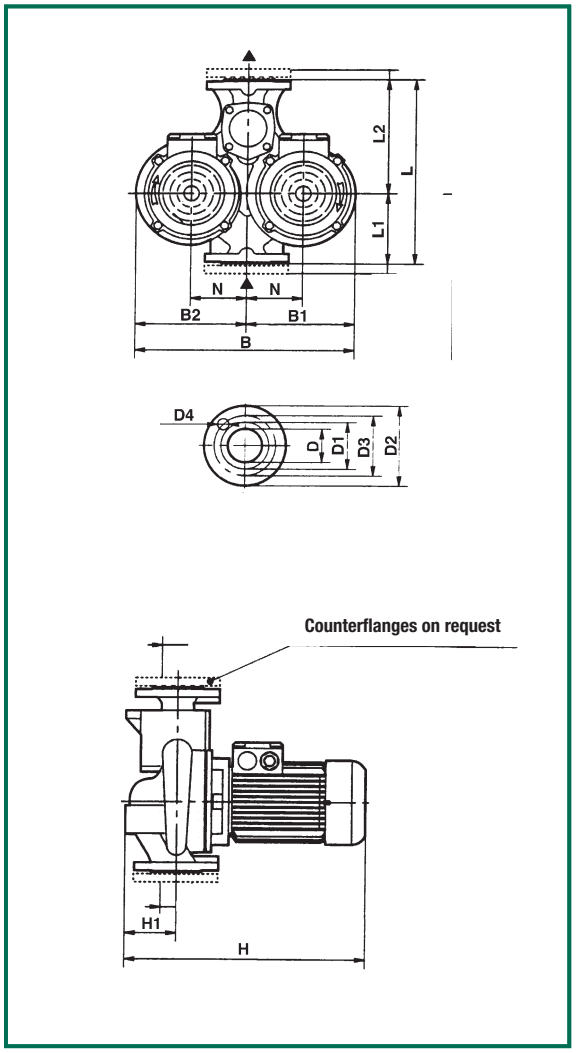
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m³/h / l/min	0 / 0	3,6 / 60	4,8 / 80	6 / 100	7,2 / 120	8,4 / 140	9 / 150	10,5 / 175	12 / 200	13,5 / 225	14,4 / 240	15 / 250	16,8 / 280	18 / 300	21 / 350	24 / 400
CP 40/1900 T [1]	3x230-400 V ~	2910	1,1	0,75	1	4,5-2,6	H (m)	17,6	17,6	17,4	17	16,8	16	15	14,4	14							
CP 40/2300 T [1]	3x230-400 V ~	2870	1,45	1,1	1,5	5,2-3		21,8	21,8	21,3	21	20,8	20	20,5	19	18	17	16					
CP 40/2700 T [1]	3x230-400 V ~	2850	1,89	1,5	2	6,4-3,7		26,9	26,9	26,7	26,2	26	25,2	25	24	23,2	22	21,5					
CP 40/3500 T [1]	3x230-400 V ~	2880	2,53	2,21	3	9-5,2		34,8	34,9	34,7	34,2	34	33,5	33	32	31,7	31	30					
CP 40/3800 T [2]	3x230-400 V ~	2900	3,54	3	4	11-6,4					38	38,5	38	37	36	35	34	33	33	31	30	26,5	
CP 40/4700 T [2]	3x230-400 V ~	2900	4,87	4	5,5	15,2-8,8					47	46,6	46,5	46	45	44	43	43	42	40	39,5	37,5	35
CP 40/5500 T [2]	3x400 V ~ Δ *	2900	6,57	5,5	7,5	11,3					55	54,5	54,3	54	53,5	53	52	52	51	50	48	45	42
CP 40/6200 T [2]	3x400 V ~ Δ *	2900	9,18	7,5	10	15,8					62	61,5	61	61	60	59	58	58	57	55	54	52,5	49

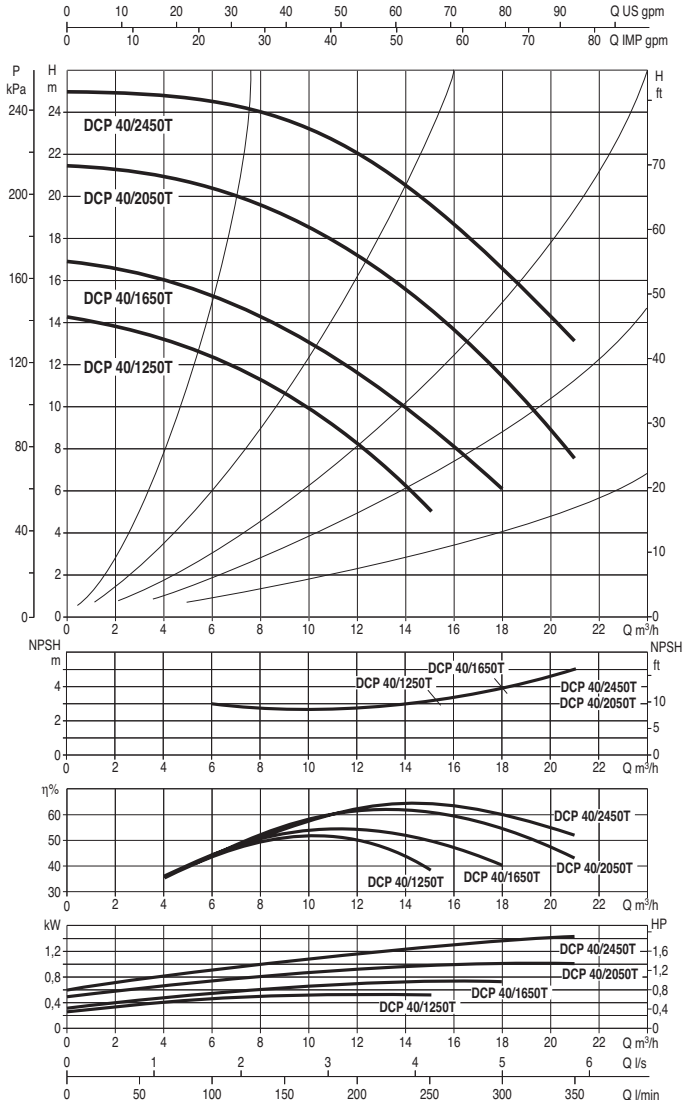
* Star start is possible

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

DCP 40

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C





MODEL	L	L1	L2	B	B1	B2	H	H1	N	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m³	WEIGHT Kg
DCP 40/1250 T	340	130	210	397	200	197	425	100	100	40 PN16	88	150	110	4 holes Ø 18	520	320	535	0,06	50
DCP 40/1650 T	340	130	210	397	200	197	425	100	100	40 PN16	88	150	110		520	320	535	0,06	50
DCP 40/2050 T	340	130	210	397	200	197	445	100	100	40 PN16	88	150	110		520	320	535	0,06	52
DCP 40/2450 T	340	130	210	397	200	197	445	100	100	40 PN16	88	150	110		520	320	535	0,06	54

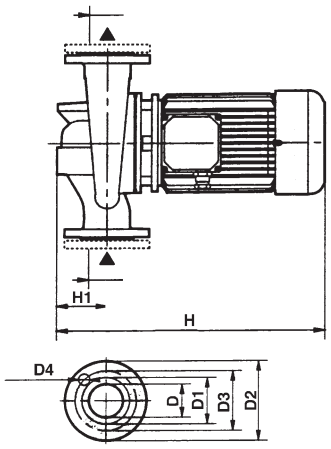
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m³/h / l/min	6 100	7,5 125	9 150	10,5 175	12 200	13,5 225	15 250	18 300	21 350
DCP 40/1250 T	3x230-400 V ~	2900	0,83	0,55	0,75	2,8-1,6	H (m)	12,5	11,5	10,5	9,5	8,1	6,8	5,2		
DCP 40/1650 T	3x230-400 V ~	2900	1,05	0,75	1	3,3-1,9		16,5	15,5	14,5	13,5	12,3	11	9,5	6	
DCP 40/2050 T	3x230-400 V ~	2900	1,33	1	1,35	4,2-2,4		20,5	20	19	18	17	16	15	11,5	7,5
DCP 40/2450 T	3x230-400 V ~	2900	2,07	1,5	2	6,2-3,6		24,5	24	23,5	23	22	21	20	16,5	13

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

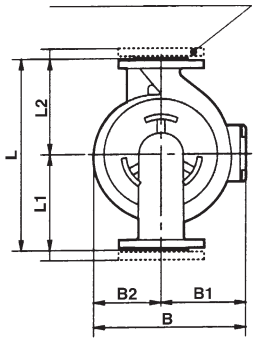
CP 50

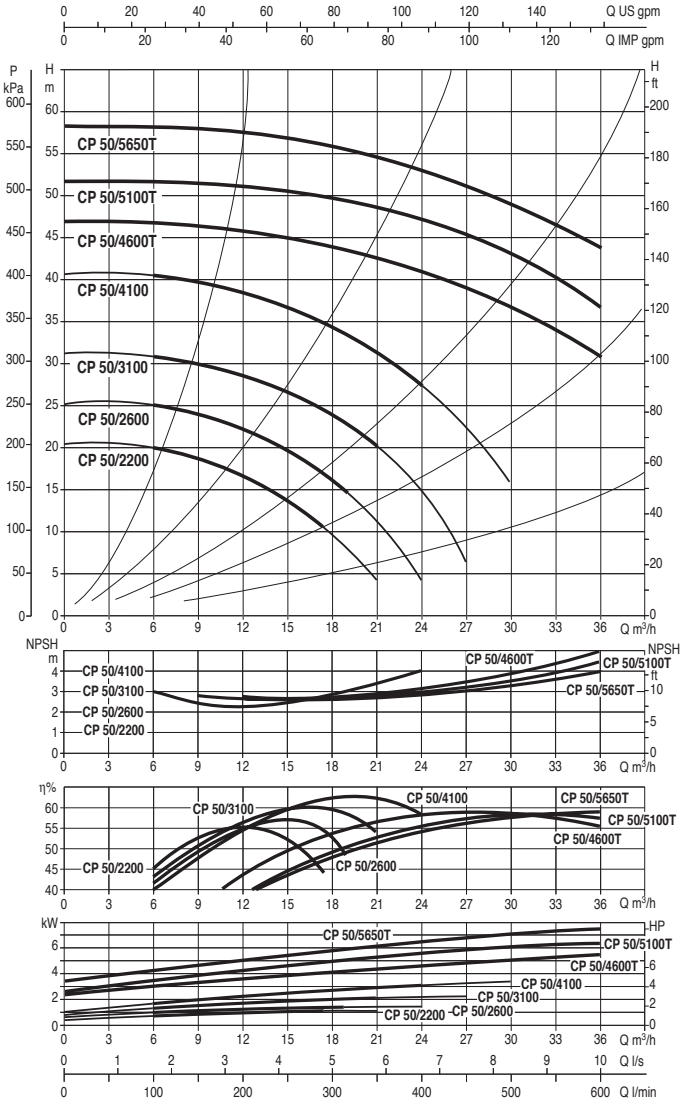
Liquid temperature range: [1] from -15°C to +120°C
[2] from -10°C to +130°C

Maximum temperature operating: +40°C



Counterflanges on request





MODEL	L	L1	L2	B	B1	B2	H	H1	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m³	WEIGHT Kg
CP 50/2200 T	425	225	200	233	120	113	463	105	50 PN16	102	165	125	4 holes Ø 18	680	330	580	0,13	40
CP 50/2600 T	425	225	200	233	120	113	463	105	50 PN16	102	165	125		680	330	580	0,13	41
CP 50/3100 T	425	225	200	233	120	113	537	105	50 PN16	102	165	125		680	330	580	0,13	46
CP 50/4100 T	425	225	200	233	120	113	537	105	50 PN16	102	165	125		680	330	580	0,13	54
CP 50/4600 T	400	220	180	290	159	131	545	110	50 PN16	102	165	125		520	320	535	0,06	56
CP 50/5100 T	400	220	180	290	159	131	545	110	50 PN16	102	165	125		520	320	535	0,06	57
CP 50/5650 T	400	220	180	290	159	131	545	110	50 PN16	102	165	125		520	320	535	0,06	64

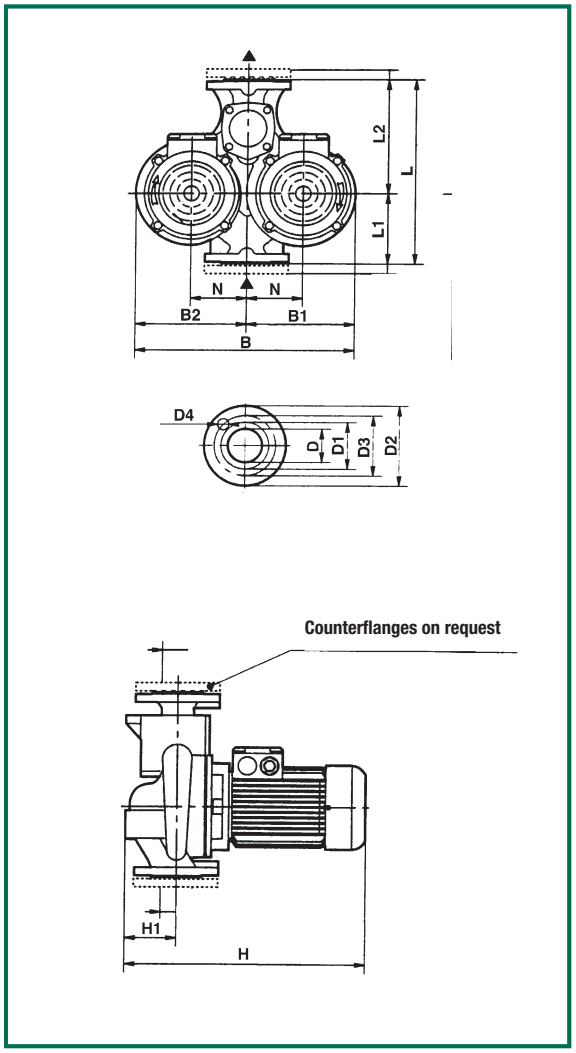
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m³/h	6	7,2	8,4	9	10,5	12	13,5	14,4	15	16,8	18	21	24	27	30	36
							l/min	100	120	140	150	175	200	225	240	250	280	300	350	400	450	500	600
CP 50/2200 T [1]	3x230-400 V ~	2870	1,42	1,1	1,5	5-2,9	H (m)	20	19,5	19	18	17	16,5	15	14,5	13	11,5	11					
CP 50/2600 T [1]	3x230-400 V ~	2860	1,89	1,5	2	6,2-3,6		25	24,5	24	23	23	22	21	20	19	17,8	16					
CP 50/3100 T [1]	3x230-400 V ~	2870	2,51	2,2	3	9-5,2		31	30,5	30	29	28,7	28,5	28	27	26	25,3	24					
CP 50/4100 T [1]	3x400 V ~ Δ *	2910	3,8	4	5,5	7,4		40,7	40,5	40	39	39	38,5	38	37	36	35,3	34,5	31,5	27,7			
CP 50/4600 T [2]	3x400 V ~ Δ *	2900	6,57	5,5	7,5	11,3										46	45	44	43	41,5	39	37	31
CP 50/5100 T [2]	3x400 V ~ Δ *	2900	9,18	7,5	10	15,8										51	51,5	50	49	47,5	45	42,5	37
CP 50/5650 T [2]	3x400 V ~ Δ *	2900	9,18	7,5	10	15,8										56,5	56	55,5	54,5	53	51	49	44

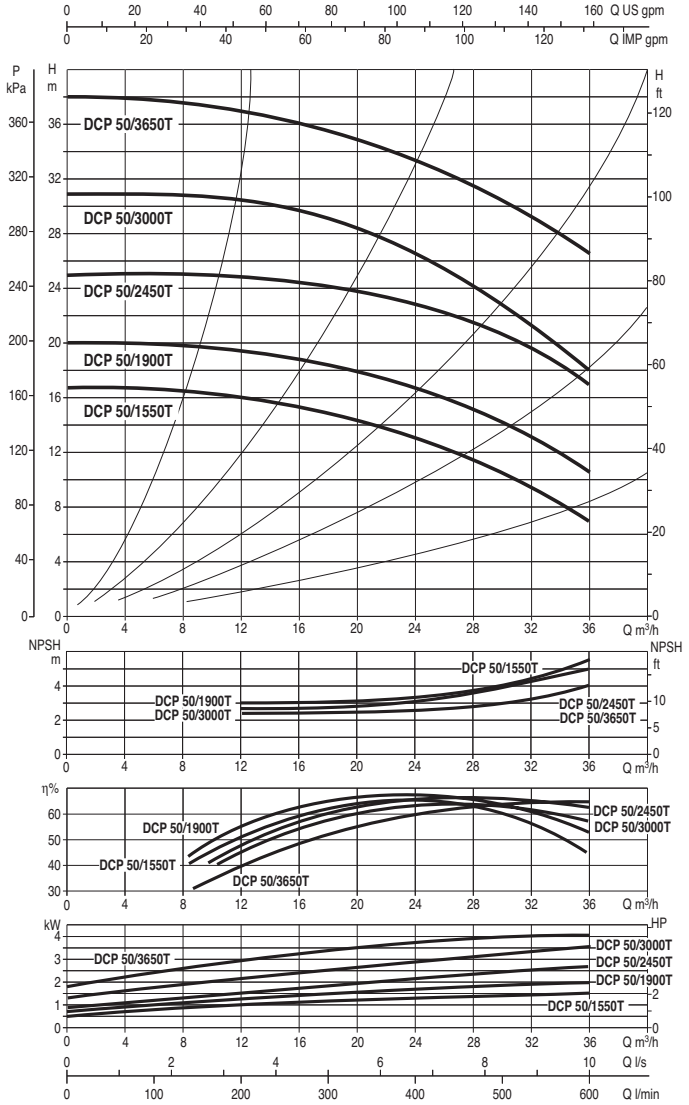
* Star start is possible

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

DCP 50

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C





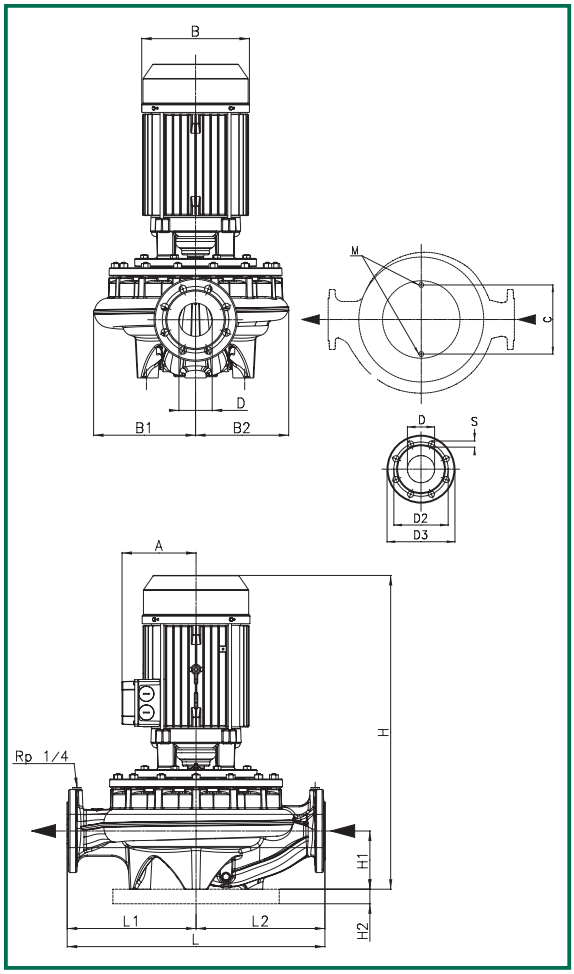
MODEL	L	L1	L2	B	B1	B2	H	H1	N	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m^3	WEIGHT Kg
DCP 50/1550 T	365	145	220	427	217	210	455	110	105	50 PN16	102	165	125	4 holes Ø 18	520	320	535	0,07	56
DCP 50/1900 T	365	145	220	427	217	210	455	110	105	50 PN16	102	165	125		520	320	535	0,07	58
DCP 50/2450 T	365	145	220	427	217	210	455	110	105	50 PN16	102	165	125		520	320	535	0,07	66
DCP 50/3000 T	365	145	220	480	217	210	495	110	105	50 PN16	102	165	125		580	360	585	0,09	56
DCP 50/3650 T	410	170	240	480	245	235	535	110	120	50 PN16	102	165	125		580	360	585	0,11	86

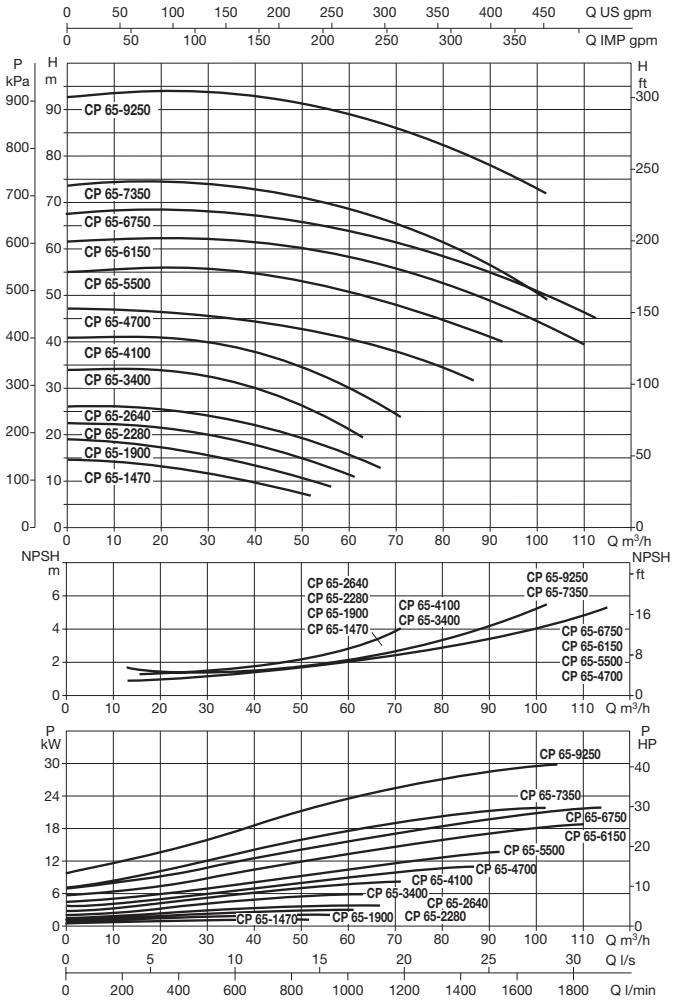
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m^3/h / l/min	15 / 250	18 / 300	21 / 350	24 / 400	27 / 450	30 / 500	36 / 600
DCP 50/1550 T	3x230-400 V ~	2900	2,07	1,5	2	6,2-3,6	H (m)	15,5	15	14,1	13	11,8	10,5	7
DCP 50/1900 T	3x230-400 V ~	2900	2,53	2	2,7	7,7-4,4		19	18,5	17,5	16,5	15,5	14,5	10,5
DCP 50/2450 T	3x230-400 V ~	2900	3,54	3	4	11-6,4		24,5	24	23,5	23	22	20,5	17
DCP 50/3000 T	3x230-400 V ~	2900	3,54	3	4	11-6,4		30	29	28	26,5	25	23	18
DCP 50/3650 T	3x230-400 V ~	2900	4,87	4	5,5	15,2-8,8		36,5	35,5	34,5	33,5	32,5	31	27

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CP 65

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C





MODEL	DIMENSIONS																	PACKING DIM.			VOLUME	WEIGHT
	A	B	B1	B2	C	D	D2	D3	S	holes	H	H1	H2	L	L1	L2	M	L\A	L\B	H		
CP 65-1470/A/BAQE/1,5	127	160	144	126	144	65	145	185	18	4	492	105	35	360	180	180	M16	670	390	710	0,185523	59,1
CP 65-1900/A/BAQE/2,2	127	160	144	126	144	65	145	185	18		492	105	35	360	180	180	M16	670	390	710	0,185523	67,6
CP 65-2280/A/BAQE/3	129	176	144	126	144	65	145	185	18		516	105	35	360	180	180	M16	670	390	710	0,185523	80,6
CP 65-2640/A/BAQE/4	144	193	144	126	144	65	145	185	18		562	105	35	360	180	180	M16	670	390	710	0,185523	87,1
CP 65-3400/A/BAQE/5,5	150	220	144	126	144	65	145	185	18		582	105	35	360	180	180	M16	670	390	710	0,185523	120,1
CP 65-4100/A/BAQE/7,5	178	259	144	126	144	65	145	185	18		664	105	35	360	180	180	M16	780	460	860	0,308568	123,7
CP 65-4700/A/BAQE/11	178	259	180	164	144	65	145	185	18		677	125	35	475	237,5	237,5	M16	780	460	860	0,308568	195,8
CP 65-5500/A/BAQE/15	178	259	180	164	144	65	145	185	18		677	125	35	475	237,5	237,5	M16	780	460	860	0,308568	213,8
CP 65-6150/A/BAQE/18,5	223	309	180	164	144	65	145	185	18		830	125	35	475	237,5	237,5	M16	900	550	1060	0,5247	230,9
CP 65-6750/A/BAQE/22	223	309	180	164	144	65	145	185	18		830	125	35	475	237,5	237,5	M16	900	550	1060	0,5247	230,9
CP 65-7350/A/BAQE/22	223	309	180	164	144	65	145	185	18		830	125	35	475	237,5	237,5	M16	900	550	1060	0,5247	270,6
CP 65-9250/A/BAQE/30	223	309	180	164	144	65	145	185	18		830	125	35	475	237,5	237,5	M16	900	550	1060	0,5247	362,2

