
CIRCULATOR WITH AIR SEPARATOR FOR HEATING AND AIR-CONDITIONING SYSTEMS



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

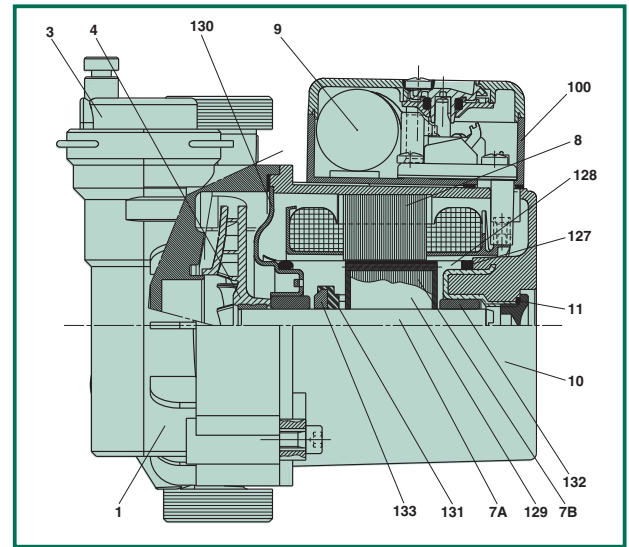
Standard voltage: single-phase 230V/50Hz

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

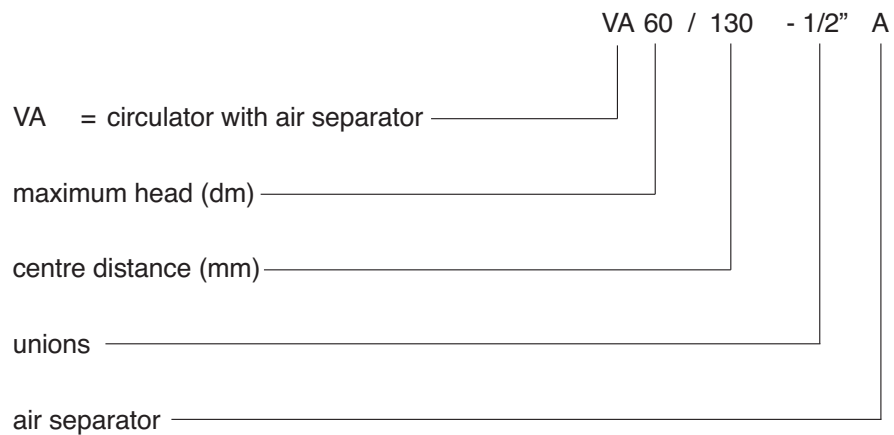
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TECHNICAL DATA

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:



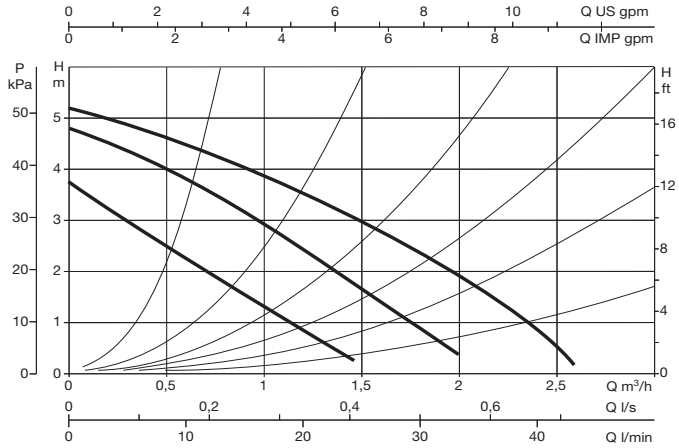
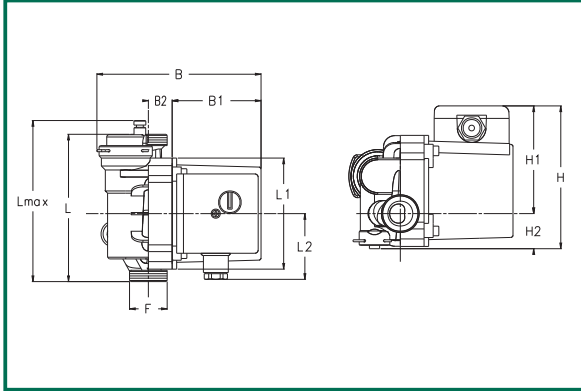
Operating range:	from 0,5 to 2,6 m ³ /h with head up to 5,8 metres.
Liquid temperature range:	from -10°C to +110°C
Characteristics of pumped liquid:	clean, free from solids and mineral oils, not viscous, chemically neutral and close to the characteristics of water (glycol max. 30 %).
Maximum operating 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 mm²/s at a density equal to 1000 kg/m³. Curve tolerance in accordance with ISO9906.