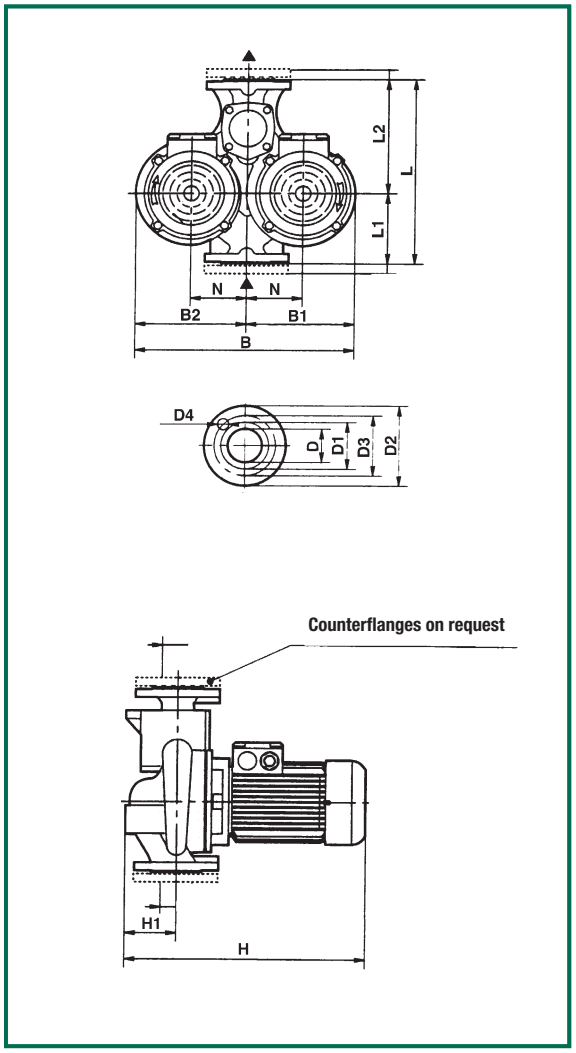
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	MOTOR SIZE	In A	I st. A	η max %	cos φ
CP 65-1470/A/BAQE/1,5	3x230-400 V ~	2804	2	1,5	2	MEC 80	6,17-3,56	35,3-20,5	67	0,83
CP 65-1900/A/BAQE/2,2	3x230-400 V ~	2790	2,6	2,2	3	MEC 80	7,42-4,29	54,2-31,2	66,5	0,83
CP 65-2280/A/BAQE/3	3x400 V ~ Δ*	2856	3,7	3	4	MEC 90L	6,48	41,5	68	0,84
CP 65-2640/A/BAQE/4	3x400 V ~ Δ*	2844	4,9	4	5,5	MEC 100	8,58	60,9	69	0,85
CP 65-3400/A/BAQE/5,5	3x400 V ~ Δ*	2870	6,4	5,5	7,5	MEC 112	10,6	81,2	69,8	0,86
CP 65-4100/A/BAQE/7,5	3x400 V ~ Δ*	2906	8,7	7,5	10	MEC 132S	14,75	99	70,5	0,9
CP 65-4700/A/BAQE/11	3x400 V ~ Δ*	2930	12	11	15	MEC 132M	20,3	157,5	90,7	0,86
CP 65-5500/A/BAQE/15	3x400 V ~ Δ*	2920	17	15	20	MEC 132M	28,73	217	72	0,87
CP 65-6150/A/BAQE/18,5	3x400 V ~ Δ*	2946	21	18,5	25	MEC 160L	34,62	259,2	72	0,88
CP 65-6750/A/BAQE/22	3x400 V ~ Δ*	2960	24	22	30	MEC 160L	39,3	309,6	72	0,88
CP 65-7350/A/BAQE/22	3x400 V ~ Δ*	2960	24,5	22	30	MEC 160L	40,22	309,6	68,3	0,88
CP 65-9250/A/BAQE/30	3x400 V ~ Δ*	2955	33	30	40	MEC 160L	54,1	231	68,3	0,88

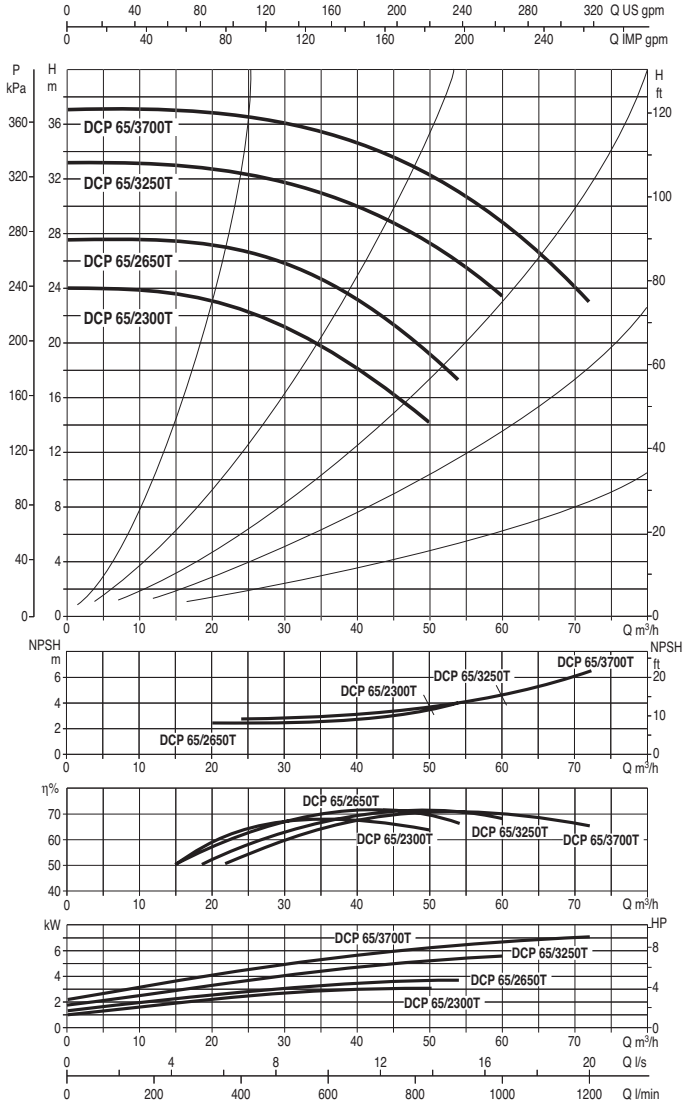
* Star start is possible

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

DCP 65

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C





MODEL	L	L1	L2	B	B1	B2	H	H1	N	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m³	WEIGHT Kg
DCP 65/2300 T	410	170	240	543	245	235	485	110	120	65 PN16	122	185	145	4 holes Ø 18	580	360	585	0,11	67
DCP 65/2650 T	450	180	270	543	275	268	495	130	140	65 PN16	122	185	145		–	–	–	0,12	81
DCP 65/3250 T	450	180	270	543	275	268	565	130	140	65 PN16	122	185	145		–	–	–	0,14	101
DCP 65/3700 T	450	180	270	543	275	268	670	130	140	65 PN16	122	185	145		–	–	–	0,16	125

MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m³/h / l/min	21 / 350	24 / 400	27 / 450	30 / 500	36 / 600	42 / 700	48 / 800	54 / 900	60 / 1000
DCP 65/2300 T	3x230-400 V ~	2900	3,54	3	4	11-6,4	H (m)	23	22,5	22	21,5	19,8	17,5	15		
DCP 65/2650 T	3x230-400 V ~	2900	4,87	4	5,5	15,2-8,8			26,5	26	25,5	24,3	22,6	20,2	18	
DCP 65/3250 T	3x400 V ~ Δ*	2900	6,57	5,5	7,5	11,3			32,5	32	31,5	30,5	29,5	28	26	23,5
DCP 65/3700 T	3x400 V ~ Δ*	2900	9,18	7,5	10	15,8			37	36,5	36	35	34	32,5	31	29

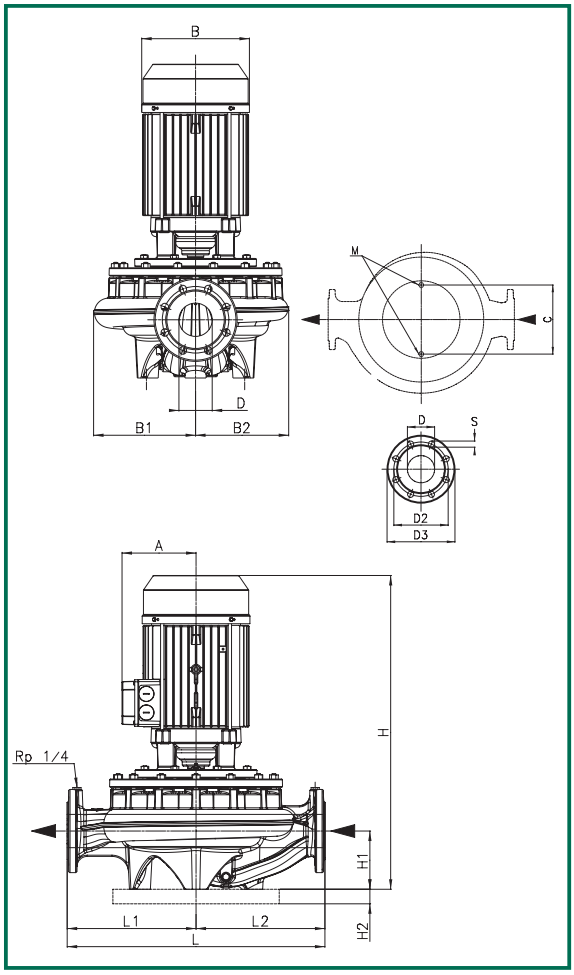
* Star start is possible

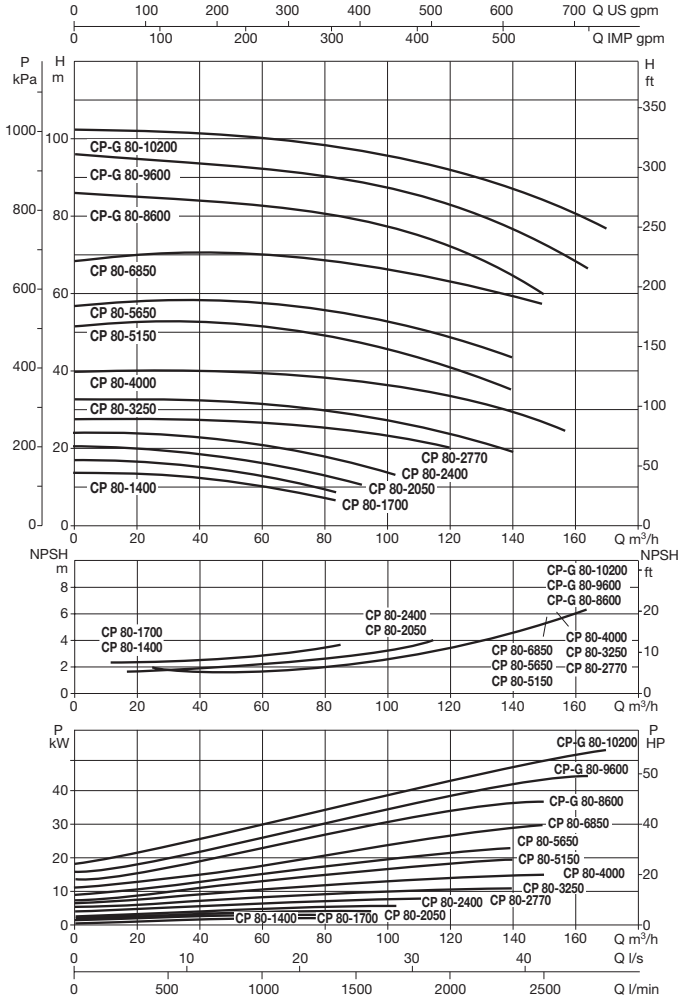
DAB PUMP PERFORMANCE

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CP 80

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C





MODEL	DIMENSIONS																	PACKING DIM.			VOLUME	WEIGHT
	A	B	B1	B2	C	D	D2	D3	S	holes	H	H1	H2	L	L1	L2	M	L\A	L\B	H		
CP 80-1400/A/BAQE/2,2	127	160	135	117	144	80	160	200	18		495	105	35	360	180	180	M16	520	290	700	0,10556	81,9
CP 80-1700/A/BAQE/3	129	176	135	117	144	80	160	200	18		519	105	35	360	180	180	M16	520	290	700	0,10556	85,7
CP 80-2050/A/BAQE/4	144	193	135	117	144	80	160	200	18		565	105	35	360	180	180	M16	520	290	700	0,10556	89,8
CP 80-2400/A/BAQE/5,5	150	220	135	117	144	80	160	200	18		585	105	35	360	180	180	M16	520	290	700	0,10556	124,4
CP 80-2770/A/BAQE/7,5	178	259	178	146	144	80	160	200	18		678	115	35	440	220	220	M16	780	460	860	0,308568	126,8
CP 80-3250/A/BAQE/11	178	259	178	146	144	80	160	200	18		678	115	35	440	220	220	M16	780	460	860	0,308568	84,5
CP 80-4000/A/BAQE/15	178	259	178	146	144	80	160	200	18	8	678	115	35	440	220	220	M16	780	460	860	0,308568	89,6
CP 80-5150/A/BAQE/18,5	223	309	190	164	144	80	160	200	18		830	115	35	500	250	250	M16	900	550	1060	0,5247	128
CP 80-5650/A/BAQE/22	223	309	190	164	144	80	160	200	18		830	115	35	500	250	250	M16	900	550	1060	0,5247	197,26
CP 80-6850/A/BAQE/30	223	309	190	164	144	80	160	200	18		830	115	35	500	250	250	M16	900	550	1060	0,5247	243,06
CP-G 80-8600/A/BAQE/37	341	400	245	224	230	80	160	200	18		1142	140	35	620	310	310	M16	900	550	1200	0,594	180,4
CP-G 80-9600/A/BAQE/45	360	463	245	224	230	80	160	200	18		1190	140	35	620	310	310	M16	900	550	1200	0,594	268,6
CP-G 80-10200/A/BAQE/55	390	516	245	224	230	80	160	200	18		1305	140	35	620	310	310	M16	900	550	1400	0,693	440,1

MODEL	VOLTAGE 50 Hz	r.p.m. 1/min	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	MOTOR SIZE	In A	I st. A	η max %	cos φ
CP 80-1400/A/BAQE/2,2	3x230-400 V ~	2910	2,5	2,2	3	MEC 80	7,7-4,45	54,2-31,2	87,5	0,88
CP 80-1700/A/BAQE/3	3x400 V ~ Δ*	2845	3,7	3	4	MEC 90L	6,8	41,5	72,5	0,84
CP 80-2050/A/BAQE/4	3x400 V ~ Δ*	2840	5,3	4	5,5	MEC 100	75,8	60,9	75,8	0,85
CP 80-2400/A/BAQE/5,5	3x400 V ~ Δ*	2870	6,4	5,5	7,5	MEC 112	10,78	81,2	76,8	0,86
CP 80-2770/A/BAQE/7,5	3x400 V ~ Δ*	2913	8,7	7,5	10	MEC 132S	13,95	99	77,2	0,9
CP 80-3250/A/BAQE/11	3x400 V ~ Δ*	2930	12	11	15	MEC 132M	21/12,2	157,5	90,7	0,86
CP 80-4000/A/BAQE/15	3x400 V ~ Δ*	2920	17	15	20	MEC 132M	28,73	217	72	0,87
CP 80-5150/A/BAQE/18,5	3x400 V ~ Δ*	2946	21	18,5	25	MEC 160L	34,62	259,2	72	0,88
CP 80-5650/A/BAQE/22	3x400 V ~ Δ*	2960	24	22	30	MEC 160L	39,3	309,6	72	0,88
CP 80-6850/A/BAQE/30	3x400 V ~ Δ*	2955	33	30	40	MEC 160L	54,1	231	68,3	0,88
CP-G 80-8600/A/BAQE/37	3x400 V ~ Δ*	2945	42	37	50	MEC 180	70	497	88	0,87
CP-G 80-9600/A/BAQE/45	3x400 V ~ Δ*	2970	49	45	60	MEC 225	78,2	586,5	92,3	0,9
CP-G 80-10200/A/BAQE/55	3x400 V ~ Δ*	2970	59	55	75	MEC 250	95,9	719,25	92,5	0,9

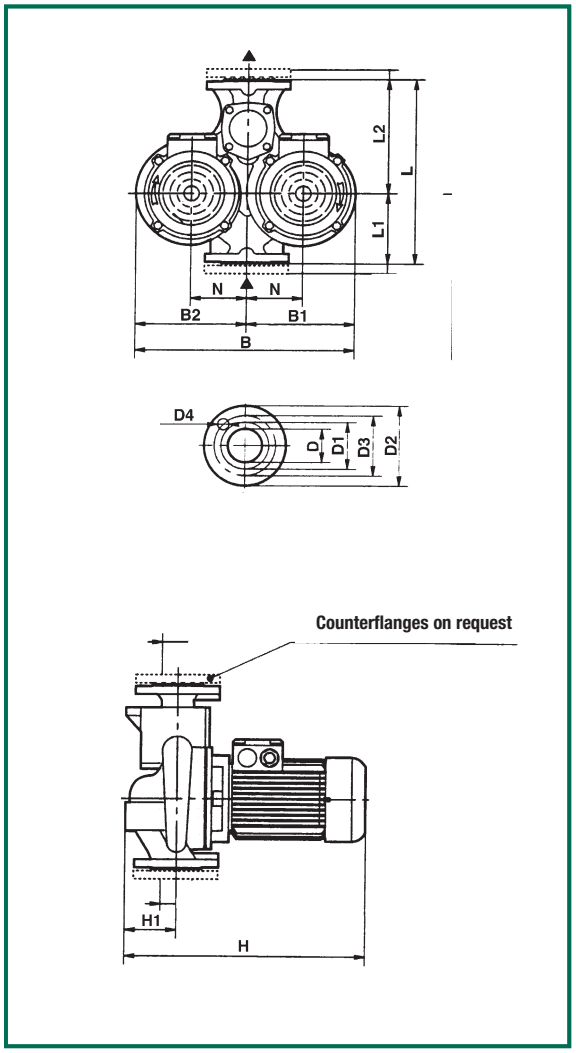
* Star start is possible

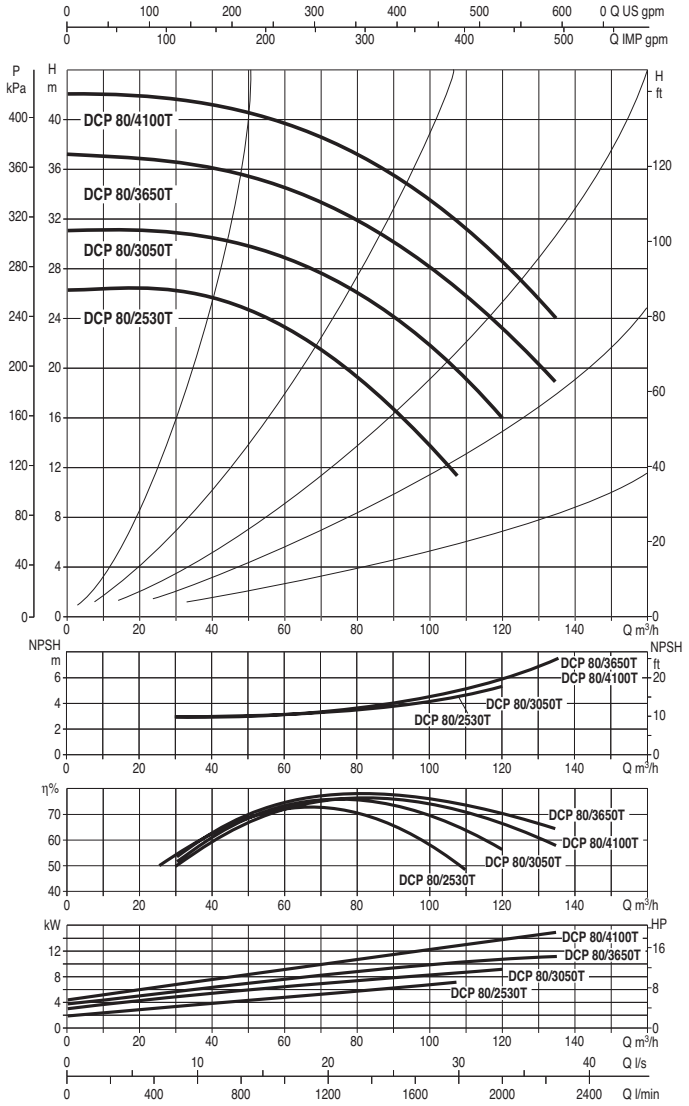
DAB PUMP PERFORMANCE

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

DCP 80

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C





MODEL	L	L1	L2	B	B1	B2	H	H1	N	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m³	WEIGHT Kg
DCP 80/2530 T	450	180	270	550	275	268	565	130	135	80 PN16	138	200	160	4 holes Ø 18	–	–	–	0,14	110
DCP 80/3050 T	510	205	305	550	280	270	690	150	135	80 PN16	138	200	160		–	–	–	0,19	141
DCP 80/3650 T	510	205	305	550	280	270	690	150	140	80 PN16	138	200	160		–	–	–	0,19	162
DCP 80/4100 T	510	205	305	670	280	270	690	150	135	80 PN16	138	200	160		–	–	–	0,24	175

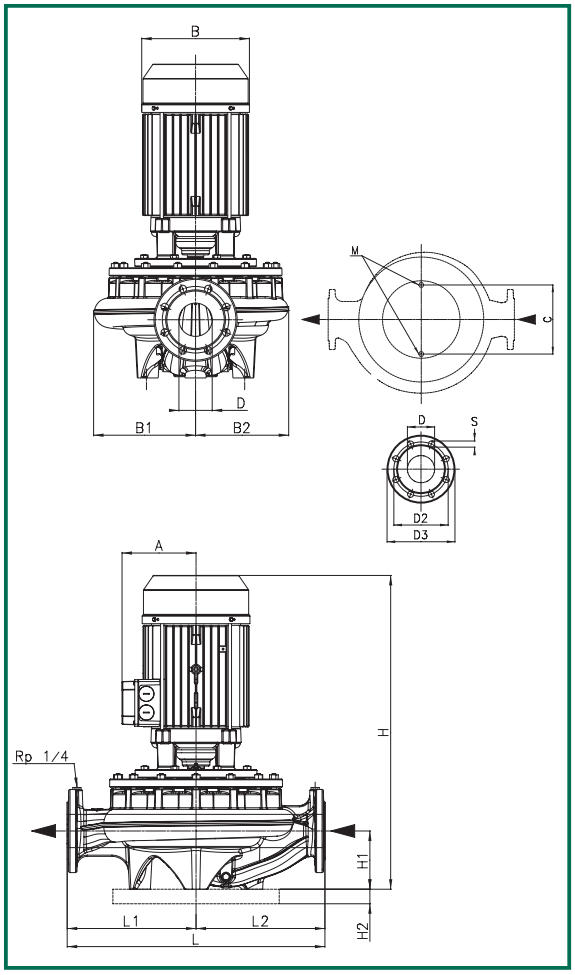
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m³/h / l/min	42 700	48 800	54 900	60 1000	75 1250	90 1500	105 1750	120 2000	135 2250
DCP 80/2530 T	3x400 V ~ Δ *	2900	9,18	7,5	10	15,8	H (m)	25,3	24,9	24,1	23,4	20,5	17	12,7		
DCP 80/3050 T	3x400 V ~ Δ *	2900	12,46	10	13,5	22,5		30,5	30	29,5	29	26,5	24	20,5	16	
DCP 80/3650 T	3x400 V ~ Δ *	2900	15,13	12,5	17	27		36,5	36	35,5	34,5	33	30	27	23	19
DCP 80/4100 T	3x400 V ~ Δ *	2900	17,94	15	20	32		41	40,5	40	39,5	38	35,5	33	29	24

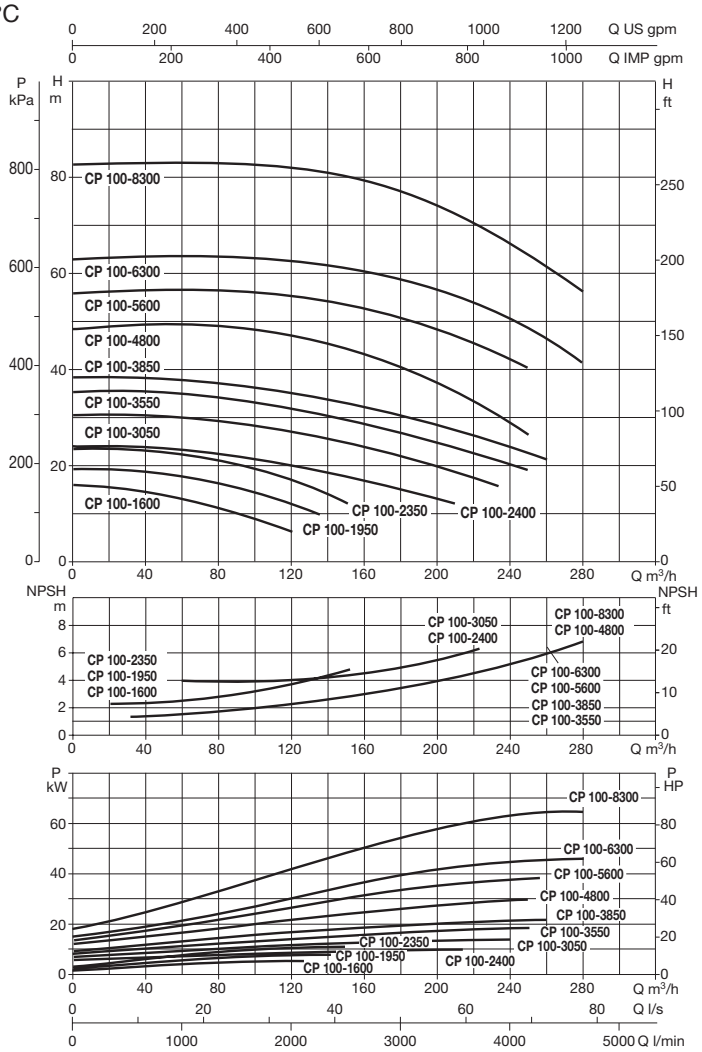
* Star start is possible

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CP 100

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C





MODEL	DIMENSIONS																	PACKING DIM.			VOLUME	WEIGHT
	A	B	B1	B2	C	D	D2	D3	S	holes	H	H1	H2	L	L1	L2	M	L\A	L\B	H		
CP 100-1600/A/BAQE/4	144	193	158	126	144	100	180	220	18		602	140	35	500	250	250	M16	780	460	860	0,308568	531,3
CP 100-1950/A/BAQE/5,5	150	220	158	126	144	100	180	220	18		622	140	35	500	250	250	M16	780	460	860	0,308568	105,12
CP 100-2350/A/BAQE/7,5	178	259	158	126	144	100	180	220	18		704	140	35	500	250	250	M16	780	460	860	0,308568	97,5
CP 100-2400/A/BAQE/11	178	259	193	153	230	100	180	220	18		670	140	35	550	275	275	M16	780	460	860	0,308568	106,6
CP 100-3050/A/BAQE/15	178	259	193	153	230	100	180	220	18		670	140	35	550	275	275	M16	780	460	860	0,308568	188,11
CP 100-3550/A/BAQE/18,5	223	309	193	153	230	100	180	220	18	8	852	140	35	550	275	275	M16	900	550	1060	0,5247	218,32
CP 100-3850/A/BAQE/22	223	309	193	153	230	100	180	220	18		852	140	35	550	275	275	M16	900	550	1060	0,5247	189,8
CP 100-4800/A/BAQE/30	223	309	204	174	230	100	180	220	18		900	140	35	550	275	275	M16	900	550	1060	0,5247	200,7
CP-G 100-5600/A/BAQE/37	341	400	204	174	230	100	180	220	18		1182	140	35	550	275	275	M16	900	550	1200	0,594	243,1
CP-G 100-6300/A/BAQE/45	360	463	204	174	230	100	180	220	18		1195	140	35	550	275	275	M16	900	550	1200	0,594	276
CP-G 100-8300/A/BAQE/55	390	516	293	252	230	100	180	220	18		1345	175	35	670	335	335	M16	900	550	1400	0,693	178,6

MODEL	VOLTAGE 50 Hz	r.p.m. 1/min	P1 MAX kW	P2 NOMINAL		MOTOR SIZE	In A	I st. A	η max %	cos φ
				kW	HP					
CP 100-1600/A/BAQE/4	3x400 V ~ Δ*	2844	4,9	4	5,5	MEC 100	8,58	60,9	69	0,85
CP 100-1950/A/BAQE/5,5	3x400 V ~ Δ*	2870	6,4	5,5	7,5	MEC 112	10,6	81,2	69,8	0,86
CP 100-2350/A/BAQE/7,5	3x400 V ~ Δ*	2906	8,7	7,5	10	MEC 132S	14,75	99	70,5	0,9
CP 100-2400/A/BAQE/11	3x400 V ~ Δ*	2930	12	11	15	MEC 132M	20,3	157,5	90,7	0,86
CP 100-3050/A/BAQE/15	3x400 V ~ Δ*	2920	17	15	20	MEC 132M	28,73	217	72	0,87
CP 100-3550/A/BAQE/18,5	3x400 V ~ Δ*	2946	21	18,5	25	MEC 160L	34,62	259,2	72	0,88
CP 100-3850/A/BAQE/22	3x400 V ~ Δ*	2960	24	22	30	MEC 160L	39,3	309,6	72	0,88
CP 100-4800/A/BAQE/30	3x400 V ~ Δ*	2955	33	30	40	MEC 160L	54,1	231	68,3	0,88
CP-G 100-5600/A/BAQE/37	3x400 V ~ Δ*	2945	42	37	50	MEC 180	70	497	88	0,87
CP-G 100-6300/A/BAQE/45	3x400 V ~ Δ*	2970	49	45	60	MEC 225	78,2	586,5	92,3	0,9
CP-G 100-8300/A/BAQE/55	3x400 V ~ Δ*	2970	59	55	75	MEC 250	95,9	719,25	92,5	0,9

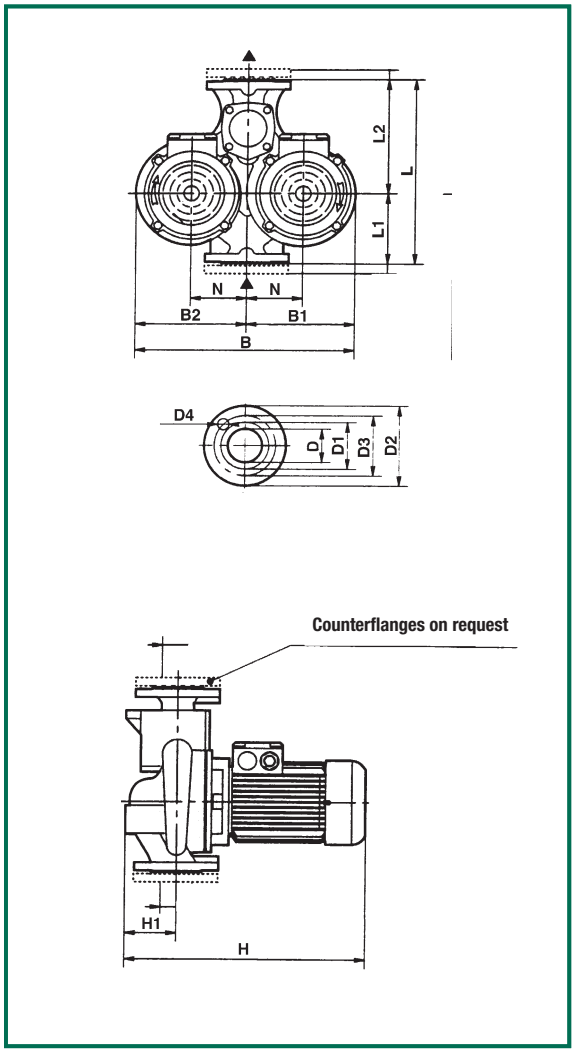
* Star start is possible

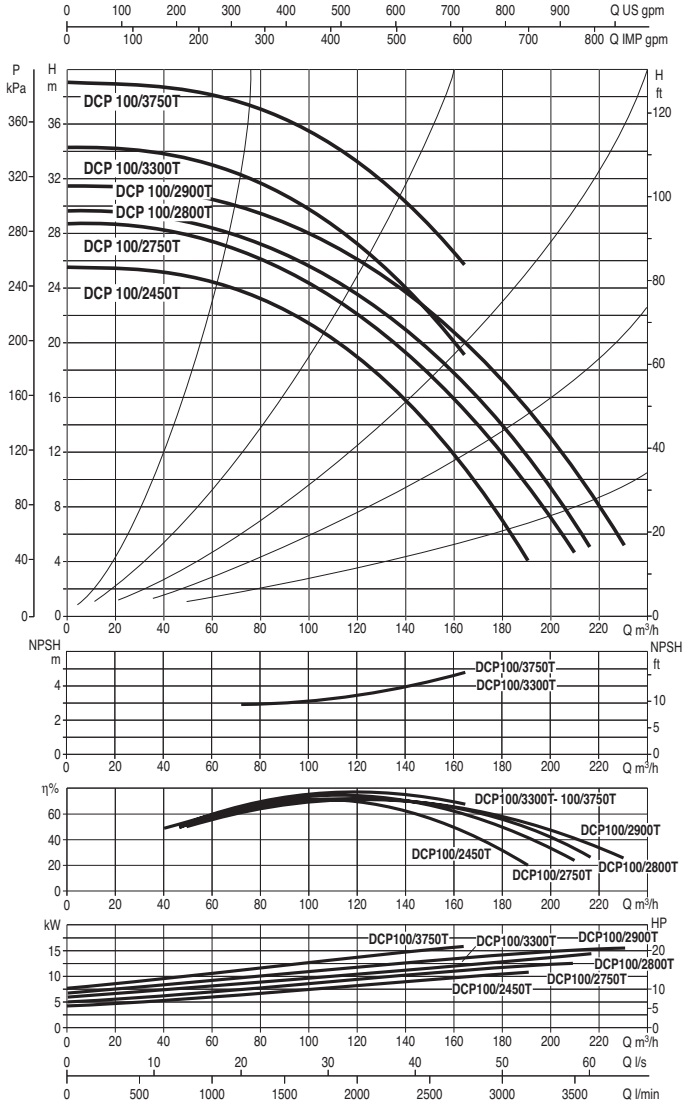
DAB PUMP PERFORMANCE

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

DCP 100

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C





MODEL	L	L1	L2	B	B1	B2	H	H1	N	D	D1	D2	D3	D4	PACKING DIMENSIONS L/A	L/B	H	VOLUME m³	WEIGHT Kg
DCP 100/2450 T	630	240	390	670	325	345	720	180	165	100 PN16	158	220	180	8 holes Ø 18	–	–	–	0,30	162
DCP 100/2750 T	630	240	390	670	325	345	720	180	165	100 PN16	158	220	180		–	–	–	0,30	162
DCP 100/2800 T	630	240	390	670	325	345	720	180	165	100 PN16	158	220	180		–	–	–	0,30	162
DCP 100/2900 T	630	240	390	670	325	345	720	180	165	100 PN16	158	220	180		–	–	–	0,30	162
DCP 100/3300 T	630	240	390	670	325	345	720	180	165	100 PN16	158	220	180		–	–	–	0,30	162
DCP 100/3750 T	630	240	390	670	325	345	720	180	165	100 PN16	158	220	180		–	–	–	0,30	162

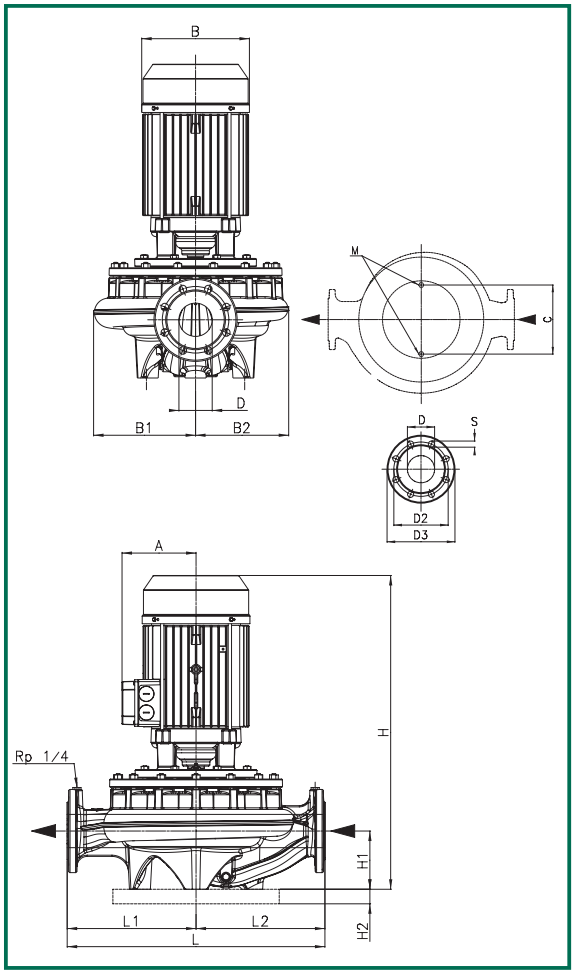
MODEL	VOLTAGE 50 Hz	r.p.m. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A	Q m³/h / l/min	60 / 1000	75 / 1250	90 / 1500	105 / 1750	120 / 2000	135 / 2250	150 / 2500	165 / 2750	180 / 3000	195 / 3250	210 / 3500	225 / 3750	240 / 4000
DCP 100/2450 T	3x400 V ~ Δ *	2900	12,46	10	13,5	22,5	H (m)	24,5	23,5	22	20,5	18,5	16	13,5	10,5	7	3			
DCP 100/2750 T	3x400 V ~ Δ *	2900	15,13	12,5	17	27		27,5	26,5	25,5	24	22	20	17,5	15	12	8,6	5		
DCP 100/2800 T	3x400 V ~ Δ *	2900	17,94	15	20	32			28	27	25,5	23,5	21,5	19	16,5	13,8	10,8	7,5	3	
DCP 100/2900 T	3x400 V ~ Δ *	2900	17,94	15	20	32				29	28	26	24,5	22	20	17,5	14	11,3	7,5	3,5
DCP 100/3300 T	3x400 V ~ Δ *	2900	15,13	12,5	17	27		33	32,3	31	29	27	24,5	22	19					
DCP 100/3750 T	3x400 V ~ Δ *	2900	17,94	15	20	32			37,5	36,5	35	33	31	28,5	26					

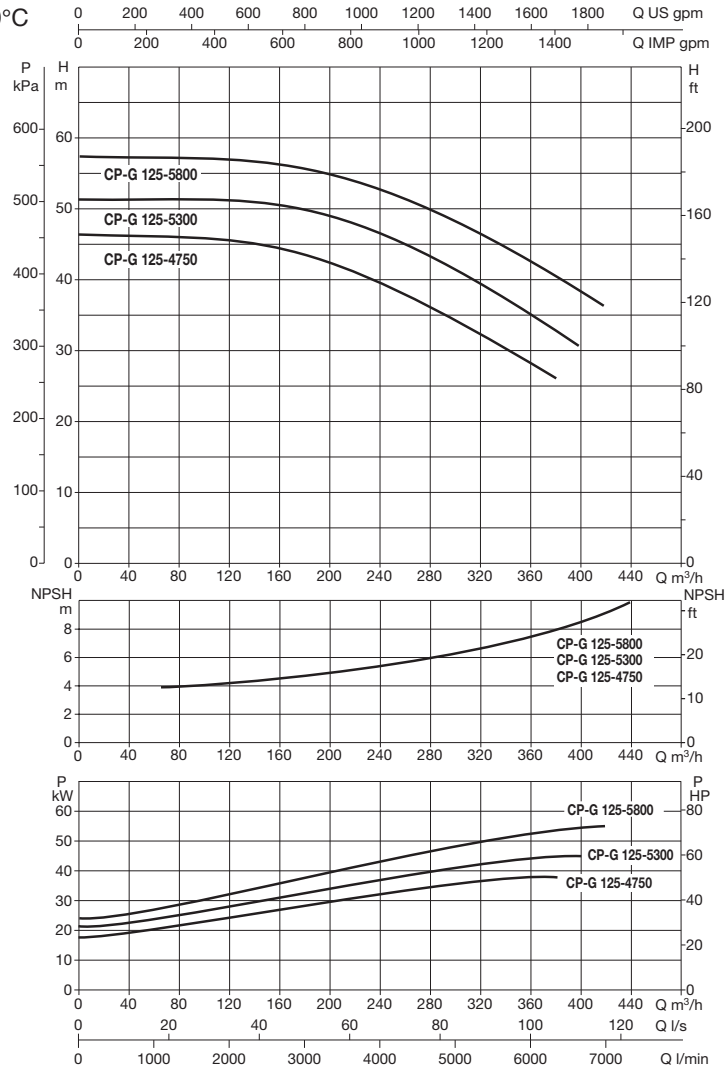
* Star start is possible

Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

CP 125

Liquid temperature range: from -10°C to +130°C
Maximum temperature operating: +40°C





MODEL	DIMENSIONS																	PACKING DIM.			VOLUME	WEIGHT
	A	B	B1	B2	C	D	D2	D3	S	holes	H	H1	H2	L	L1	L2	M	L\A	L\B	H		
CP 125-4750/A/BAQE/37	341	400	252	205	230	125	210	250	18	8	1126	215	35	620	310	310	M16	900	550	1200	0,594	578,8
CP-G 125-5300/A/BAQE/45	360	463	252	205	230	125	210	250	18		1275	215	35	620	310	310	M16	900	550	1400	0,693	280,9
CP-G 125-5800/A/BAQE/55	390	516	252	205	230	125	210	250	18		1389	215	35	620	310	310	M16	900	550	1400	0,693	288,9

MODEL	VOLTAGE 50 Hz	r.p.m. 1/min	P1 MAX kW	P2 NOMINAL		MOTOR SIZE	In A	I st. A	η max %	cos φ
				kW	HP					
CP-G 125-4750/A/BAQE/37	3x400 V ~ Δ*	2945	42	37	50	MEC 180	70	497	88	0,87
CP-G 125-5300/A/BAQE/45	3x400 V ~ Δ*	2970	49	45	60	MEC 225	78,2	586,5	92,3	0,9
CP-G 125-5800/A/BAQE/55	3x400 V ~ Δ*	2970	59	55	75	MEC 250	95,9	719,25	92,5	0,9

* Star start is possible

DAB PUMP PERFORMANCE

ACCESSORIES UNIONS AND COUNTERFLANGES

MODEL	UNIONS						
	1 1/4" F	1 1/2" F - BRASS	1 1/4" F - BRASS	1" F - BRASS	Ø 22 - COPPER	Ø 28 - COPPER	REDUCTION 1 1/2 - 2"
ALM 200 T		●	●	●	●	●	●
ALP 800 T		●	●	●	●	●	●
ALM 500 T	●						
ALM 2000 T	●						

MODEL	COUNTERFLANGES			
	DN 40 - PN 10	DN 50 - PN 10	DN 65 - PN 10	DN 80 - PN 10
KLM 40/300 T	●			
KLP 40/600 T	●			
KLP 40/900 T	●			
KLP 40/1200 T	●			
KLM 50/300 T		●		
KLM 50/600 T		●		
KLM 50/900 T		●		
KLP 50/1200 T		●		
KLM 65/300 T			●	
KLM 65/600 T			●	
KLP 65/900 T			●	
KLP 65/1200 T			●	
KLM 80/300 T				●
KLM 80/600 T				●
KLP 80/900 T				●
KLP 80/1200 T				●
DKLM 40/300 T	●			
DKLP 40/600 T	●			
DKLP 40/900 T	●			
DKLP 40/1200 T	●			
DKLM 50/300 T		●		
DKLM 50/600 T		●		
DKLM 50/900 T		●		
DKLP 50/1200 T		●		
DKLM 65/300 T			●	
DKLM 65/600 T			●	
DKLP 65/900 T			●	
DKLP 65/1200 T			●	
DKLM 80/300 T				●
DKLM 80/600 T				●
DKLP 80/900 T				●
DKLP 80/1200 T				●

ACCESSORIES COUNTERFLANGES

MODEL	COUNTERFLANGES						
	DN 40 - PN 16	DN 50 - PN 16	DN 65 - PN 16	DN 80 - PN 16	DN 100 - PN 16	DN 125 - PN 16	DN 150 - PN 16
CM 40/440 T	●						
CM 40/540 T	●						
CM 40/670 T	●						
CM 40/870 T	●						
CM 40/1300 T	●						
CM 40/1450 T	●						
CM 50/510 T		●					
CM 50/630 T		●					
CM 50/780 T		●					
CM 50/1000 T		●					
CM 50/1270 T		●					
CM 50/1420 T		●					
CM 65-420/A/BAQE/0,25			●				
CM 65-540/A/BAQE/0,37			●				
CM 65-660/A/BAQE/0,55			●				
CM 65-760/A/BAQE/0,55			●				
CM 65-920/A/BAQE/0,75			●				
CM 65-1080/A/BAQE/1,1			●				
CM 65-1200/A/BAQE/1,5			●				
CM 65-1530/A/BAQE/2,2			●				
CM 65-1680/A/BAQE/3			●				
CM 65-2380/A/BAQE/4			●				
CM 80-550/A/BAQE/0,55				●			
CM 80-650/A/BAQE/0,75				●			
CM 80-740/A/BAQE/1,1				●			
CM 80-890/A/BAQE/1,5				●			
CM 80-1050/A/BAQE/2,2				●			
CM 80-1530/A/BAQE/3				●			
CM 80-1700/A/BAQE/4				●			
CM 80-2410/A/BAQE/5,5				●			
CM 80-2700/A/BAQE/7,5				●			
CM 80-3420/A/BAQE/11				●			
CM 100-510/A/BAQE/0,75					●		
CM 100-650/A/BAQE/1,1					●		
CM 100-660/A/BAQE/1,5					●		
CM 100-865/A/BAQE/2,2					●		
CM 100-1020/A/BAQE/3					●		
CM 100-1320/A/BAQE/4					●		
CM 100-1650/A/BAQE/5,5					●		
CM 100-2050/A/BAQE/7,5					●		
CM 100-2550/A/BAQE/11					●		
CM 100-3290/A/BAQE/15					●		
CM 100-3680/A/BAQE/18,5					●		
CM 100-4100/A/BAQE/22					●		
CM 125-1075/A/BAQE/4						●	
CM 125-1270/A/BAQE/5,5						●	
CM 125-1560/A/BAQE/7,5						●	
CM 125-2100/A/BAQE/11						●	
CM 125-2550/A/BAQE/15						●	
CM 125-3200/A/BAQE/18,5						●	
CM 125-3600/A/BAQE/22						●	
CM 125-4022/A/BAQE/30						●	
CM 150-955/A/BAQE/5,5							●
CM 150-1322/A/BAQE/7,5							●
CM 150-1600/A/BAQE/11							●
CM 150-1950/A/BAQE/15							●
CM 150-2200/A/BAQE/18,5							●
CM 150-2405/A/BAQE/22							●

ACCESSORIES COUNTERFLANGES

MODEL	COUNTERFLANGES					
	DN 40 - PN 16	DN 50 - PN 16	DN 65 - PN 16	DN 80 - PN 16	DN 100 - PN 16	DN 125 - PN 16
CP 40/1900 T	●					
CP 40/2300 T	●					
CP 40/2700 T	●					
CP 40/3500 T	●					
CP 40/3800 T	●					
CP 40/4700 T	●					
CP 40/5500 T	●					
CP 40/6200 T	●					
CP 50/2200 T		●				
CP 50/2600 T		●				
CP 50/3100 T		●				
CP 50/4100 T		●				
CP 50/4600 T		●				
CP 50/5100 T		●				
CP 50/5650 T		●				
CP 65-1470/A/BAQE/1,5			●			
CP 65-1900/A/BAQE/2,2			●			
CP 65-2280/A/BAQE/3			●			
CP 65-2640/A/BAQE/4			●			
CP 65-3400/A/BAQE/5,5			●			
CP 65-4100/A/BAQE/7,5			●			
CP 65-4700/A/BAQE/11			●			
CP 65-5500/A/BAQE/15			●			
CP 65-6150/A/BAQE/18,5			●			
CP 65-6750/A/BAQE/22			●			
CP 65-7350/A/BAQE/22			●			
CP 65-9250/A/BAQE/30			●			
CP 80-1400/A/BAQE/2,2				●		
CP 80-1700/A/BAQE/3				●		
CP 80-2050/A/BAQE/4				●		
CP 80-2400/A/BAQE/5,5				●		
CP 80-2770/A/BAQE/7,5				●		
CP 80-3250/A/BAQE/11				●		
CP 80-4000/A/BAQE/15				●		
CP 80-5150/A/BAQE/18,5				●		
CP 80-5650/A/BAQE/22				●		
CP 80-6850/A/BAQE/30				●		
CP-G 80-8600/A/BAQE/37				●		
CP-G 80-9600/A/BAQE/45				●		
CP-G 80-10200/A/BAQE/55				●		
CP 100-1600/A/BAQE/4					●	
CP 100-1950/A/BAQE/5,5					●	
CP 100-2350/A/BAQE/7,5					●	
CP 100-2400/A/BAQE/11					●	
CP 100-3050/A/BAQE/15					●	
CP 100-3550/A/BAQE/18,5					●	
CP 100-3850/A/BAQE/22					●	
CP 100-4800/A/BAQE/30					●	
CP-G 100-5600/A/BAQE/37					●	
CP-G 100-6300/A/BAQE/45					●	
CP-G 100-8300/A/BAQE/55					●	
CP-G 125-4750/A/BAQE/37						●
CP-G 125-5300/A/BAQE/45						●
CP-G 125-5800/A/BAQE/55						●

ACCESSORIES COUNTERFLANGES

MODEL	COUNTERFLANGES				
	DN 40 - PN 16	DN 50 - PN 16	DN 65 - PN 16	DN 80 - PN 16	DN 100 - PN 16
DCM 40/380 T	●				
DCM 40/460 T	●				
DCM 40/620 T	●				
DCM 50/460 T		●			
DCM 50/630 T		●			
DCM 50/880 T		●			
DCM 65/670 T			●		
DCM 65/820 T			●		
DCM 65/900 T			●		
DCM 80/630 T				●	
DCM 80/730 T				●	
DCM 80/860 T				●	
DCM 80/1020 T				●	
DCM 100/820 T					●
DCM 100/1000 T					●
DCM 100/1200 T					●
DCM 100/1450 T					●
DCP 40/1250 T	●				
DCP 40/1650 T	●				
DCP 40/2050 T	●				
DCP 40/2450 T	●				
DCP 50/1550 T		●			
DCP 50/1900 T		●			
DCP 50/2450 T		●			
DCP 50/3000 T		●			
DCP 50/3650 T		●			
DCP 65/2300 T			●		
DCP 65/2650 T			●		
DCP 65/3250 T			●		
DCP 65/3700 T			●		
DCP 80/2530 T				●	
DCP 80/3050 T				●	
DCP 80/3650 T				●	
DCP 80/4100 T				●	
DCP 100/3300 T					●
DCP 100/3750 T					●
DCP 100/2450 T					●
DCP 100/2750 T					●
DCP 100/2800 T					●
DCP 100/2900 T					●

PROTECTION AND CONTROL SYSTEM

SINGLE-PHASE POWER INPUT

MODEL	P2 NOMINAL		ED 1,3 M	E2D 2,6 M
	kW	HP		
ALM 200 M	0,059	0,08	●	
ALP 800 M	0,37	0,5	●	
ALM 500 M	0,25	0,33	●	
ALP 2000 M	0,55	0,75	●	
KLM 40/300 M	0,25	0,33	●	
KLP 40/600 M	0,37	0,5	●	
KLP 40/900 M	0,37	0,5	●	
KLP 40/1200 M	0,55	0,75	●	
KLM 50/300 M	0,25	0,33	●	
KLM 50/600 M	0,25	0,33	●	
KLP 50/900 M	0,75	1	●	
KLP 50/1200 M	0,75	1	●	
DKLM 40/300 M	0,25	0,33		●
DKLP 40/600 M	0,37	0,5		●
DKLP 40/900 M	0,37	0,5		●
DKLP 40/1200 M	0,55	0,75		●
DKLM 50/300 M	0,25	0,33		●
DKLM 50/600 M	0,25	0,33		●
DKLP 50/900 M	0,75	1		●
DKLP 50/1200 M	0,75	1		●

MODEL	Single installation	Twin installation
	ED 1,3 M	**E2D 2,6 M**
Max. connectable number of pumps	1	2*
Thermostat connection	●	●
Alarm control connection	●	●
Remote alarm control connection	●	●

* 2 single pumps or 1 twin pump unit.

THREE-PHASE POWER INPUT

MODEL	Single installation			Twin installation		
	ED 1 T	**ED 1,5 T**	**ED 2,5 T**	**E2D 2 T**	**E2D 3 T**	**E2D 5 T**
Max. connectable number of pumps	1	1	1	2*	2*	2*
Thermostat connection	●	●	●	●	●	●
Alarm control connection	●	●	●	●	●	●
Remote alarm control connection	●	●	●	●	●	●

* 2 single pumps or 1 twin pump unit.