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

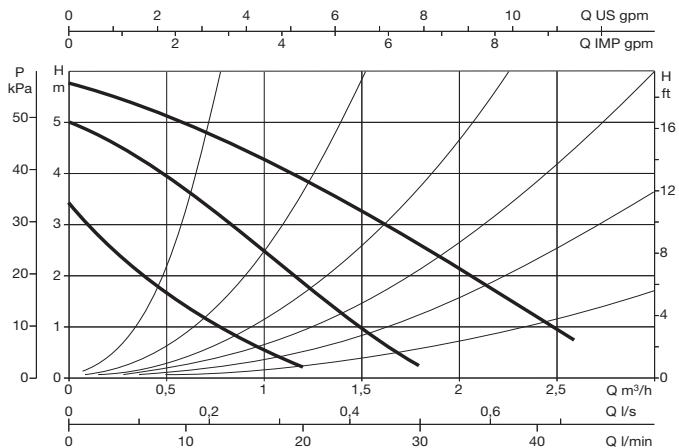
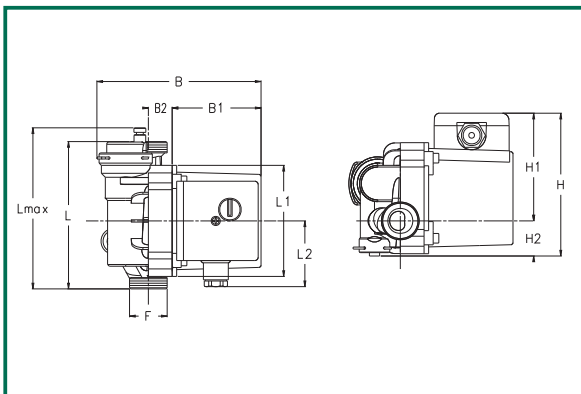
VA 50/130 - 1/2" A



L max	L	L1	L2	B	B1	B2	H	H1	H2	PACKING DIMENSIONS			VOLUME m ³	WEIGHT Kg
										L	B	H		
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						MINIMUM HEAD PRESSURE
			SPEED	n r.p.m.	P1 MAX W	In A	CAPACITOR		
VA 50/130-1/2" A	1x230 V ~	130	3	2371	80	0,34	2,5	450	t° +90°C mt. 2,5
			2	1880	65	0,28			
			1	1352	46	0,20			

VA 60/130 - 1/2" A



L max	L	L1	L2	B	B1	B2	H	H1	H2	PACKING DIMENSIONS			VOLUME m ³	WEIGHT Kg
										L	B	H		
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						MINIMUM HEAD PRESSURE
			SPEED	n r.p.m.	P1 MAX W	In A	CAPACITOR		
VA 60/130-1/2" A	1x230 V ~	130	3	2090	99	0,43	2,5	450	t° +90°C mt. 2,5
			2	1480	77	0,34			
			1	1002	51	0,23			