THREE-PHASE VOLTAGE

MODEL	P2 NOMIN.		Single installation								Twin installation				
	kW	HP	ED 1T	ED 1,5T	ED 2,5T	ED 4T	ED 7,5T	ED 8T	ED 15T	ED 20T	E2D 2T	E2D 3T	E2D 5T	E2D 8T	E2D 15T
ALM 200 T	0,059	0,08	●								●				
ALP 800 T	0,37	0,5	●								●				
ALM 500 T	0,25	0,33	●								●				
ALM 2000 T	0,55	0,75	●								●				
KLM 40/300 T	0,25	0,33	●								●				
KLP 40/600 T	0,37	0,5	●								●				
KLP 40/900 T	0,37	0,5	●								●				
KLP 40/1200 T	0,55	0,75	●								●				
KLM 50/300 T	0,25	0,33	●								●				
KLM 50/600 T	0,25	0,33	●								●				
KLM 50/900 T	0,75	1	●								●				
KLP 50/1200 T	0,75	1	●								●				
KLM 65/300 T	0,25	0,33	●								●				
KLM 65/600 T	0,37	0,5	●								●				
KLP 65/900 T	1,1	1,5		●								●			
KLP 65/1200 T	1,1	1,5		●								●			
KLM 80/300 T	0,25	0,33	●								●				
KLM 80/600 T	0,75	1	●								●				
KLP 80/900 T	1,84	2,5			●								●		
KLP 80/1200 T	1,84	2,5			●								●		
DKLM 40/300 T	0,25	0,33									●				
DKLP 40/600 T	0,37	0,5									●				
DKLP 40/900 T	0,37	0,5									●				
DKLP 40/1200 T	0,55	0,75									●				
DKLM 50/300 T	0,25	0,33									●				
DKLM 50/600 T	0,25	0,33									●				
DKLM 50/900 T	0,75	1									●				
DKLP 50/1200 T	0,75	1									●				
DKLM 65/300 T	0,25	0,33									●				
DKLM 65/600 T	0,37	0,5									●				
DKLP 65/900 T	1,1	1,5										●			
DKLP 65/1200 T	1,1	1,5										●			
DKLM 80/300 T	0,25	0,33									●				
DKLM 80/600 T	0,75	1									●				
DKLP 80/900 T	1,84	2,5											●		
DKLP 80/1200 T	1,84	2,5											●		

THREE-PHASE VOLTAGE

MODEL	P2 NOMIN.		Single installation							
	kW	HP	ED 1T	ED 1,5T	ED 2,5T	ED 4T	ED 7,5T	ED 8T	ED 15T	ED 20T
CM 40/440 T	0,74	1	●							
CM 40/540 T	0,74	1	●							
CM 40/670 T	0,74	1	●							
CM 40/870 T	0,74	1	●							
CM 40/1300 T	0,75	1	●							
CM 40/1450 T	0,9	1,25	●							
CM 50/510 T	0,74	1	●							
CM 50/630 T	0,74	1	●							
CM 50/780 T	0,74	1	●							
CM 50/1000 T	0,74	1	●							
CM 50/1270 T	1,1	1,5	●							
CM 50/1420 T	1,1	1,5	●							
CM 65-420/A/BAQE/0,25	0,25	0,33	●							
CM 65-540/A/BAQE/0,37	0,37	0,45	●							
CM 65-660/A/BAQE/0,55	0,55	0,72	●							
CM 65-760/A/BAQE/0,55	0,55	0,72	●							
CM 65-920/A/BAQE/0,75	0,75	0,95	●							
CM 65-1080/A/BAQE/1,1	1,1	1,38		●						
CM 65-1200/A/BAQE/1,5	1,5	1,92			●					
CM 65-1530/A/BAQE/2,2	2,2	2,84			●					
CM 65-1680/A/BAQE/3	3	3,48				●				
CM 65-2380/A/BAQE/4	4	4,97					●			
CM 80-550/A/BAQE/0,55	0,55	0,72	●							
CM 80-650/A/BAQE/0,75	0,75	0,95	●							
CM 80-740/A/BAQE/1,1	1,1	1,38		●						
CM 80-890/A/BAQE/1,5	1,5	1,92			●					
CM 80-1050/A/BAQE/2,2	2,2	2,84			●					
CM 80-1530/A/BAQE/3	3	3,48				●				
CM 80-1700/A/BAQE/4	4	4,97					●			
CM 80-2410/A/BAQE/5,5	5,5	7,5					●			
CM 80-2700/A/BAQE/7,5	7,5	10						●		
CM 80-3420/A/BAQE/11	11	15								●
CM 100-510/A/BAQE/0,75	0,75	0,95	●							
CM 100-650/A/BAQE/1,1	1,1	1,38		●						
CM 100-660/A/BAQE/1,5	1,5	1,92			●					
CM 100-865/A/BAQE/2,2	2,2	2,84			●					
CM 100-1020/A/BAQE/3	3	3,48				●				
CM 100-1320/A/BAQE/4	4	4,97					●			
CM 100-1650/A/BAQE/5,5	5,5	7,5					●			
CM 100-2050/A/BAQE/7,5	7,5	10						●		
CM 100-2550/A/BAQE/11	11	15								●
CM 100-3290/A/BAQE/15	15	20								
CM 100-3680/A/BAQE/18,5	18,5	25								
CM 100-4100/A/BAQE/22	22	30								
CM 125-1075/A/BAQE/4	4	4,97					●			
CM 125-1270/A/BAQE/5,5	5,5	7,5					●			
CM 125-1560/A/BAQE/7,5	7,5	10						●		
CM 125-2100/A/BAQE/11	11	15								●
CM 125-2550/A/BAQE/15	15	20								
CM 125-3200/A/BAQE/18,5	18,5	25								
CM 125-3600/A/BAQE/22	22	30								
CM 125-4022/A/BAQE/30	30	40								
CM 150-955/A/BAQE/5,5	5,5	7,5					●			
CM 150-1322/A/BAQE/7,5	7,5	10					●			
CM 150-1600/A/BAQE/11	11	15								●
CM 150-1950/A/BAQE/15	15	20								
CM 150-2200/A/BAQE/18,5	18,5	25								
CM 150-2405/A/BAQE/22	22	30								

THREE-PHASE VOLTAGE

MODEL	P2 NOMIN.		Single installation							
	kW	HP	ED 1T	ED 1,5T	ED 2,5T	ED 4T	ED 7,5T	ED 8T	ED 15T	ED 20T
CP 40/1900 T	0,75	1	●							
CP 40/2300 T	1,1	1,5		●						
CP 40/2700 T	1,5	2			●					
CP 40/3500 T	2,21	3		●						
CP 40/3800 T	3,0	4,0			●					
CP 40/4700 T	4,0	5,5			●					
CP 40/5500 T	5,5	7,5				●				
CP 40/6200 T	7,5	10				●				
CP 50/2200 T	1,1	1,5		●						
CP 50/2600 T	1,5	2			●					
CP 50/3100 T	2,21	3		●						
CP 50/4100 T	4	5,5			●					
CP 50/4600 T	5,5	7,5				●				
CP 50/5100 T	7,5	10				●				
CP 50/5650 T	7,5	10				●				
CP 65-1470/A/BAQE/1,5	1,5	1,89		●						
CP 65-1900/A/BAQE/2,2	2,2	2,8			●					
CP 65-2280/A/BAQE/3	3	3,93				●				
CP 65-2640/A/BAQE/4	4	5,2				●				
CP 65-3400/A/BAQE/5,5	5,5	7,37					●			
CP 65-4100/A/BAQE/7,5	7,5	9,89						●		
CP 65-4700/A/BAQE/11	11	14,74					●			
CP 65-5500/A/BAQE/15	15	25,22								●
CP 65-6150/A/BAQE/18,5	18,5	25,22								
CP 65-6750/A/BAQE/22	22	30								
CP 65-7350/A/BAQE/22	22	30								
CP 65-9250/A/BAQE/30	30	40,48								
CP 80-1400/A/BAQE/2,2	2,2	2,8			●					
CP 80-1700/A/BAQE/3	3	3,93				●				
CP 80-2050/A/BAQE/4	8,74	5,2								
CP 80-2400/A/BAQE/5,5	5,5	7,37					●			
CP 80-2770/A/BAQE/7,5	7,5	9,89						●		
CP 80-3250/A/BAQE/11	11	14,74					●			
CP 80-4000/A/BAQE/15	15	25,22								●
CP 80-5150/A/BAQE/18,5	18,5	25,22								
CP 80-5650/A/BAQE/22	22	30								
CP 80-6850/A/BAQE/30	30	40,48								
CP-G 80-8600/A/BAQE/37	37	50,32								
CP-G 80-9600/A/BAQE/45	45	61,2								
CP-G 80-10200/A/BAQE/55	55	74,8								
CP 100-1600/A/BAQE/4	4	5,2				●				
CP 100-1950/A/BAQE/5,5	5,5	7,37					●			
CP 100-2350/A/BAQE/7,5	7,5	9,89						●		
CP 100-2400/A/BAQE/11	11	14,74					●			
CP 100-3050/A/BAQE/15	15	25,22								●
CP 100-3550/A/BAQE/18,5	18,5	25,22								
CP 100-3850/A/BAQE/22	22	30								
CP 100-4800/A/BAQE/30	30	40,48								
CP-G 100-5600/A/BAQE/37	37	50,32								
CP-G 100-6300/A/BAQE/45	45	33,08								
CP-G 100-8300/A/BAQE/55	55	74,80								
CP-G 125-4750/A/BAQE/37	37	50,32								
CP-G 125-5300/A/BAQE/45	45	61,2								
CP-G 125-5800/A/BAQE/55	55	74,8								

THREE-PHASE VOLTAGE

MODEL	P2 NOMIN.		Twin installation				
	kW	HP	E2D 2T	E2D 3T	E2D 5T	E2D 8T	E2D 15T
DCM 40/380 T	0,25	0,33	●				
DCM 40/460 T	0,25	0,33	●				
DCM 40/620 T	0,25	0,33	●				
DCM 50/460 T	0,25	0,33	●				
DCM 50/630 T	0,37	0,5	●				
DCM 50/880 T	0,5	0,7	●				
DCM 65/670 T	0,55	0,75	●				
DCM 65/820 T	0,75	1,0	●				
DCM 65/900 T	0,9	1,25	●				
DCM 80/630 T	0,75	1	●				
DCM 80/730 T	0,9	1,25	●				
DCM 80/860 T	1,1	1,5	●				
DCM 80/1020 T	1,5	2,0		●			
DCM 100/820 T	1,5	2		●			
DCM 100/1000 T	2,2	3,0		●			
DCM 100/1200 T	3,0	4,0			●		
DCM 100/1450 T	4,0	5,5			●		
DCP 40/1250 T	0,55	0,75	●				
DCP 40/1650 T	0,75	1,0	●				
DCP 40/2050 T	1,0	1,35	●				
DCP 40/2450 T	1,5	2,0		●			
DCP 50/1550 T	1,5	2,0		●			
DCP 50/1900 T	2,0	2,7		●			
DCP 50/2450 T	3,0	4,0			●		
DCP 50/3000 T	3,0	4,0			●		
DCP 50/3650 T	4,0	5,5			●		
DCP 65/2300 T	3	4			●		
DCP 65/2650 T	4	5,5			●		
DCP 65/3250 T	5,5	7,5			●		
DCP 65/3700 T	7,5	10				●	
DCP 80/2530 T	7,5	10				●	
DCP 80/3050 T	10	13,5					●
DCP 80/3650 T	12,5	17					●
DCP 80/4100 T	15	20					●
DCP 100/3300 T	12,5	17					●
DCP 100/3750 T	15	20					●
DCP 100/2450 T	10	13,5					●
DCP 100/2750 T	12,5	17					●
DCP 100/2800 T	15	20					●
DCP 100/2900 T	15	20					●

ED 1,3 M

CE

GENERAL DATA

Applications

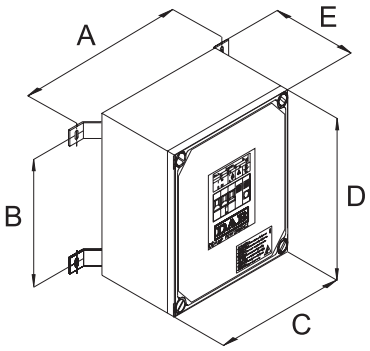
Electric control panel for protecting a single-phase electric pump in a thermostat-controlled single installation.

Features

Made from flame-proof thermoplastic with IP55 level of protection and supplied in a cabinet for wall-mounting.
The panel is self-protected and protects the electric pump from overloads and short circuits with manual reset.
Complete with:
- Modular isolator for the power input line;
- Self-protected transformer for 24V powering of external commands;
- Terminals for connecting the electric pump to any thermostats (pressure switches or floats);
- Terminals for using an alarm command or connecting a remote acoustic or luminous alarm (without potential);
- Button on the front of the panel for manual pump operation;
- Green led on the front of the panel indicating the pump is working.

TECHNICAL DATA

- Rated input voltage: 220-240V~ +/- 10%
- Phases: 1
- Frequency: 50-60 Hz
- Rated maximum working power: 1.85 kW 220-240V
- Rated maximum working current: 10A
- Operating temperature range: -10°C +40°C
- Storage temperature range: -25°C +55°C
- Relative humidity (without condensation): 50% at 40°C MAX. (90% at 20°C)
- Max. altitude: 3000 m (a.s.l.)
- Protection level: IP55
- The panels are built to EN 60204-1 and EN 60439-1 standards



MODEL	DIMENSIONS (mm)					GROSS WEIGHT (Kg)
	A	B	C	D	E	
ED 1,3 M	350	245	270	300	190	5,6

ED 1 T - ED 1,5 T - ED 2,5 T

CE

GENERAL DATA

Applications

Electric control panel for protecting a single-phase electric pump in a thermostat-controlled single installation.

Features

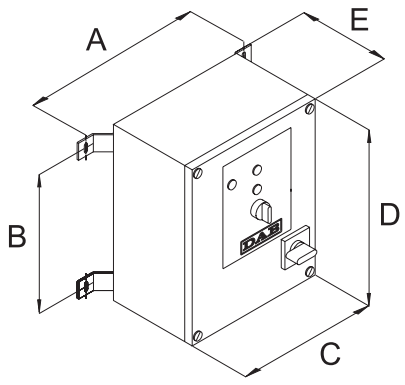
Made from flame-proof thermoplastic with IP55 level of protection and supplied in a cabinet for wall-mounting.
The panel is self-protected and protects the electric pump from overloads, short circuits and missing phases with manual reset.
Complete with:
- modular isolator for the power input line with padlockable door handle;
- Self-protected transformer for 24V powering of external commands;
- Terminals for connecting the electric pump to any thermostats (pressure switches or floats);
- Terminals for using an alarm command or connecting a remote acoustic or luminous alarm (without potential);
- Switch on the front of the panel for manual - 0 – automatic electric pump operation;
- Indicators on the front of the panel:
  - red led indicating the current protection device has cut in;
  - green led indicating the pump is working;
  - white led indicating the auxiliary circuits are working properly.

TECHNICAL DATA

- Rated input voltage: 400V~ +/- 10%
- Phases: 3
- Frequency: 50-60 Hz

	ED 1 T	ED 1,5 T	ED 2,5 T	ED 4 T	ED 7,5 T	ED 8 T	ED 15 T	ED 20 T
- Rated maximum working power(kW):	1,38	2,2	3,5					
- Rated maximum working current (A):	2,5	4	6,3	6-10	9-14	13-18	20-25	24-32

- Operating temperature range: -10°C +40°C
- Storage temperature range: -25°C +55°C
- Relative humidity (without condensation): 50% at 40°C MAX. (90% at 20°C)
- Max. altitude: 3000 m (a.s.l.)
- Protection level: IP55
- The panels are built to EN 60204-1 and EN 60439-1 standards



MODEL	DIMENSIONS (mm)					GROSS WEIGHT (Kg)
	A	B	C	D	E	
ED 1 T	350	245	270	300	230	5,6
ED 1,5 T	350	245	270	300	230	5,6
ED 2,5 T	350	245	270	300	230	5,6

E2D 2,6 M

CE

GENERAL DATA

Applications

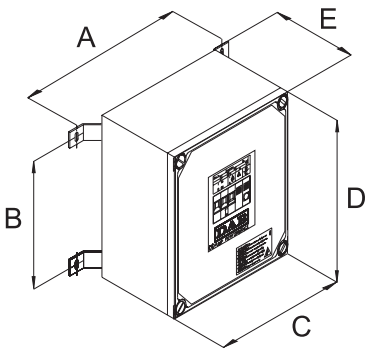
Electric control panel for protecting a single-phase electric pump in a thermostat-controlled twin installation (2 single pumps or 1 twin unit).

Features

Made from flame-proof thermoplastic with IP55 level of protection and supplied in a cabinet for wall-mounting.
The panel is self-protected and protects the electric pump from overloads and short circuits with manual reset.
Complete with:
- Modular isolator for the power input line;
- Self-protected transformer for 24V powering of external commands;
- Terminals for connecting the electric pump to any thermostats (pressure switches or floats);
- Terminals for using an alarm command or connecting a remote acoustic or luminous alarm (without potential);
- Pre-set for inverting the starting order of the two pumps at every start up, for simultaneous operation and for starting one of the two in case the other one breaks down;
- Buttons on the front of the panel for manual pump operation;
- Green led on the front of the panel indicating the pump is working;

TECHNICAL DATA

- Rated input voltage: 220-240V~ +/- 10%
- Phases: 1
- Frequency: 50-60 Hz
- Rated maximum working power: 1.85 kW 220-240V
- Rated maximum working current : 10A
- Operating temperature range: -10°C +40°C
- Storage temperature range: -25°C +55°C
- Relative humidity (without condensation): 50% at 40°C MAX. (90% at 20°C)
- Max. altitude: 3000 m (a.s.l.)
- Protection level: IP55
- The panels are built to EN 60204-1 and EN 60439-1 standards



MODEL	DIMENSIONS (mm)					GROSS WEIGHT (Kg)
	A	B	C	D	E	
E2D 2,6 M	345	335	270	390	230	8,5

DAB PUMP PERFORMANCE

E2D 2 T - E2D 3 T - E2D 5 T

GENERAL DATA

Applications

Electric control panel for protecting a three-phase electric pump in a thermostat-controlled twin installation (2 single pumps or 1 twin unit).

Features

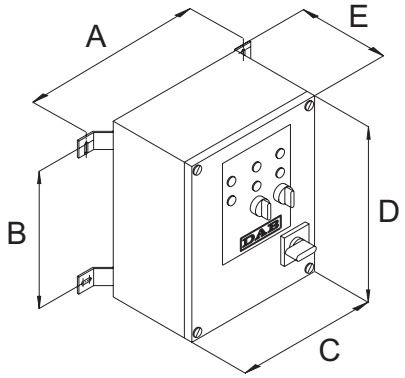
Made from flame-proof thermoplastic with IP55 level of protection and supplied in a cabinet for wall-mounting. The panel is self-protected and protects the electric pump from overloads, short circuits and missing phases with manual reset.
Complete with:
- Modular isolator for the power input line with padlockable door handle;
- Self-protected transformer for 24V powering of external commands;
- Terminals for connecting the electric pump to any thermostats (pressure switches or floats);
- Terminals for using an alarm command or connecting a remote acoustic or luminous alarm (without potential);
- Pre-set for inverting the starting order of the two pumps at every start up, for simultaneous operation and for starting one of the two in case the other one breaks down;
- Switch on the front of the panel for manual - 0 - automatic pump operation;
- Indicators on the front of the panel:
  - red led indicating the current protection device has cut in;
  - green led indicating the pump is working;
  - white led indicating the auxiliary circuits are working properly.

TECHNICAL DATA

- Rated input voltage: 400V~ +/- 10%
- Phases: 3
- Frequency: 50-60 Hz

	E2D 2 T	E2D 3 T	E2D 5 T	E2D 8 T	E2D 15 T	E2D 16 T	E2D 30 T	E2D 40 T
- Rated maximum working power(kW):	1,38	2,2	3,5					
- Rated maximum working current (A):	2,5	4	6,3	6-10	9-14	13-18	20-25	24-32

- Operating temperature range: -10°C +40°C
- Storage temperature range: -25°C +55°C
- Relative humidity (without condensation): 50% at 40°C MAX. (90% at 20°C)
- Max. altitude: 3000 m (a.s.l.)
- Protection level: IP55
- The panels are built to EN 60204-1 and EN 60439-1 standards



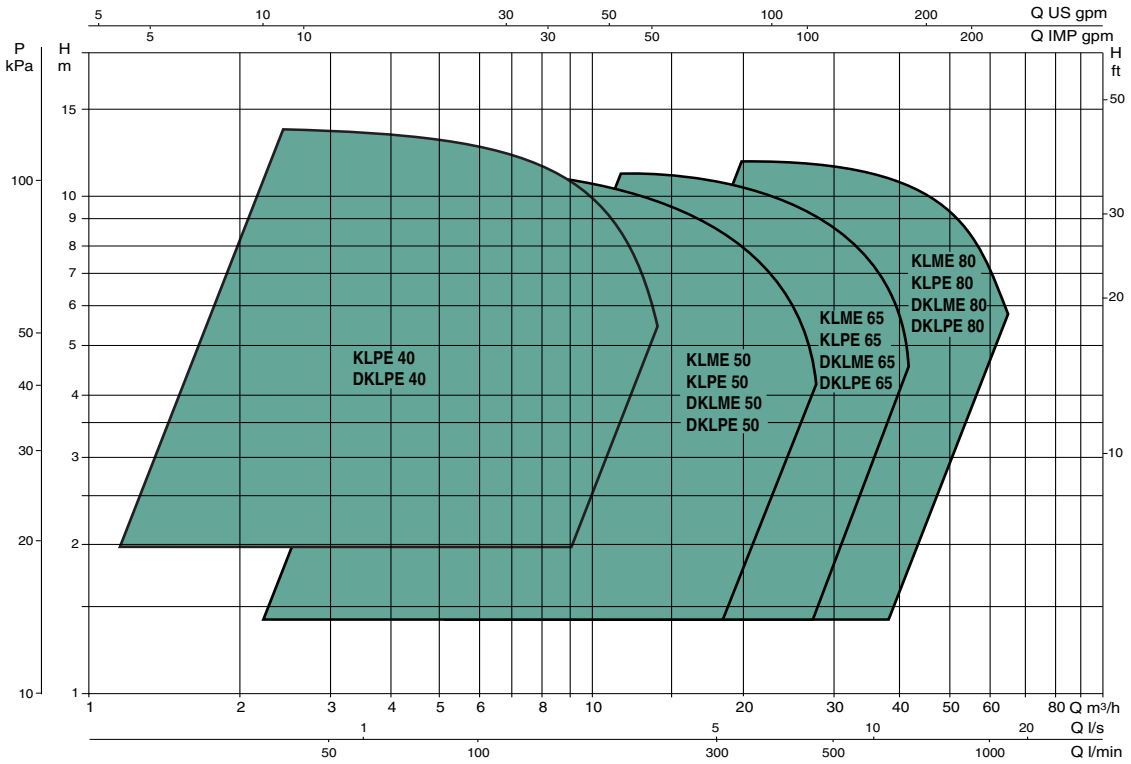
MODEL	DIMENSIONS (mm)					GROSS WEIGHT (Kg)
	A	B	C	D	E	
E2D 2 T	345	335	270	390	230	8
E2D 3 T	345	335	270	390	230	8
E2D 5 T	345	335	270	390	230	8,1

PERFORMANCE RANGE

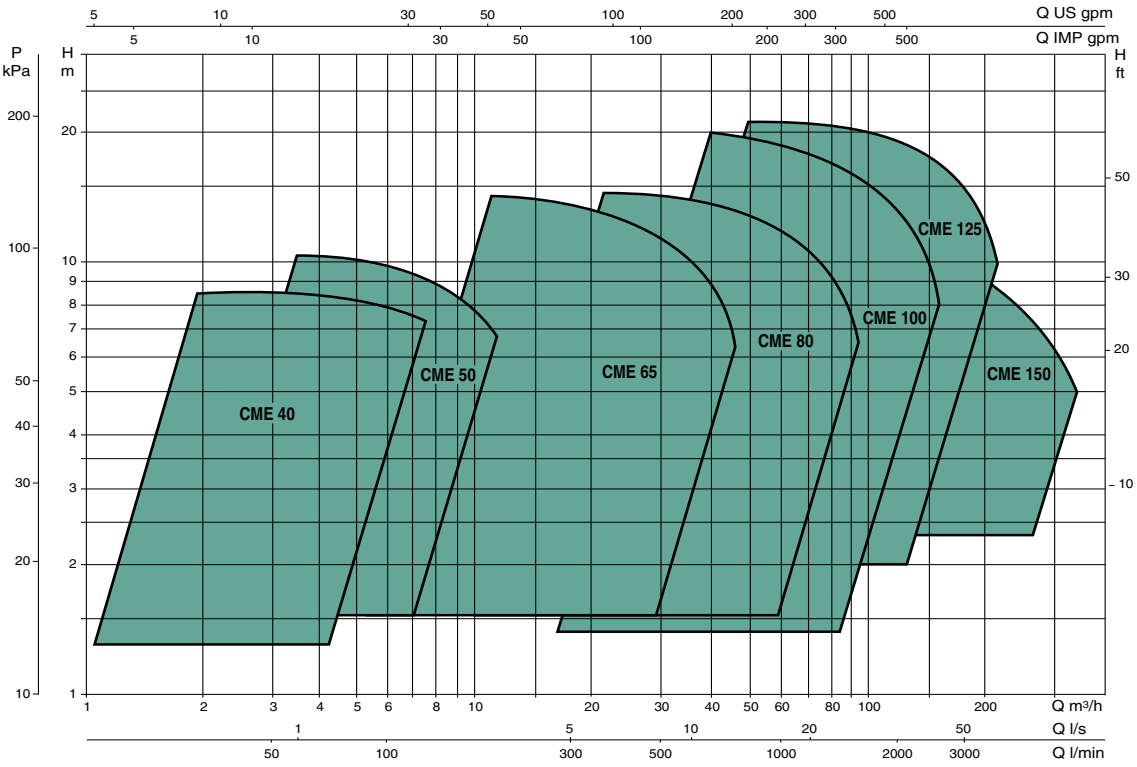
GRAPHIC SELECTION TABLE

Performance curves are based on kinematic viscosity values equal to 1mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

KLME - KLPE / DKLME - DKLPE



CME



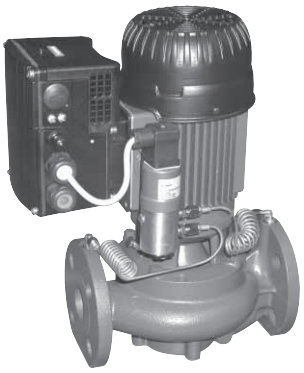
PERFORMANCE RANGE

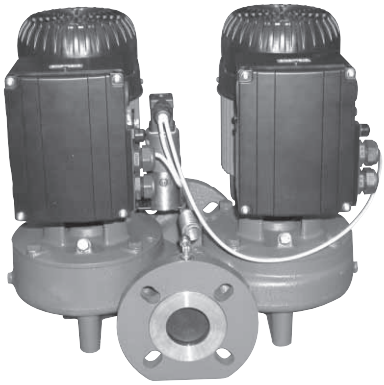
NUMERICAL SELECTION TABLE

MODEL		P2 NOMINAL		Q m³/h	0	3.6	7.2	8.4	9.6	12	18	30	36	48	72	84	96	108	144	168	210	240
SINGLE	TWIN	kW	HP	l/min	0	60	120	140	160	200	300	500	600	800	1200	1400	1600	1800	2400	2800	3500	4000
KLPE 40/600 M	DKLPE 40/600 M	0,37	0,5	H* (m)	8,2		6,9	6,3	5,7	4												
KLPE 40/1200 M	DKLPE 40/1200 M	0,55	0,75		13,7		11,9	11,2	10,4	8,4												
KLME 50/600 M	DKLME 50/600 M	0,25	0,33		5,4		4,7	4,5	4,3	3,8	2											
KLPE 50/1200 M	DKLPE 50/1200 M	0,75	1		12		11,8	11,6	11	10,5	8,6											
KLME 65/600 M	DKLME 65/600 M	0,37	0,5		5,5			5,3	5	4,7	3,8											
KLPE 65/1200 T	DKLPE 65/1200 T	1,1	1,5		12					11,6	11	8,8	6,7									
KLME 80/600 M	DKLME 80/600 M	0,75	1		5,7						5,7	5	4,3	2,5								
KLPE 80/1200 T	DKLPE 80/1200 T	1,84	2,5		11,8							11,5	11	9,7								
CME 40/540 M	–	0,25	0,33	H* (m)	5,4	5,1	4															
CME 40/870 M	–	0,37	0,5		8,7	8,5	7,5															
CME 50/630 M	–	0,37	0,5		6,3	6,2	5	4,4	3,6													
CME 50/1000 M	–	0,37	0,5		10,2	10,1	9,2	8,8	8,4	6,8												
CME 65/650 M	–	0,55	0,75		6,2		6,2	6,1	6	5,9	5,3	3,1										
CME 65/960 M	–	1,1	1,5		9,7				9,7	9,6	8,9	6,3	4,4									
CME 65/1400 T	–	2,2	3		14,3					14,6	14,1	12,1	10,5	6,2								
CME 80/650 M	–	1,1	1,5		6,3						5,9	5,7	5,5	4,7	2							
CME 80/980 T	–	2,2	3		9,8						9,8	9,5	9,2	8,1	4,5							
CME 80/1330 T	–	3,7	5		13,2							12,7	12,5	11,8	8,8	6,7						
CME 100/550 M	–	1,1	1,5		5,7							4,8	4,7	4,2	2,5	1,3						
CME 100/950 T	–	2,2	3		9,8							9	8,9	8,6	7,1	6,1	4,9	3,5				
CME 100/1500 T	–	3,7	5		14,4								14,2	14,1	12,5	11,4	10,1	8,7	3,2			
CME 100/1800 T	–	5,5	7,5		18,1								17,8	17,6	16,3	15,3	14,1	12,8	7,7			
CME 100/2000 T	–	7,4	10		20,7								20,2	20	18,9	18	16,9	15,5	10,7	6,3		
CME 125/880 T	–	3,7	5		8,4										7,9	7,7	7,5	7,2	6,1	5,2	3	
CME 125/1500 T	–	7,5	10		14,7										14,2	14,2	14,1	13,9	12,8	11,6	3,4	5,5
CME 150/1000 T	–	5,5	7,5		10,7											9,6	9,4	9,1	8	7,2	5,5	3,9
CME 150/1250 T	–	7,4	10		13,3											12,3	12,2	12,1	11,4	10,7	8,8	5

* Head at maximum frequency (50 Hz).

KLME-KLPE
DKLME-DKLPE





CE

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 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.
Flanged suction and delivery connections in PN 10 with threaded holes for control pressure gauges. To make it easy to apply to existing systems, the pump is compatible with counterflanges in PN 6.
Technopolymer impeller.
Mechanical seal in carbon/ceramic.
The pumps are available in the single version (KLME-KLPE) and in the twin version (DKLME-DKLPE).
In the twin version, a clapet valve is incorporated in the suction connection to prevent water from recirculating while the unit is not operating. A blind flange is also supplied standard if one of the two motors needs servicing.
The twin version allows pump operation to be alternated if a back-up unit or simultaneous operation of the two pumps is required.

Construction features of the motor
Closed, asynchronous motor with external ventilation, four poles for KLME and DKLME and two poles for KLPE and DKLPE.
Rotor mounted on oversized maintenance-free greased ball brushings to ensure silent running and long life.
Incorporated overload cut-out.
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 a 5-try automatic reset feature.
Supplied standard with:
- remote control terminals (start/stop)
- economy function adjustment terminals
- enable terminals for connecting the back-up pump (twin version)
- 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)

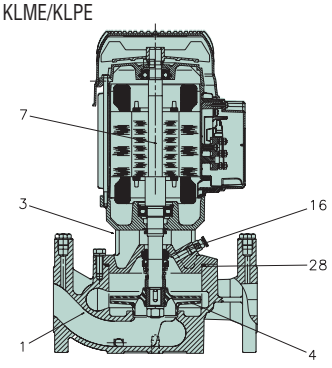
Remote control feature through RS 485 serial interface and USS protocol

TECHNICAL DATA

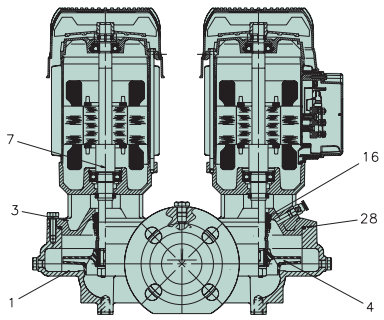
N.	PARTS*	MATERIALS
1	PUMP BODY	CAST IRON 250 UNI ISO 185
3	SUPPORT	CAST IRON 250 UNI ISO 185
4	IMPELLER	TECHNOPOLYMER B
7	SHAFT WITH ROTOR	STAINLESS STEEL AISI 303 X10 CrNis 1809 - UNI 6900/71
16	MECHANICAL SEAL	CARBON/CERAMICS
28	OR GASKET	EPDM RUBBER

* In contact with the liquid.

KLME/KLPE



DKLME/DKLPE



- Operating range: from 2 to 67 m^3 /h with a head of up to 13,7 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: 10 bar (1000 kPa).
- Standard flanging: DN 40, DN 50, DN 65, DN 80 in PN 6 / PN 10 (4 slots)
- Flanging on request: DN 80 in PN 16 (8 holes)
- Counterflanging on request: threaded DN 40, DN 50, DN 65 in PN 6
  with collar to weld: DN 40, DN 50, DN 65, DN 80 in PN 6
  with collar to weld: DN 40, DN 50, DN 65, in PN 10/PN 16 (4 holes)
  with collar to weld: DN 80 in PN 10 / PN 16 (8 holes).

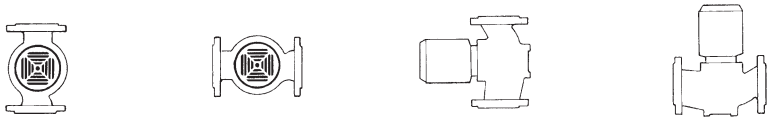
- Classification index:
  (example)

D KL P E 80 / 1200 T

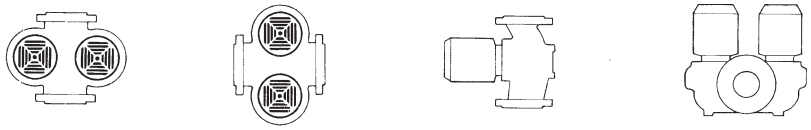
- D = Twin version
- KL = Series
- P = M = 4-pole motor; P = 2-pole motor
- E = motor complete with HYDRODRIVER
- 80 = (DN) Nominal diameter of flanged connectors
- 1200 = Maximum head (cm)
- T = M = single-phase motor; T = three-phase motor

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

KLME - KLPE



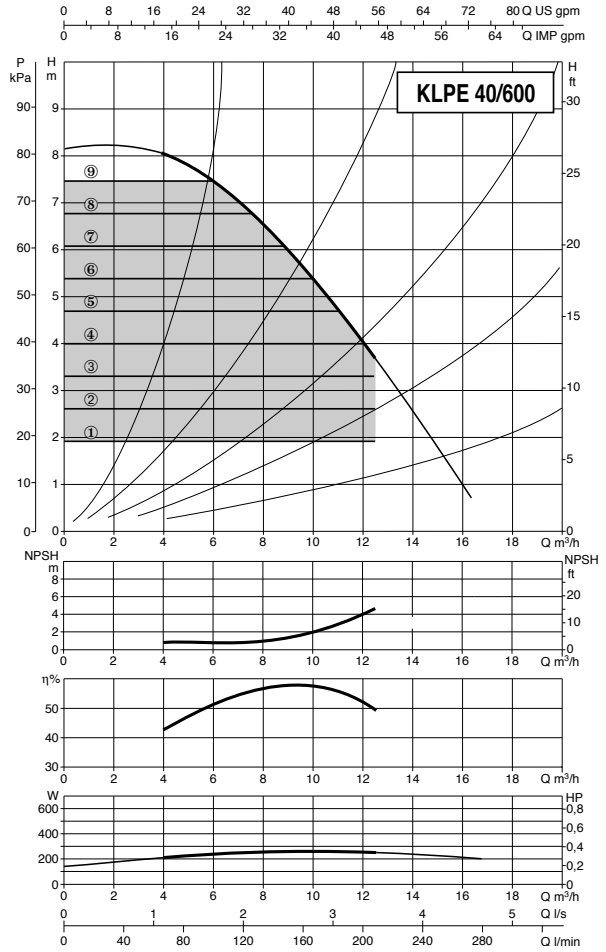
DKLME - DKLPE

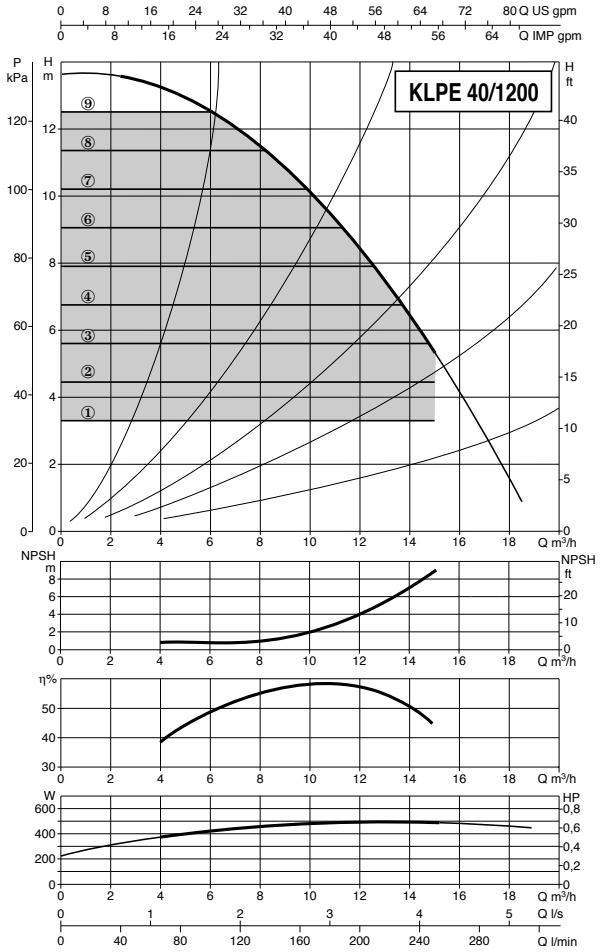


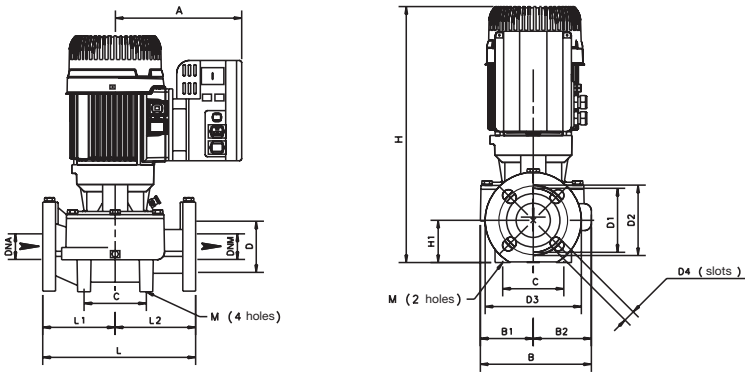
Le curve di prestazione sono basate su valori di viscosità cinematica = 1 mm²/s e densità pari a 1000 kg/m³. Tolleranza delle curve secondo ISO 9906.

KLPE 40

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







MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	I	L	L1	L2	M
KLPE 40/600 M	227	179	82	97	100	40	40	80	100	110	150	4 slots 18x23	395	66	–	250	125	125	2 FORI 10
KLPE 40/1200 M	227	179	82	97	100	40	40	80	100	110	150		395	66	–	250	125	125	

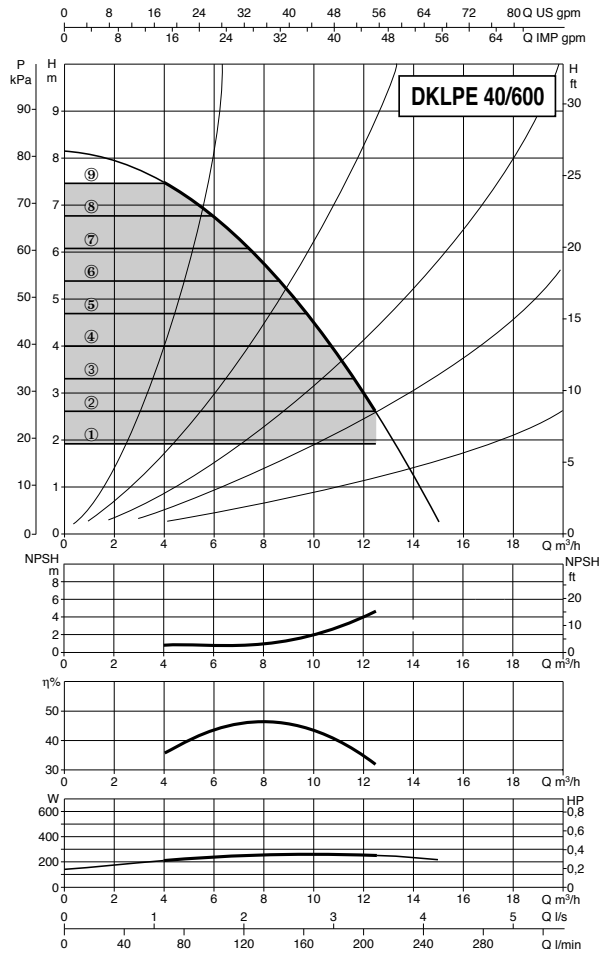
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
KLPE 40/600 M	1x208-240 V ~	2 POLES	2950	0,36	0,37	0,5	4-4,6
KLPE 40/1200 M	1x208-240 V ~	2 POLES	2890	0,62	0,55	0,75	4-4,6

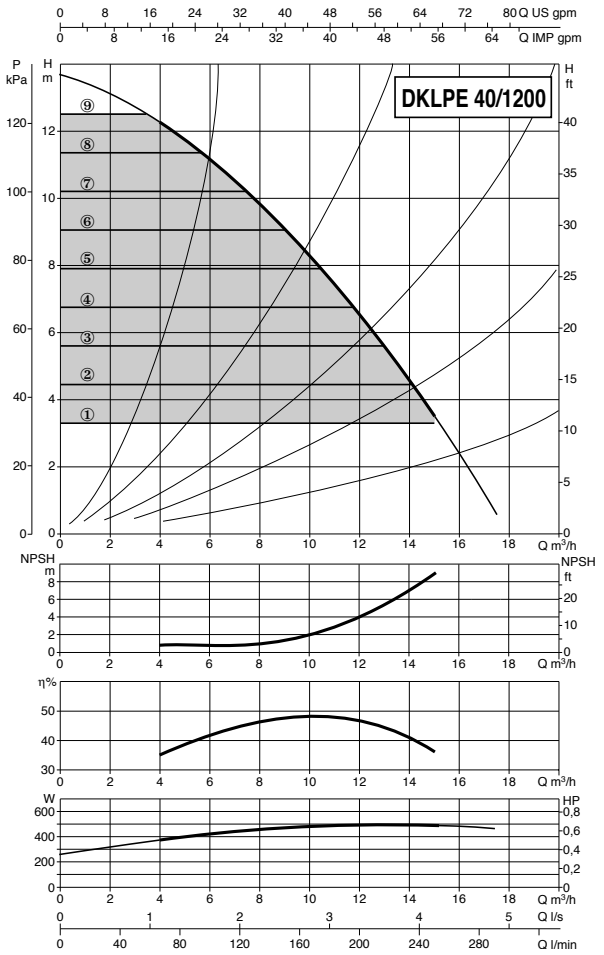
PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
530	280	470	0,07	27,8
530	280	470	0,07	27,8

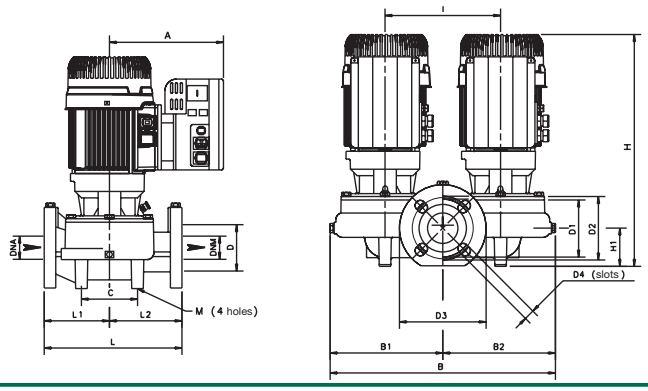
Le curve di prestazione sono basate su valori di viscosità cinematica = 1 mm²/s e densità pari a 1000 kg/m³. Tolleranza delle curve secondo ISO 9906.

DKLPE 40

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







MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	I	L	L1	L2	M
DKLPE 40/600 M	227	372	185	187	100	40	40	80	100	110	150	4 slots 18x23	400	66	200	250	125	125	2 FORI 10
DKLPE 40/1200 M	227	372	185	187	100	40	40	80	100	110	150		400	66	200	250	125	125	

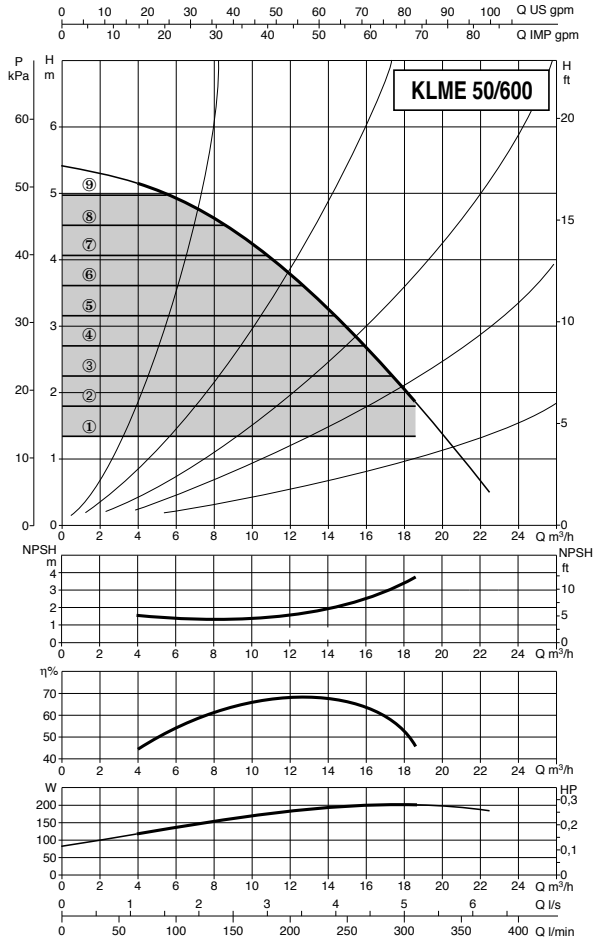
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
DKLPE 40/600 M	1x208-240 V ~	2 POLES	2950	0,36	0,37	0,5	4-4,6
DKLPE 40/1200 M	1x208-240 V ~	2 POLES	2890	0,62	0,55	0,75	4-4,6

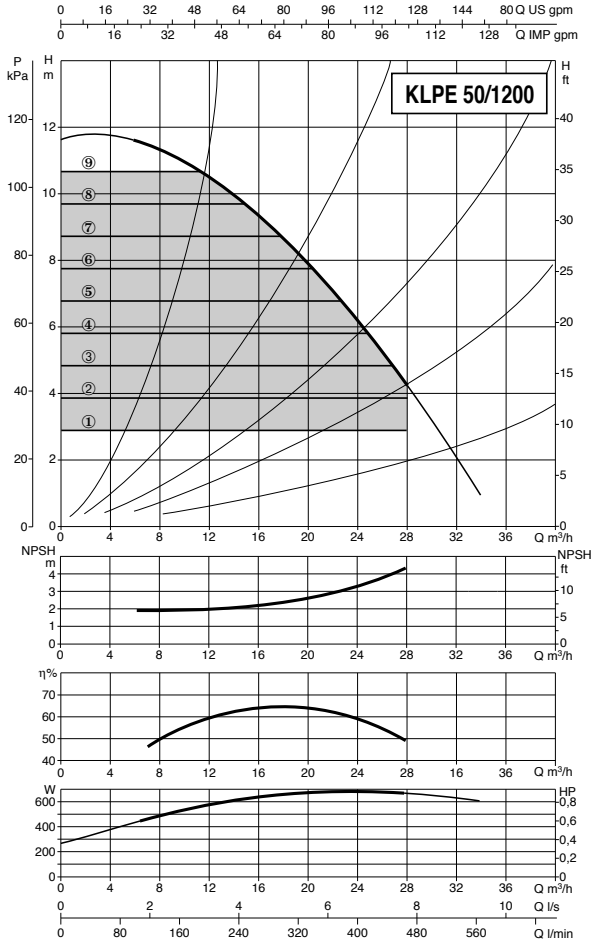
PACKING DIMENSIONS			VOLUME m³	WEIGHT
L/A	L/B	H		Kg
540	420	610	0,138	47
540	420	610	0,138	52

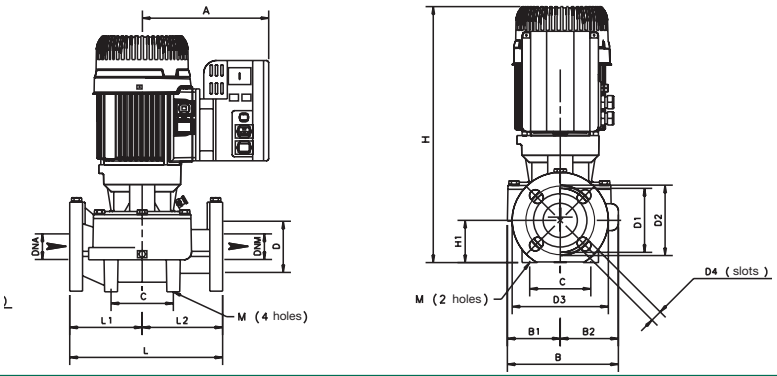
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

KLME 50 - KLPE 50

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







MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	I	L	L1	L2	M
KLME 50/600 M	230	204	94	110	100	50	50	90	110	125	165	4 slots 18x25,5	414	73	–	280	140	140	2 FORI 10
KLPE 50/1200 M	230	204	94	110	100	50	50	90	110	125	165		414	73	–	280	140	140	

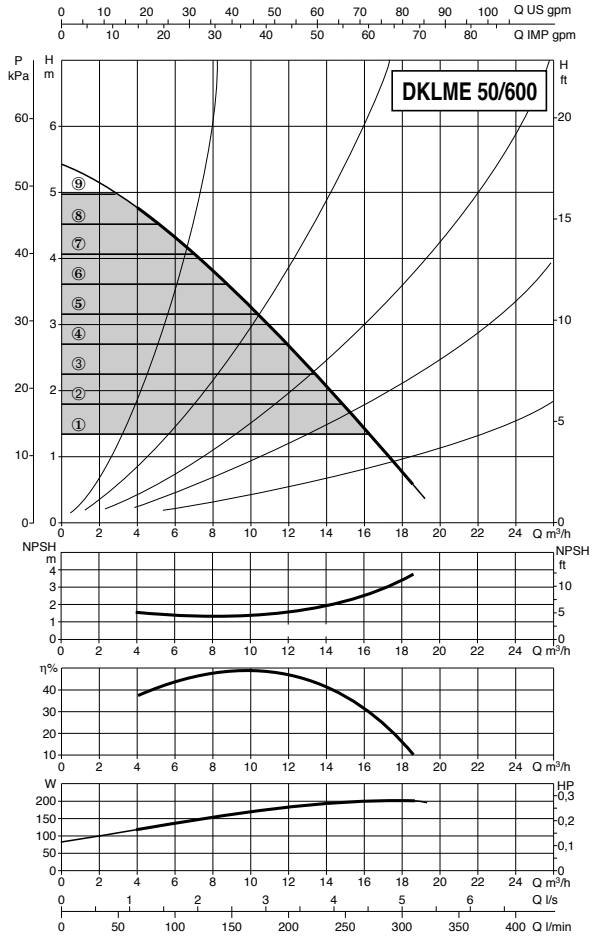
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
KLME 50/600 M	1x208-240 V ~	4 POLES	1340	0,33	0,25	0,33	2,8-3,2
KLPE 50/1200 M	1x208-240 V ~	2 POLES	2890	0,93	0,75	1	7,1-8,2

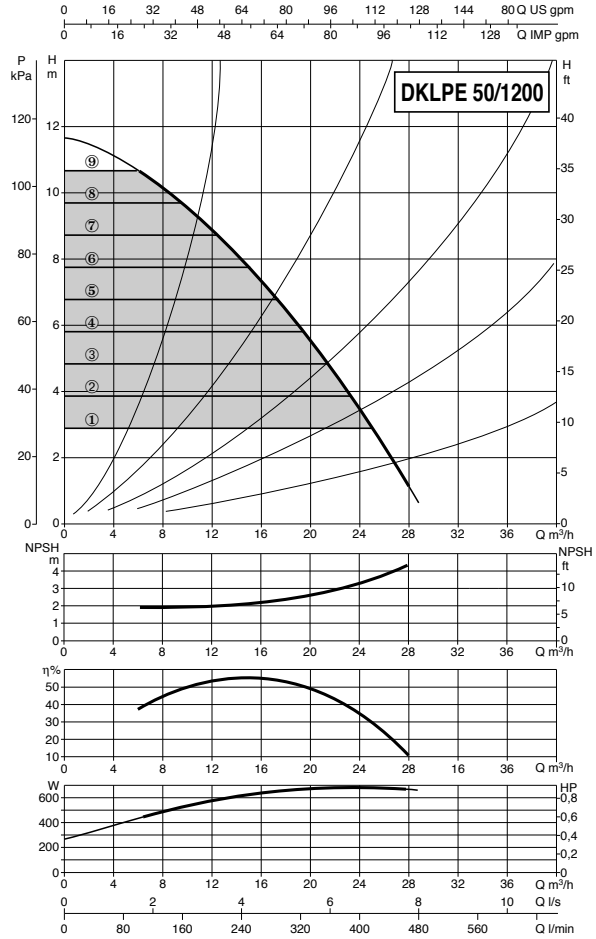
PACKING DIMENSIONS			VOLUME m³	WEIGHT
L/A	L/B	H		Kg
530	280	470	0,07	32,8
530	280	470	0,07	34,8

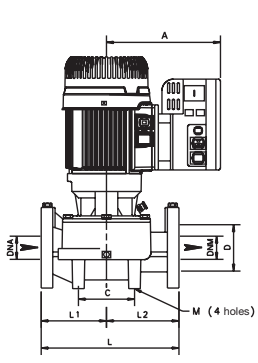
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

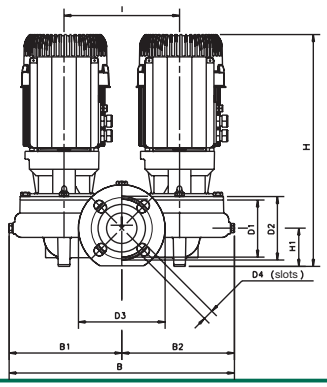
DKLME 50 - DKLPE 50

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









MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	I	L	L1	L2	M
DKLME 50/600 M	230	434	217	217	120	50	50	90	110	125	165	4 slots 18x25,5	414	66	200	250	125	125	4 FORI 14
DKLPE 50/1200 M	230	434	217	217	120	50	50	90	110	125	165		414	66	200	250	125	125	

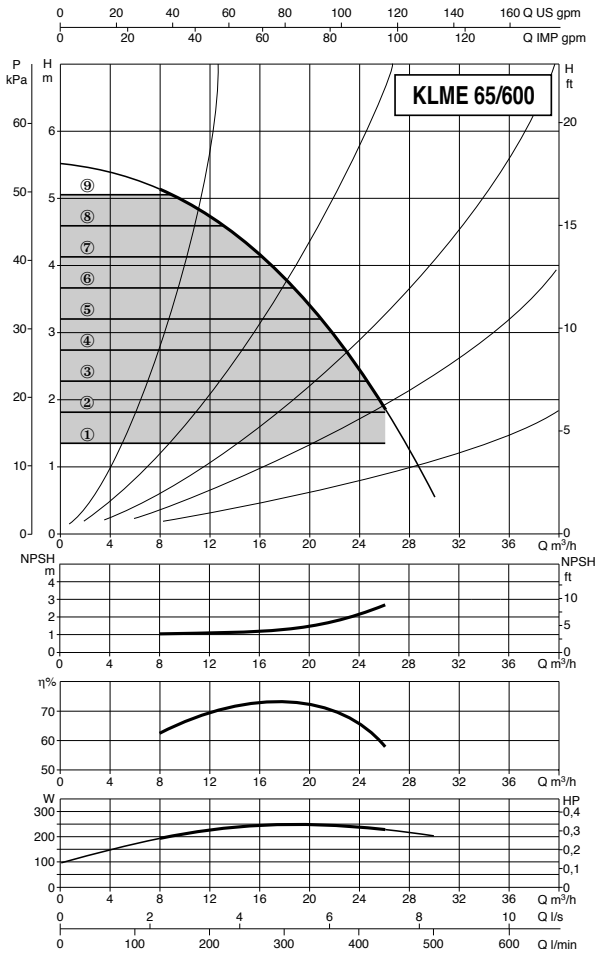
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
DKLME 50/600 M	1x208-240 V ~	4 POLES	1340	0,33	0,25	0,33	2,8-3,2
DKLPE 50/1200 M	1x208-240 V ~	2 POLES	2890	0,93	0,75	1	7,1-8,2

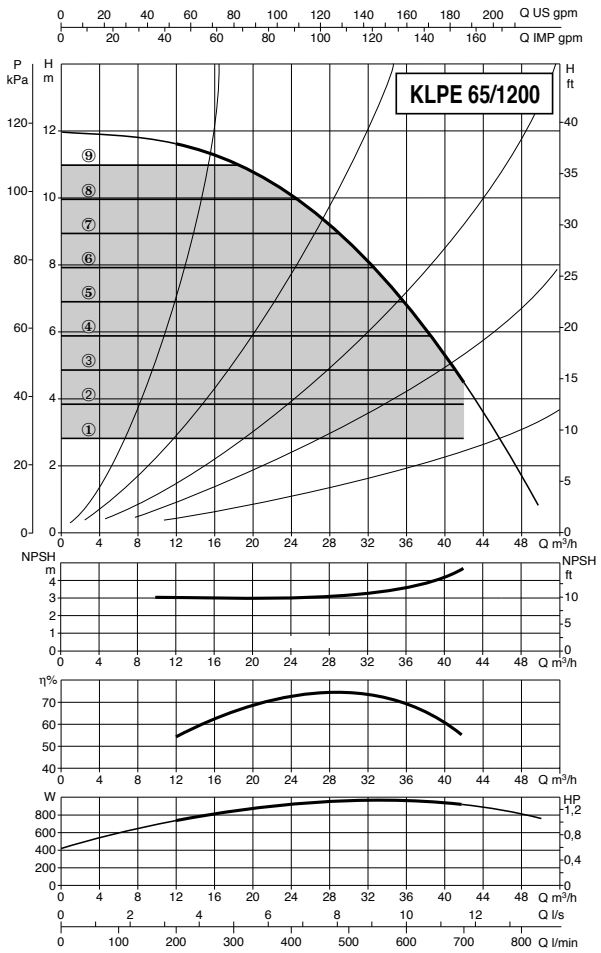
PACKING DIMENSIONS			VOLUME m³	WEIGHT Kg
L/A	L/B	H		
540	420	610	0,138	67
540	420	610	0,138	79

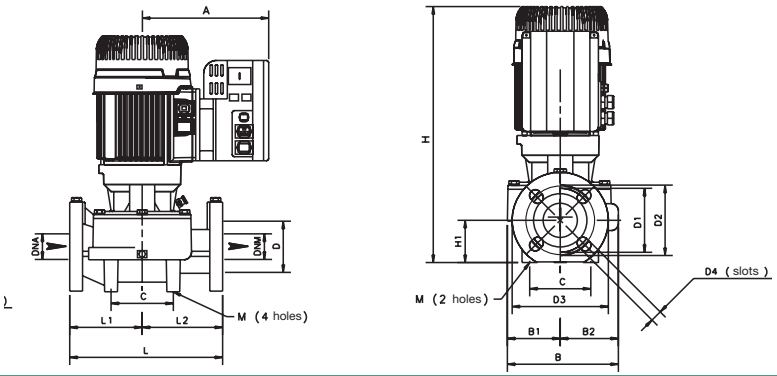
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

KLME 65 - KLPE 65

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







MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	I	L	L1	L2	M
KLME 65/600 M	230	228	99	129	100	65	65	110	130	145	185	4 slots 18x25,5	433	82	–	340	170	170	2 FORI 12
KLPE 65/1200 T	230	228	99	129	100	65	65	110	130	145	185		433	82	–	340	170	170	

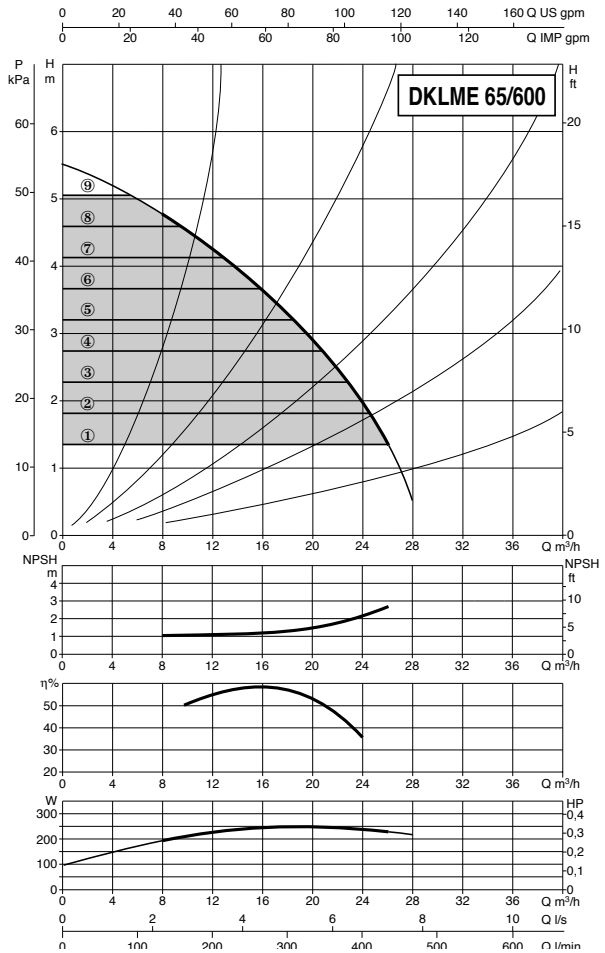
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
KLME 65/600 M	1x208-240 V ~	4 POLES	1400	0,37	0,37	0,5	2,8-3,2
KLPE 65/1200 T	3x380-480 V ~	2 POLES	2880	1,34	1,1	1,5	3,9-4,9

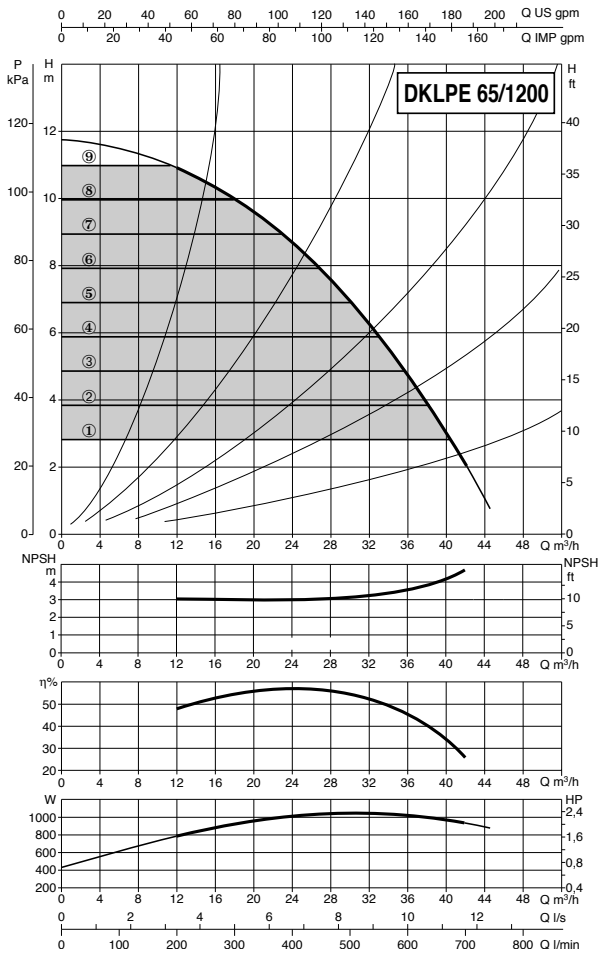
PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
530	290	540	0,095	37,8
530	290	540	0,095	43,4

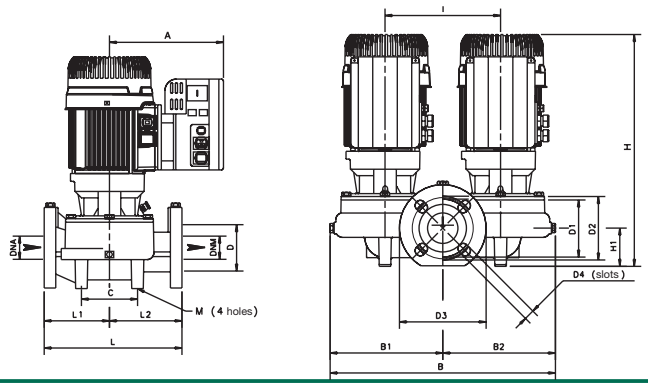
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

DKLME 65 - DKLPE 65

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







MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	I	L	L1	L2	M
DKLME 65/600 M	230	455	226	229	140	65	65	110	130	145	185	4 slots 18x25,5	433	82	240	340	170	170	4 FORI 14
DKLPE 65/1200 T	230	455	226	229	140	65	65	110	130	145	185		433	82	240	340	170	170	

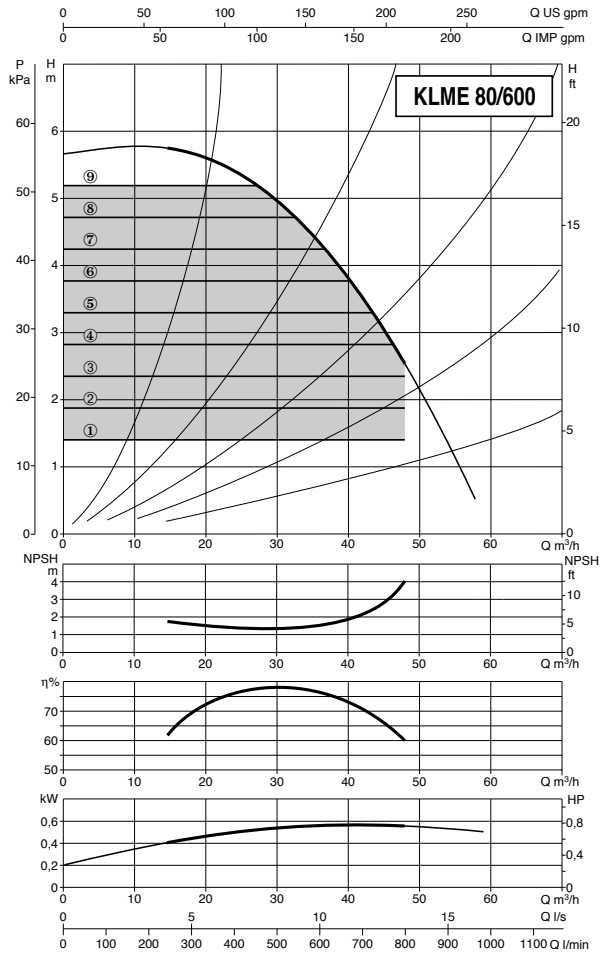
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
DKLME 65/600 M	1x208-240 V ~	4 POLES	1400	0,37	0,37	0,5	2,8-3,2
DKLPE 65/1200 T	3x380-480 V ~	2 POLES	2880	1,34	1,1	1,5	3,9-4,9

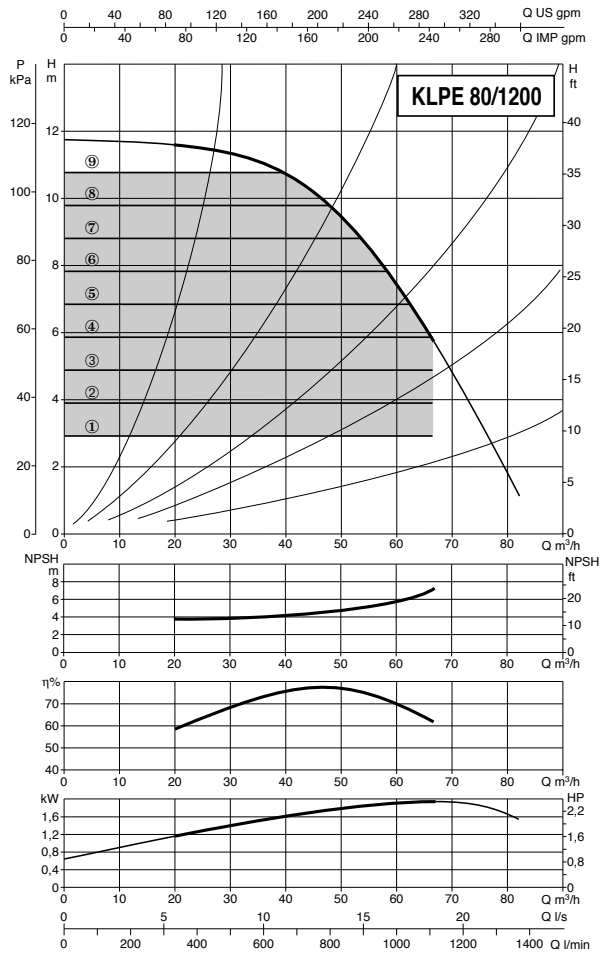
PACKING DIMENSIONS			VOLUME m³	WEIGHT Kg
L/A	L/B	H		
730	630	720	0,33	71,7
730	630	720	0,33	89,6

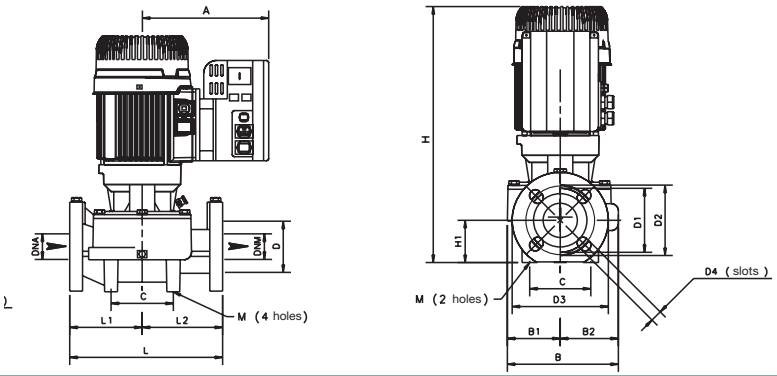
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

KLME 80- KLPE 80

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







MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	I	L	L1	L2	M
KLME 80/600 M	230	229	99	130	115	80	80	128	150	160	200	4 slots 18x23	463	97	–	360	190	170	2 FORI 12
KLPE 80/1200 T	230	229	99	130	115	80	80	128	150	160	200		463	97	–	360	190	170	

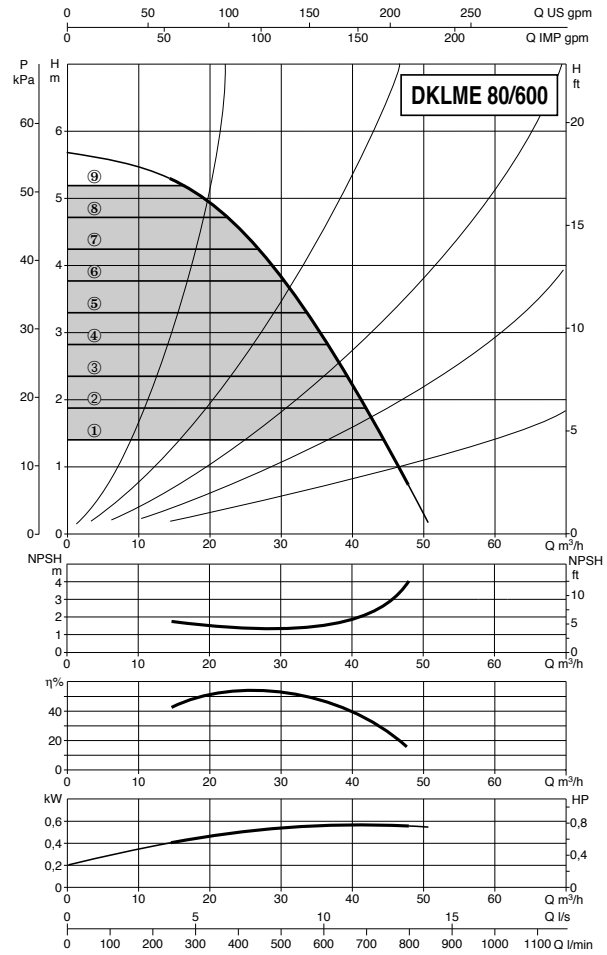
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
KLME 80/600 M	1x208-240 V ~	4 POLES	1440	0,77	0,75	1	5,4-6,2
KLPE 80/1200 T	3x380-480 V ~	2 POLES	2840	2,16	1,84	2,5	4,7-5,9

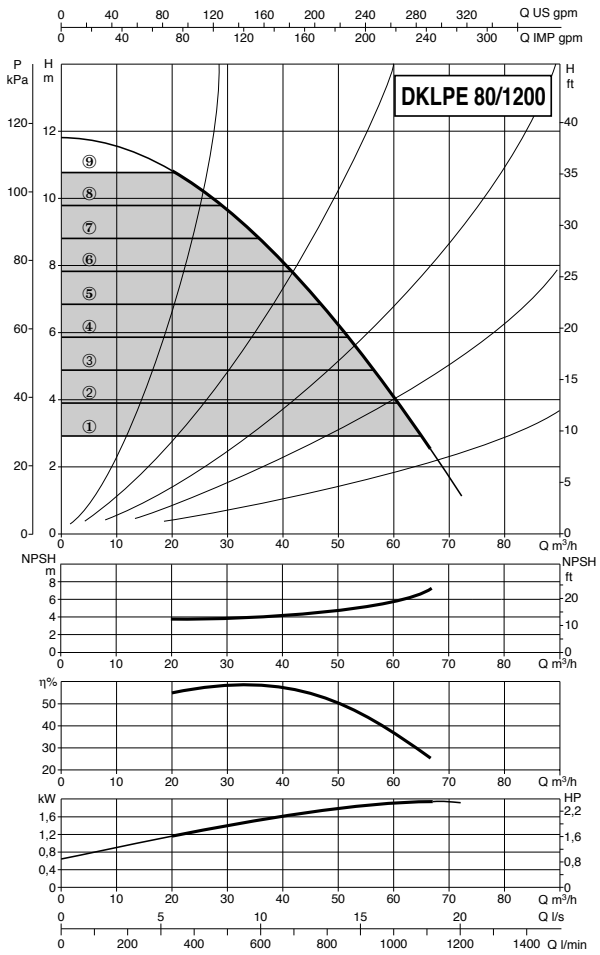
PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
530	290	610	0,095	47,3
530	290	610	0,095	48,3

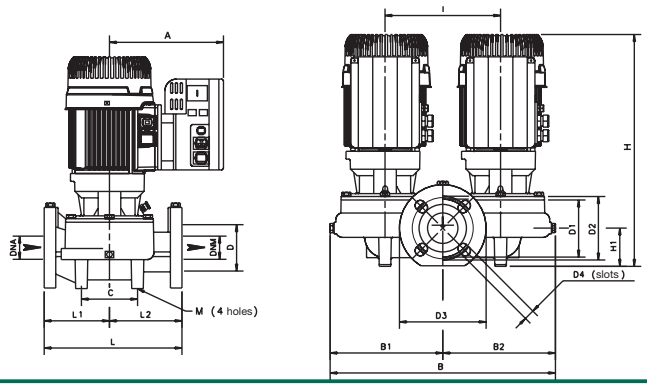
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

DKLME 80 - DKLPE 80

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







MODEL	A	B	B1	B2	C	DNA	DNM	D	D1	D2	D3	D4	H	H1	I	L	L1	L2	M
DKLME 80/600 M	230	463	230	233	150	80	80	128	150	160	200	4 slots 18x23	463	97	240	380	190	170	4 FORI 14
DKLPE 80/1200 T	230	463	230	233	150	80	80	128	150	160	200		463	97	240	380	190	170	

MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
DKLME 80/600 M	1x208-240 V ~	4 POLES	1440	0,77	0,75	1	5,4-6,2
DKLPE 80/1200 T	3x380-480 V ~	2 POLES	2840	2,16	1,84	2,5	4,7-5,9

PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
730	630	720	0,33	87,5
730	630	720	0,33	89,5

CME

CE

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 brushings 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

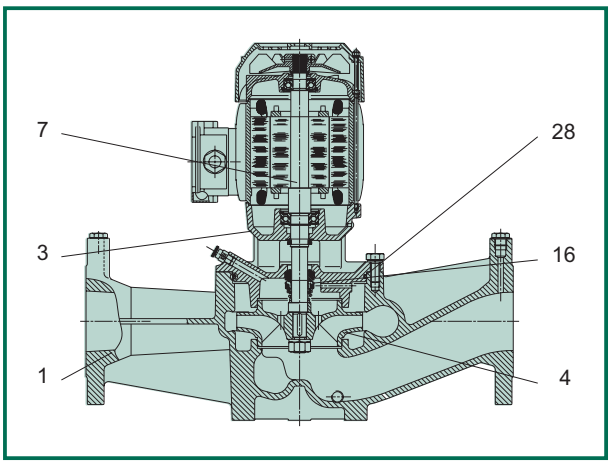
Construction features of electronic part (HYDRODRIVER)
Adjustment unit directly mounted on the electric pump that, by using the signal of the standard differential transducer, already connected and ready to use, modulates the speed of rotation in order to keep the differential pressure of the system 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.



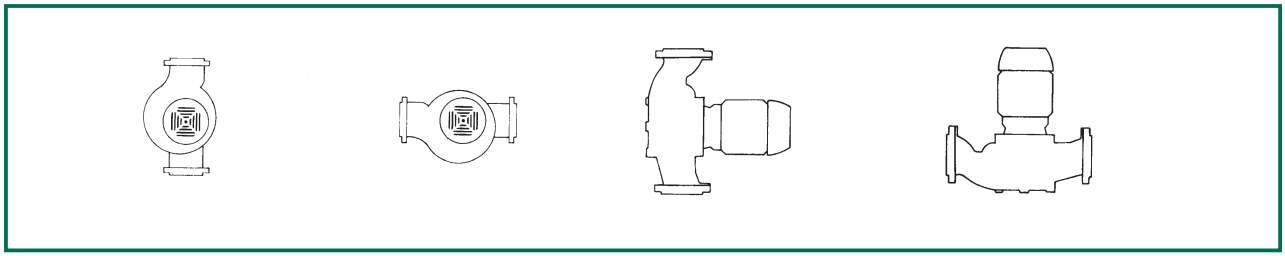
- Operating range: from 1,5 a to 270 m^3/h with a head of up to 21 metres.
- Pumped liquid: clean, without solid or abrasive substances, not viscous, not aggressive, not crystallised and chemically neutral, close to water characteristics.
- Liquid temperature range: from -15°C to +120°C.
- Maximum ambient 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)

C M E 50 / 1000 T

- Circulator
- M = 4-pole motor
- E = motor complete with HYDRODRIVER
- (DN) Nominal diameter of flanged connectors
- Maximum head (cm)
- T = three-phase motor

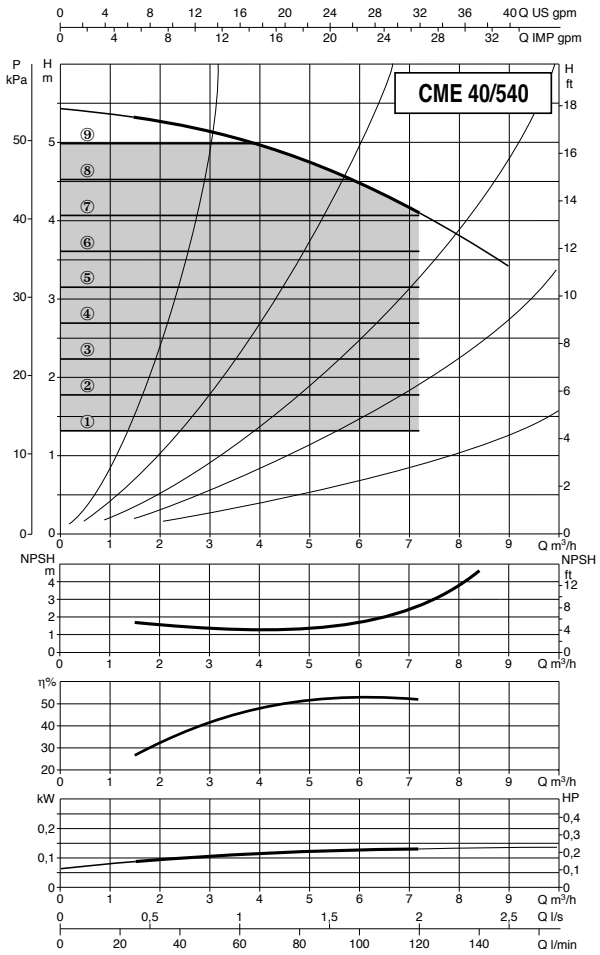
- Installation: fixed horizontal or vertical provided the motor is always positioned above the pump.

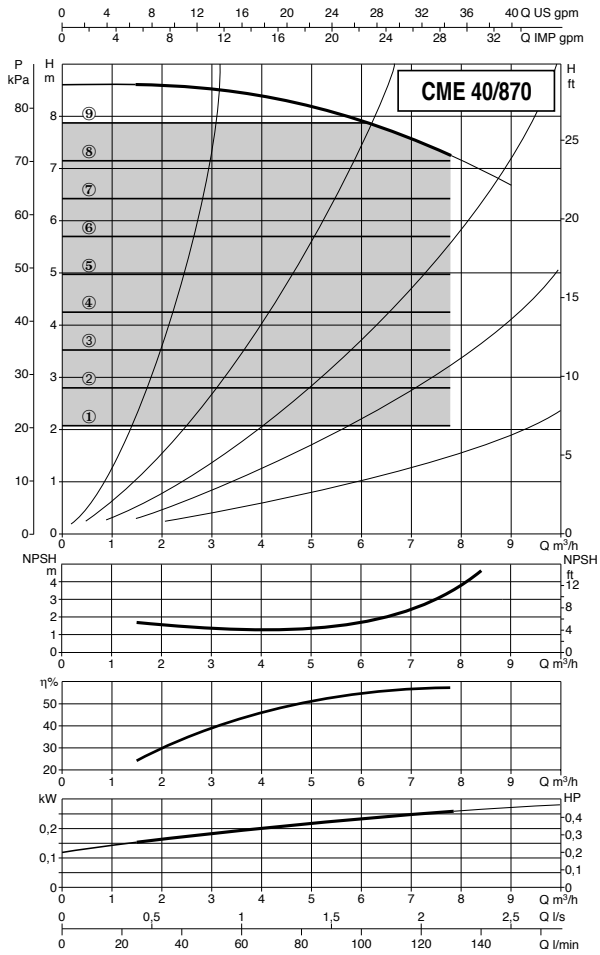


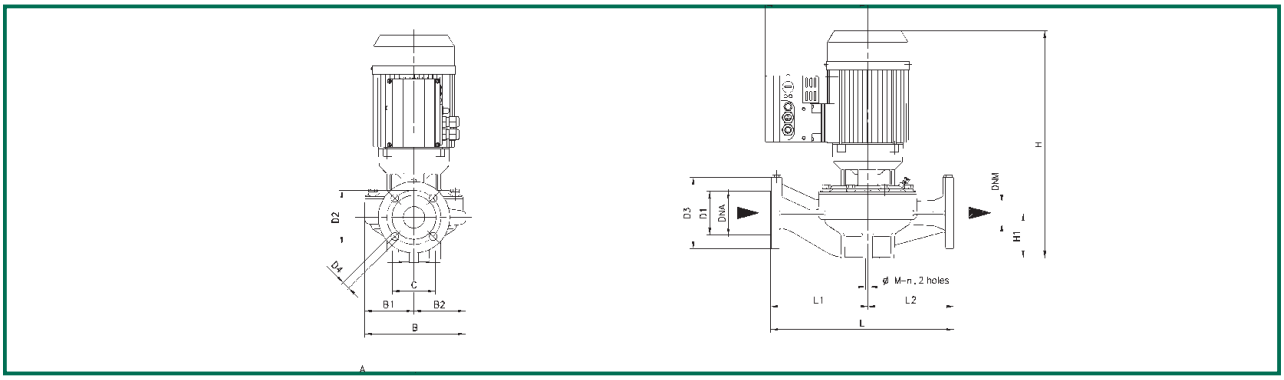
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

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 kW	P2 NOMINAL HP	In A
CME 40/540 M	1x208-240 V ~	4 POLES	1480	0,34	0,75	1	4-4,6
CME 40/870 M	1x208-240 V ~	4 POLES	1480	0,52	0,75	1	4-4,6

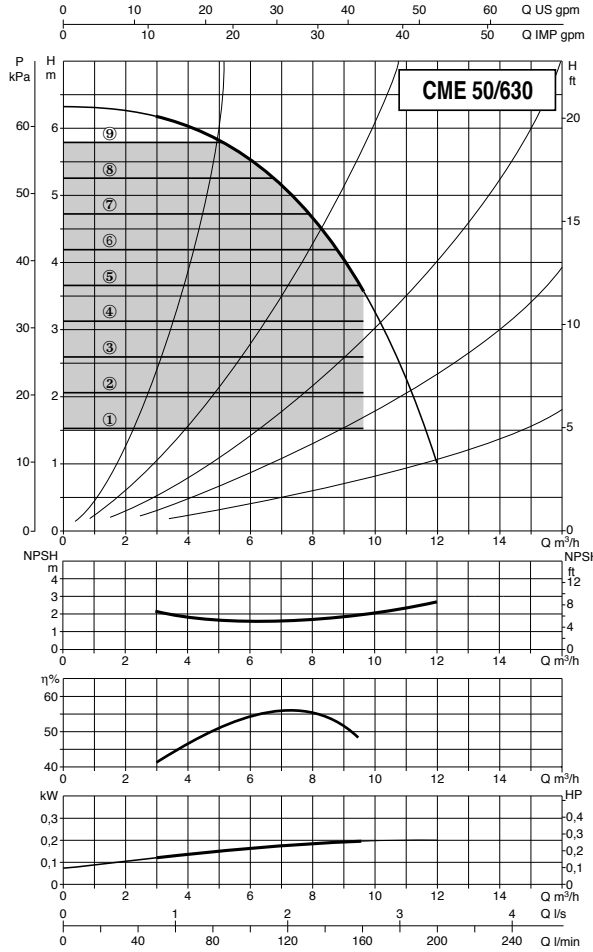
PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
680	330	580	0.13	46
680	330	580	0.13	46

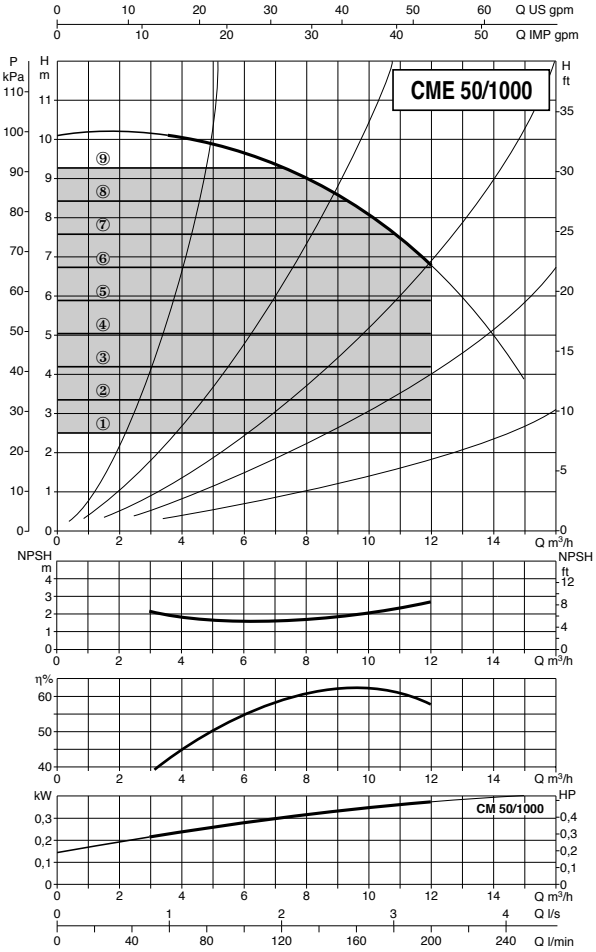
DAB PUMP PERFORMANCE

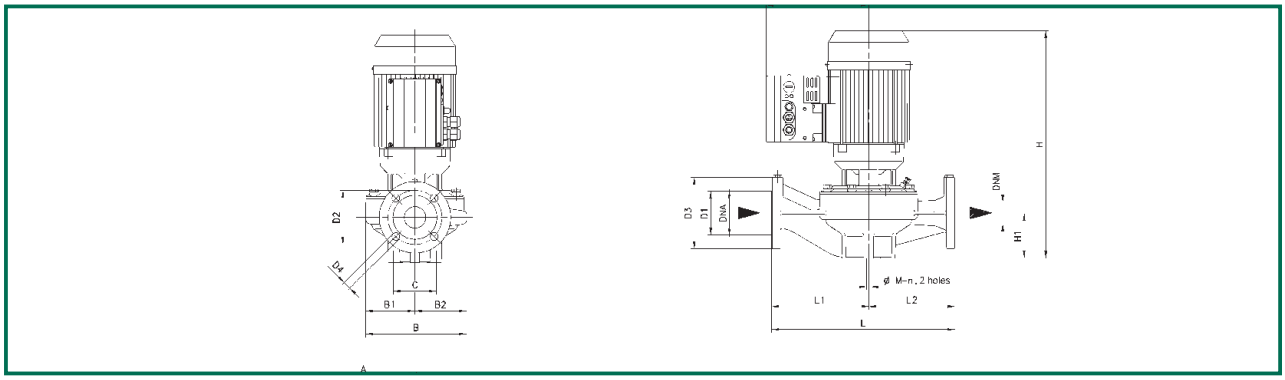
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

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

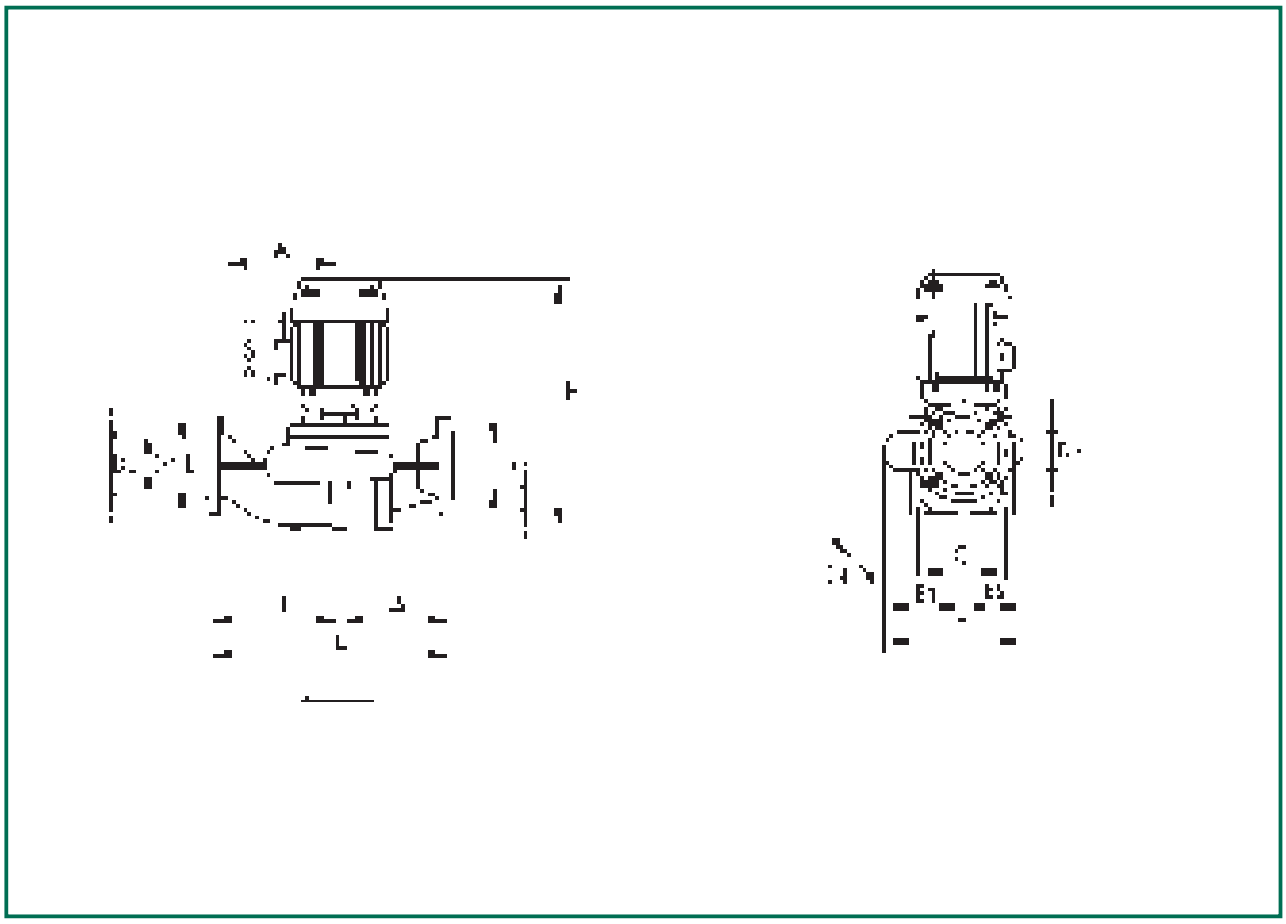
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
CME 50/630 M	1x208-240 V ~	4 POLES	1480	0,51	0,73	1	4-4,6
CME 50/1000 M	1x208-240 V ~	4 POLES	1470	0,66	0,73	1	5,4-6,2

PACKING DIMENSIONS			VOLUME m³	WEIGHT Kg
L/A	L/B	H		
680	330	580	0.13	51,6
680	330	580	0.13	51,6

Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. 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 FORI 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

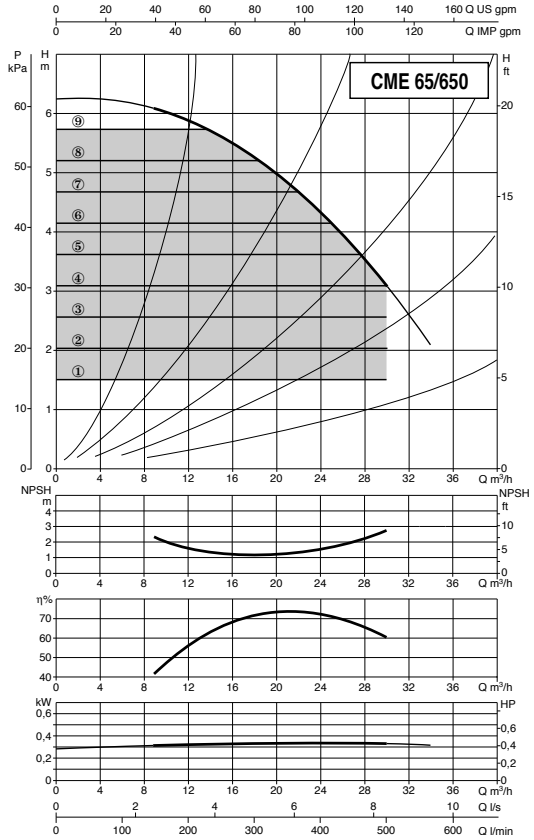
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
CME 65/650 M	1x208-240 V ~	4 POLES	1430	0,64	0,55	0,75	5,4-6,2
CME 65/960 M	1x208-240 V ~	4 POLES	1430	1,8	1,1	1,5	7,1-8,2
CME 65/1400 T	3x380-480 V ~	4 POLES	1450	2,16	2,2	3	3,7-4,7

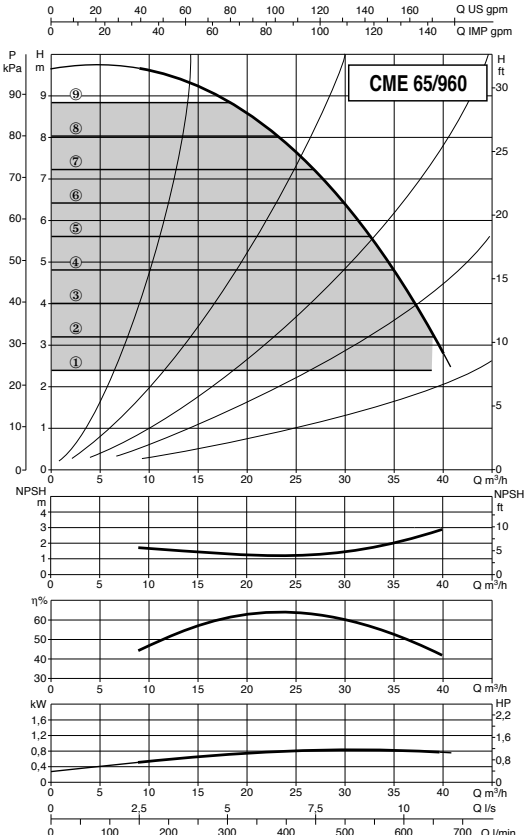
PACKING DIMENSIONS			VOLUME m^3	WEIGHT Kg
L/A	L/B	H		
680	330	560	0,12	50
670	390	710	0,18	70
670	390	710	0,18	79

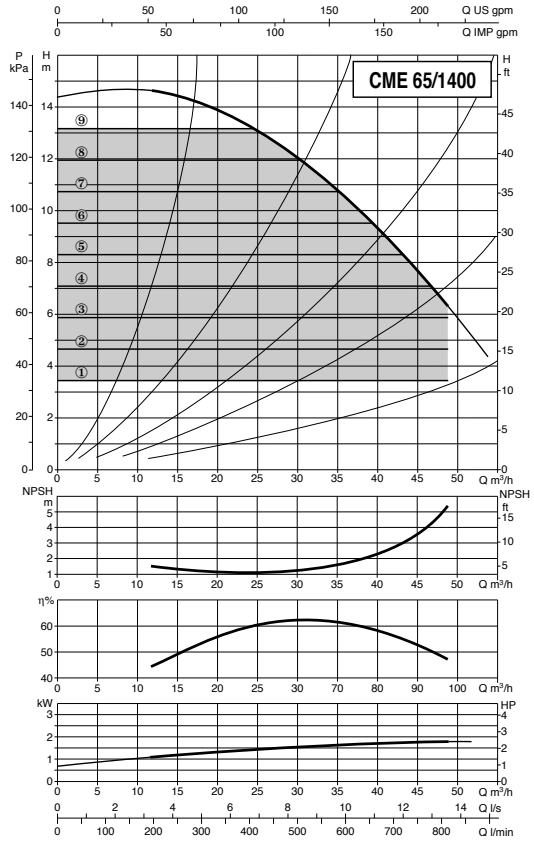
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO 9906.

CME 65

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



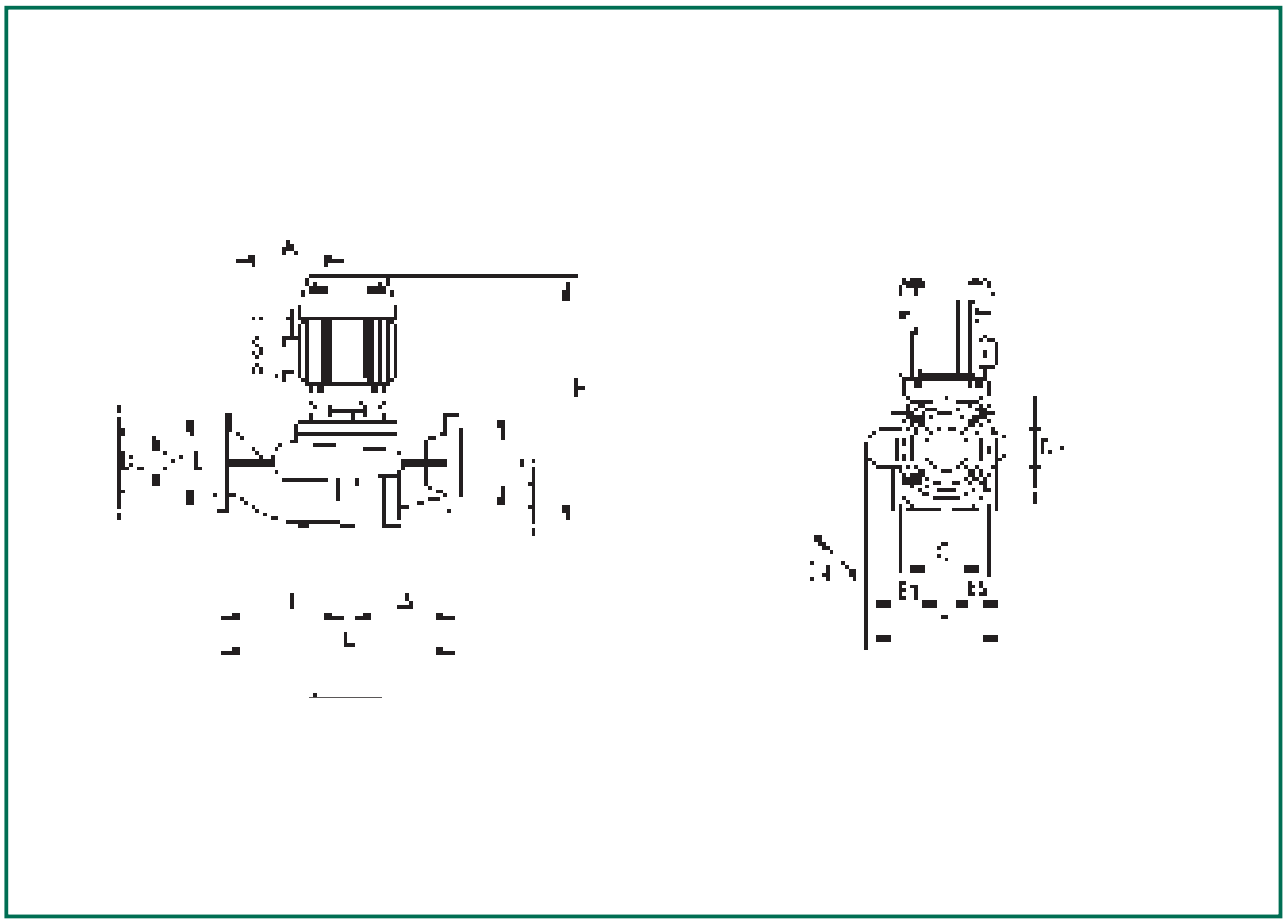




Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO 9906.

CME 80

Liquid temperature range: from -15°C to +120°C
Maximum temperature operating: +40°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 FORI Ø 18	16
CME 80/980 T	525	262,5	262,5	320	173	147	148	545	125	80	138	200	160		16
CME 80/1330T	525	262,5	262,5	320	173	147	148	545	125	80	138	200	160		16

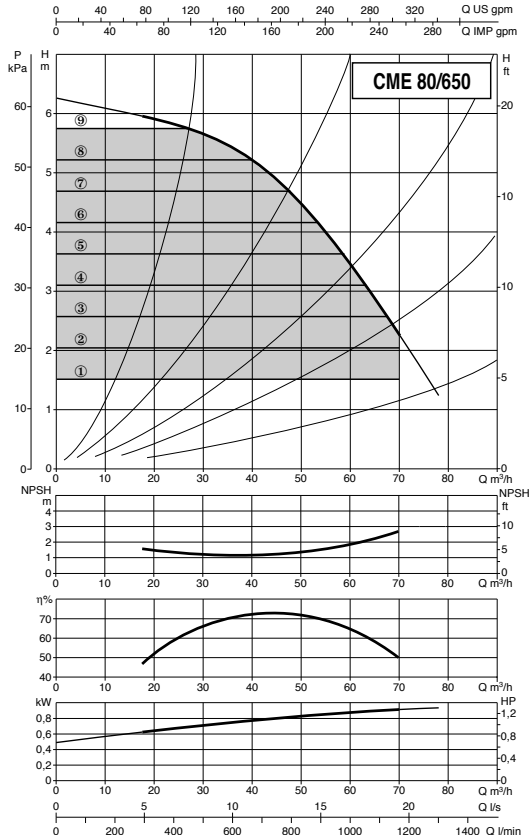
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
CME 80/650 M	1x208-240 V ~	4 POLES	1430	1,13	1,1	1,5	7,1-8,2
CME 80/980 T	3x380-480 V ~	4 POLES	1400	1,96	2,2	3	4,7-5,9
CME 80/1330 T	3x380-480 V ~	4 POLES	1400	3,4	3	4	7,2

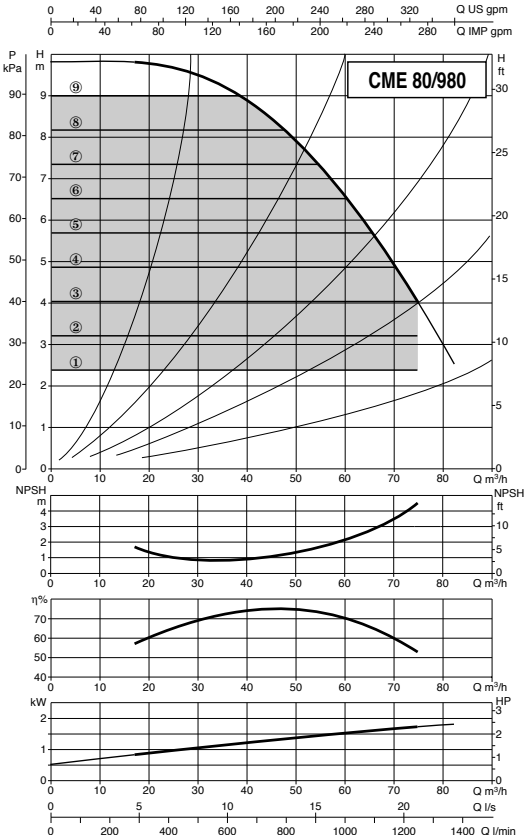
PACKING DIMENSIONS			VOLUME m^3	WEIGHT Kg
L/A	L/B	H		
670	390	710	0,18	65
670	390	710	0,18	89
670	390	710	0,18	99

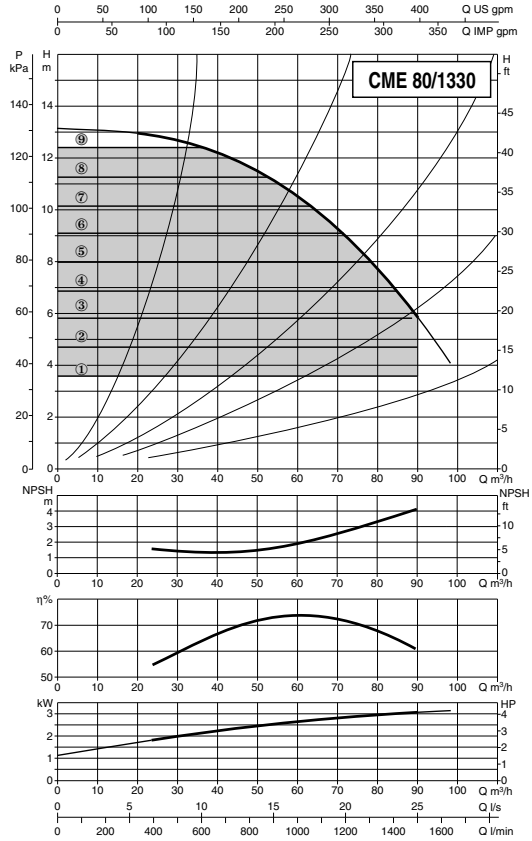
Performance curves based on kinematic viscosity values equal to 1 mm^2/s at a density equal to 1000 kg/m^3. Curve tolerance in accordance with ISO 9906.

CME 80

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



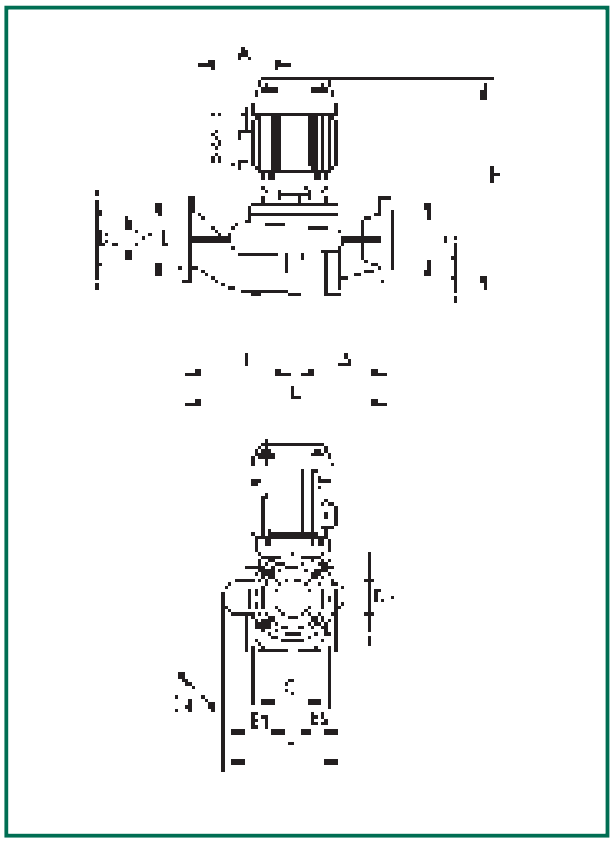


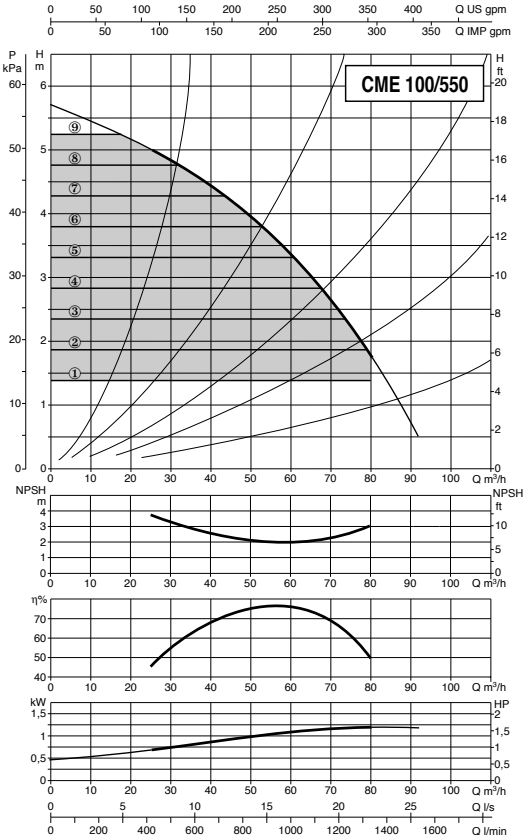


Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

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 FORI 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

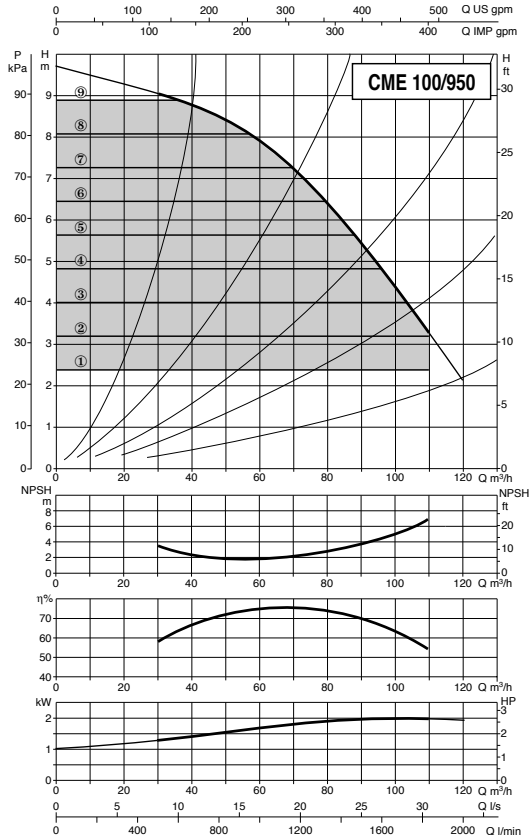
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
CME 100/550 M	1x208-240 V ~	4 POLES	1430	1,08	1,1	1,5	7,1-8,2
CME 100/950 T	3x380-480 V ~	4 POLES	1425	2,42	2,2	3	3,7-4,7
CME 100/1500 T	3x380-480 V ~	4 POLES	1400	4,89	3,7	5	7,9-10
CME 100/1800 T	3X380-480 V ~	4 POLES	1450	6,7	5,5	7,5	9,66-12,2
CME 100/2000 T	3x380-480 V ~	4 POLES	1450	8,2	7,4	10	12,7-16

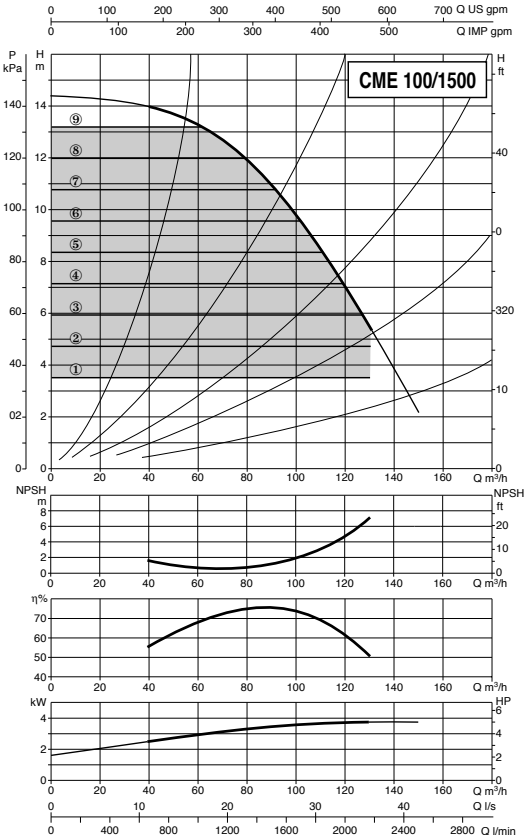
PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
670	390	710	0,18	80
670	390	710	0,18	98
670	390	710	0,18	102
780	440	860	0,29	147
780	440	860	0,29	157

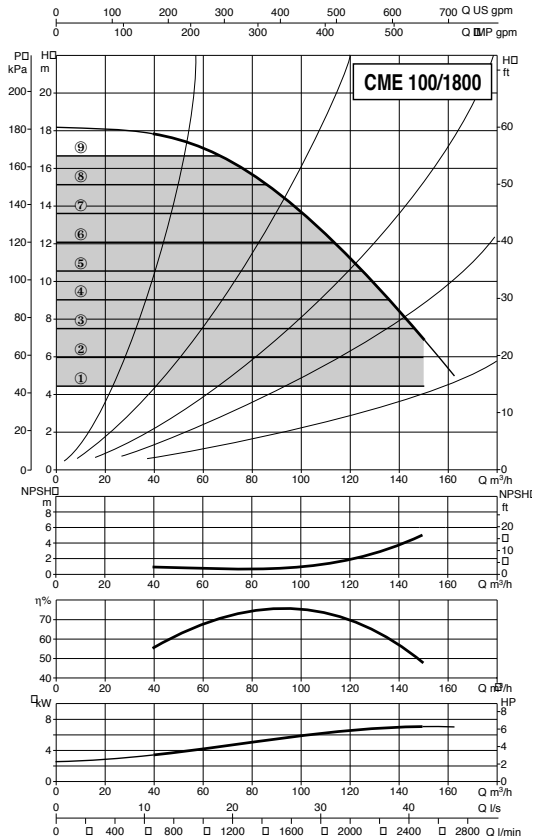
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

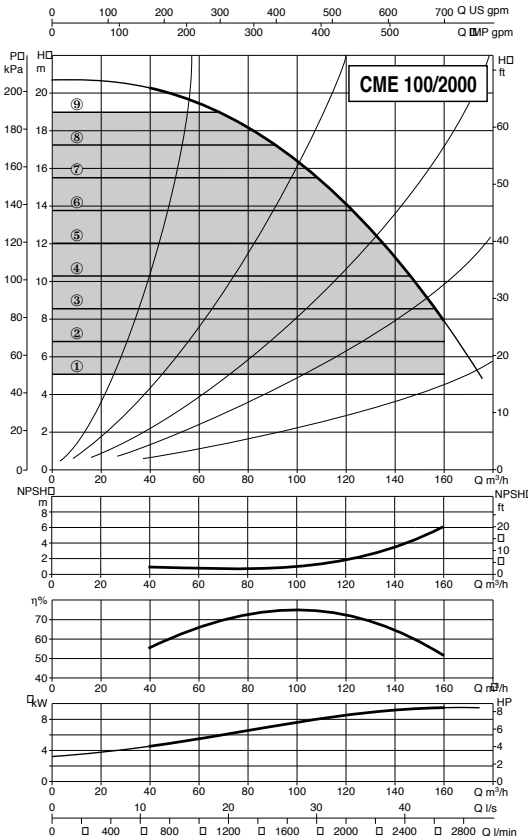
CME 100

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





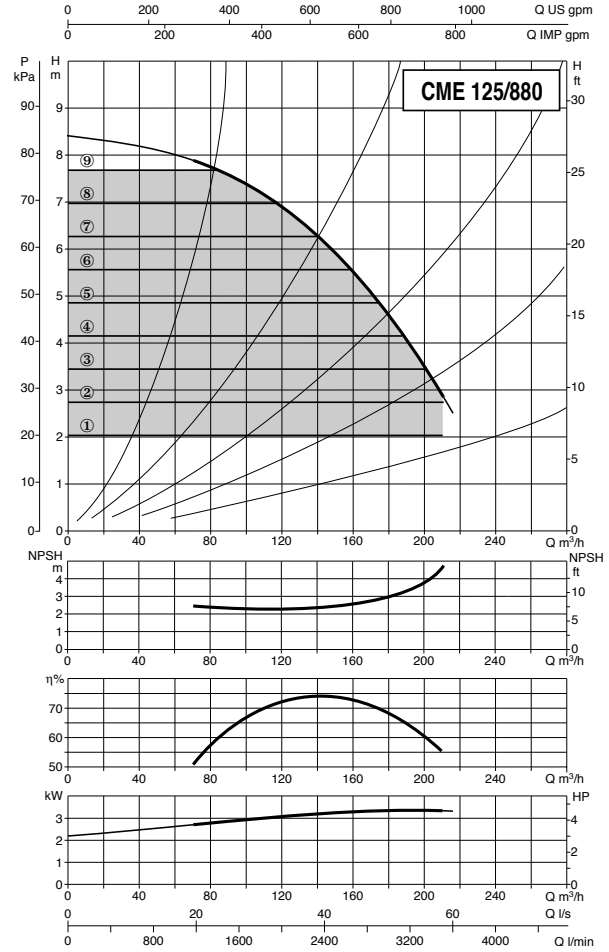


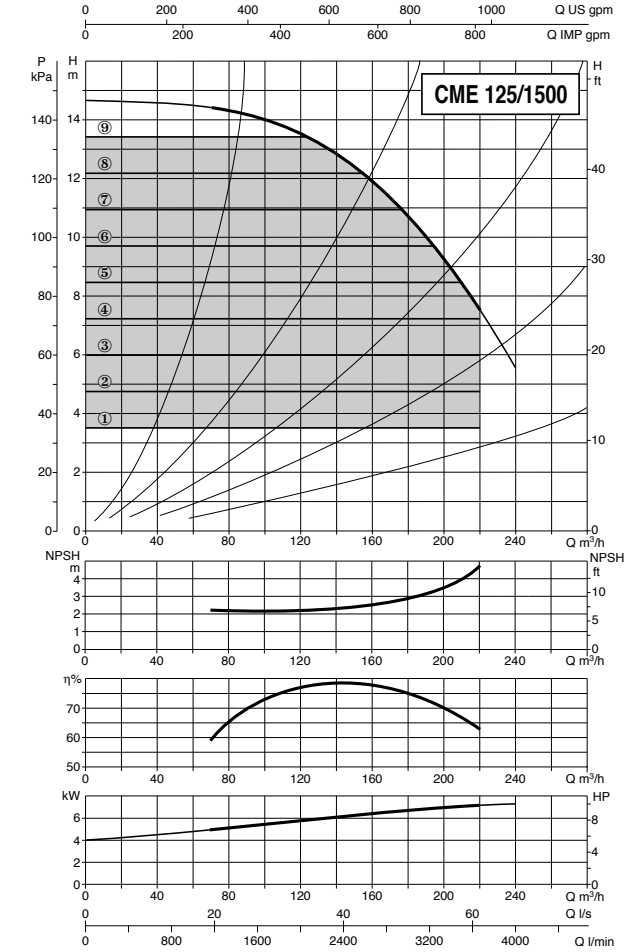


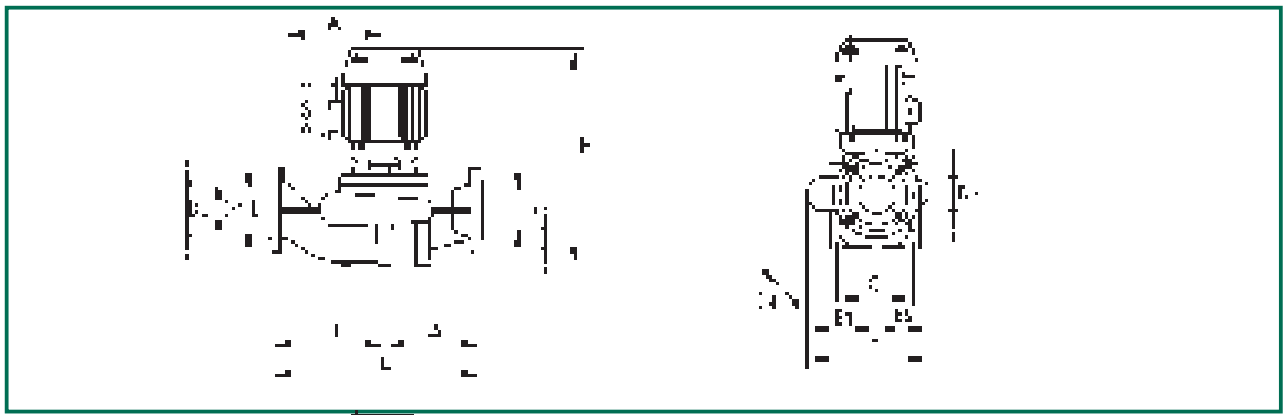
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

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 FORI Ø 18	16
CME 125/1500 T	630	350	280	386	175	145	202	479	140	125	188	250	210		16

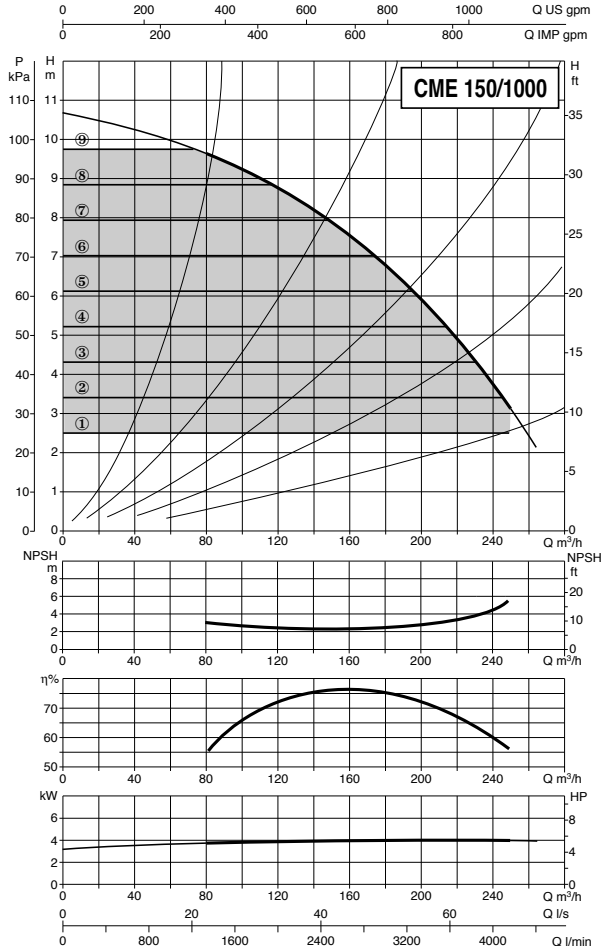
MODEL	ELECTRICAL DATA						
	VOLTAGE 50-60 Hz	MOTOR TYPE	r.p.m. n. 1/min.	P1 MAX kW	P2 NOMINAL kW	P2 NOMINAL HP	In A
CME 125/880 T	3x380-480 V ~	4 POLES	1400	4,22	3,7	5	5-6,4
CME 125/1500 T	3x380-480 V ~	4 POLES	1450	8,6	7,5	10	12,7-16

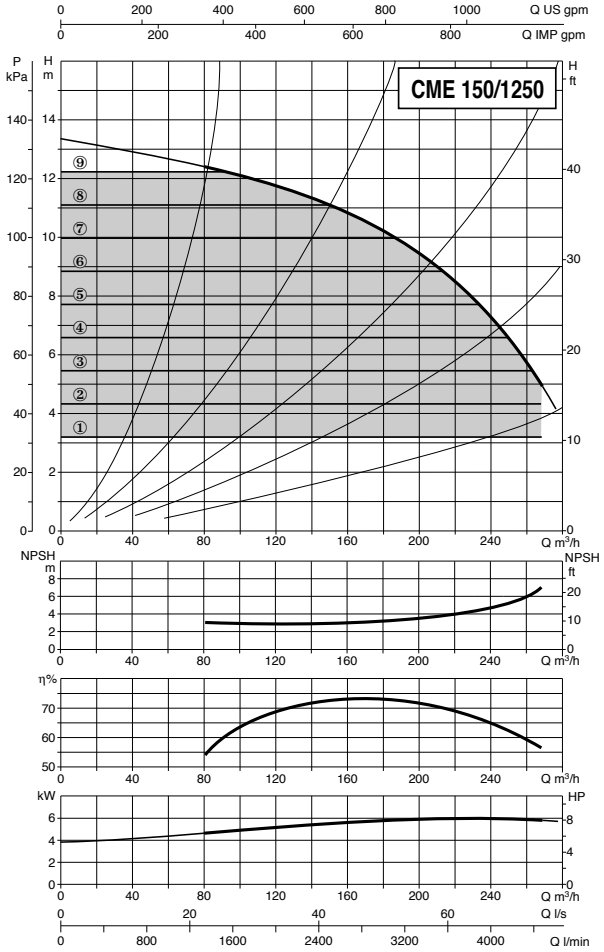
PACKING DIMENSIONS L/A	PACKING DIMENSIONS L/B	PACKING DIMENSIONS H	VOLUME m³	WEIGHT Kg
780	440	860	0,29	132
780	440	860	0,29	180

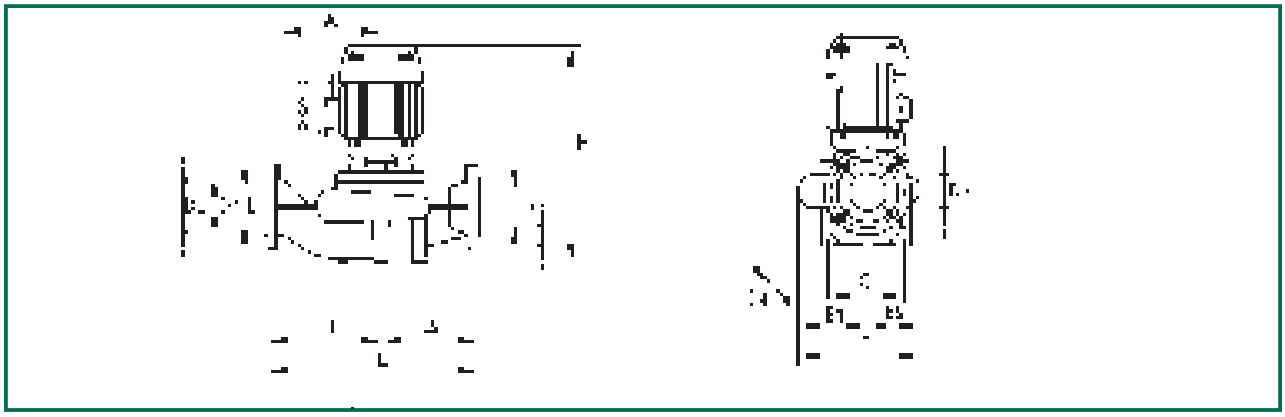
Performance curves based on kinematic viscosity values equal to 1 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO 9906.

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 FORI Ø 22	16
CME 150/1250 T	690	375	315	417	231	186	270	736	200	150	212	285	240		16

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

PACKING DIMENSIONS			VOLUME m³	WEIGHT Kg
L/A	L/B	H		
860	500	940	0,40	197
780	440	860	0,29	214

ACCESSORIES

COUNTERFLANGES

MODEL		COUNTERFLANGES										
SINGLE	TWIN	DN 40 PN 10	DN 50 PN 10	DN 65 PN 10	DN 80 PN 10	DN 40 PN 16	DN 50 PN 16	DN 65 PN 16	DN 80 PN 16	DN 100 PN 16	DN 125 PN 16	DN 150 PN 16
KLPE 40/600	DKLPE 40/600	●										
KLPE 40/1200	DKLPE 40/1200	●										
KLME 50/600	DKLME 50/600		●									
KLPE 50/1200	DKLPE 50/1200		●									
KLME 65/600	DKLME 65/600			●								
KLPE 65/1200	DKLPE 65/1200			●								
KLME 80/600	DKLME 80/600				●							
KLPE 80/1200	DKLPE 80/1200				●							
CME 40/540	–					●						
CME 40/870	–					●						
CME 50/630	–						●					
CME 50/1000	–						●					
CME 65/650	–							●				
CME 65/960	–							●				
CME 65/1400	–							●				
CME 80/650	–								●			
CME 80/980	–								●			
CME 80/1330	–								●			
CME 100/550	–									●		
CME 100/950	–									●		
CME 100/1500	–									●		
CME 100/1800	–									●		
CME 100/2000	–									●		
CME 125/880	–										●	
CME 125/1500	–										●	
CME 150/1000	–											●
CME 150/1250	–											●

NOTES

NOTES

DAB PUMPS LTD.
Unit 4, Stortford Hall Industrial
Park Dunmow Road, Bishops Stortford, Herts
CM23 5GZ - UK
Tel. +44 1279 652 776
Fax +44 1279 657 727

DAB PUMPS B.V.
Brusselstraat 150
B-1702 Groot-Bijgaarden - Belgium
Tel. +32 2 4668353
Fax +32 2 4669218

DAB PUMPEN DEUTSCHLAND GmbH
Tackweg 11
D - 47918 Tönisvorst - Germany
Tel. +49 2151 82136-0
Fax +49 2151 82136-36

DAB PUMPS IBERICA S.L.
Parque Empresarial San Fernando
Edificio Italia Planta 1ª
28830 - San Fernando De Henares - Madrid - Spain
Ph. +34 91 6569545
Fax +34 91 6569676

DAB PUMPS B.V.
Albert Einsteinweg, 4
5151 DL Drunen - Nederland
Tel. +31 416 387280
Fax +31 416 387299
info.nl@dabpumps.com

PUMPS AMERICA, INC. DAB PUMPS DIVISION
3226 Benchmark Drive
Ladson, SC 29456 USA
Ph. 1-843-824-6332
Toll Free 1-866-896-4DAB (4322)
Fax 1-843-797-3366

DAB PUMPS RUSSIA
127247 Dmitovskoe sh., 100 bld. 3
Moscow, Russia
тел.: +7 095 485-1679

DAB PUMPS S.p.A.
Via M. Polo, 14 - 35035 Mestrino (PD) - Italy
Tel. +39 049 9048811 - Fax +39 049 9048847
http://www.dabpumps.com

Vendite Italia:
Tel. 049 9048873-75-76
049 9048950
Fax 049 9048888

Export Sales Dept:
Ph. (+39) 049 9048895-96-97
049 9048964-996
Fax (+39) 049 9048900

Assistenza Tecnica Clienti:
Customer Technical Assistance:
Ph. (+39) 049 9048911
Fax (+39) 049 9048920

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