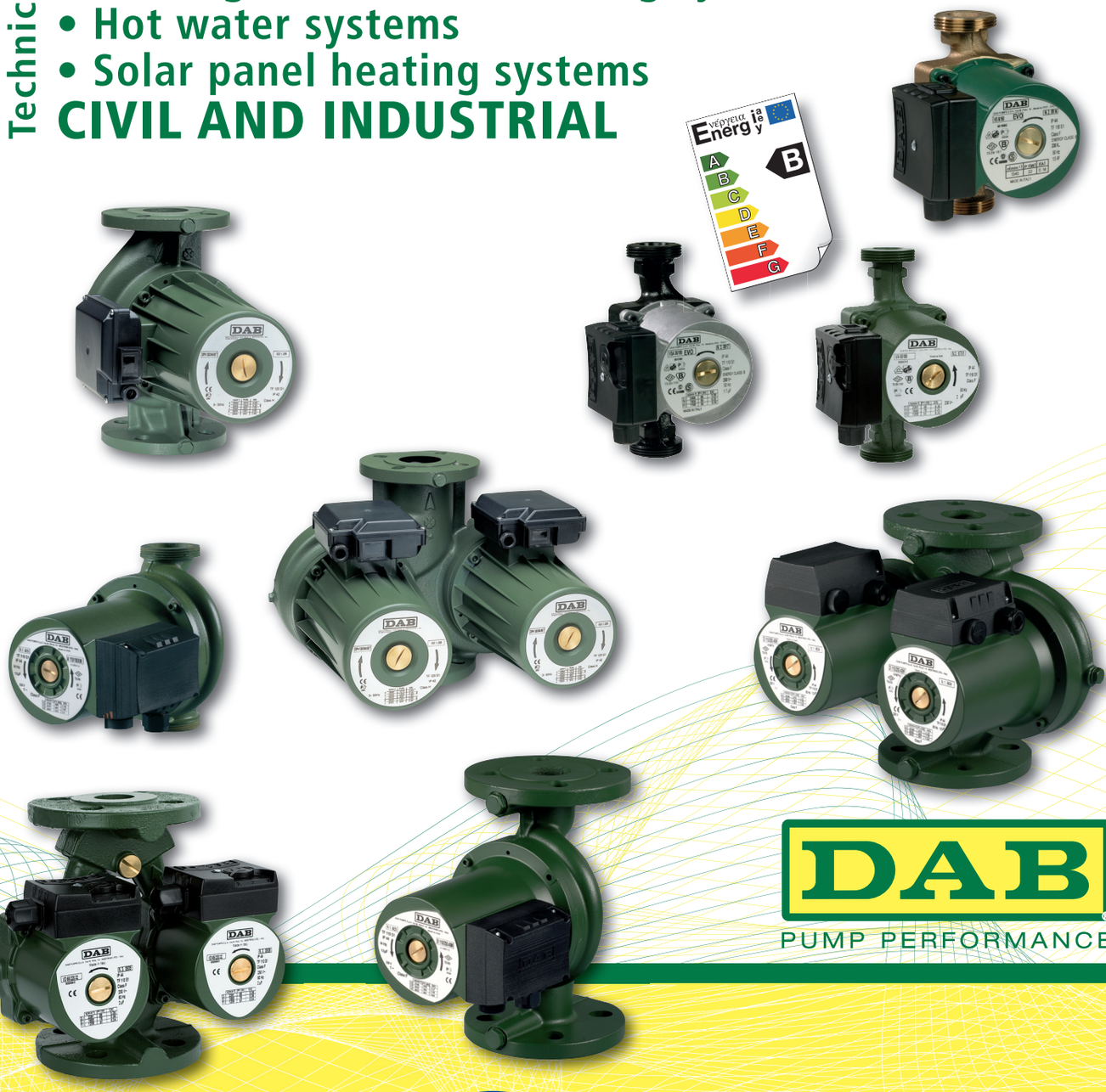
NEW

Technical datasheet

WET ROTOR CIRCULATORS FOR

- Heating and air conditioning systems
- Hot water systems
- Solar panel heating systems

CIVIL AND INDUSTRIAL



DAB
PUMP PERFORMANCE

DWT GROUP
PUMPS • MOTORS • ELECTRONICS

09/2009 6018101

CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

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 - VSA 25	**-**	57		2,7	2,5	2,2	1,8	1,3	0,6															
VA 35 - VSA 35	**-**	71		4,3	3,9	3,4	2,9	2,1	1,4															
VA 55 - VSA 55	**VD 55/220.32**	82		5,4	4,8	4	3,2	2,4	1,4	0,2														
VA 65 - VSA 65	**-**	102	H (m)	6,1	5,4	4,6	3,9	3,1	2,4															
VB 35/120	**-**	71		4,3	3,9	3,4	2,9	2,1	1,4															
VB 55/120	**-**	82		5,4	4,8	4	3,2	2,4	1,4	0,2														
VB 65/120	**VD 65/220.32**	102		6,1	5,4	4,6	3,9	3,1	2,4															
VS 8/150	**-**	40		0,83	0,73	0,52	0,21																	
VS 16/150	**-**	54	H	1,81	1,78	1,62	1,41	0,6	0,6															
VS 35/150	**-**	71	(m)	4,31	3,9	3,4	2,8	2,1	1,4	1,05														
VS 65/150	**-**	103		6	5,4	4,6	3,9	3,1	2,1	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 M - 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.

DAB PUMPS reserve the right to make modifications without prior notice

DAB
PUMP PERFORMANCE

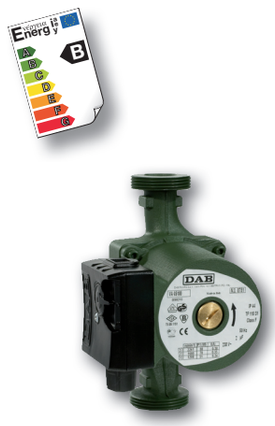
CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

Pump for circulating hot water in closed and pressurised or open tank systems. Also suitable for solar power systems. Single body comprising bronze hydraulic unit and wet rotor motor. Die-cast aluminium motor casing.
Technopolymer impeller. Tempered stainless steel driving shaft mounted on graphite bearings 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.
No overload protection required.
Protection level: IP 44 **Insulating class:** F
Cable grommet: PG 11
Standard voltage: single-phase 230 V / 50 Hz

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

- **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.
- **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 3/4"F - 1"F - 11/4"F - 11/4"M
  DN20-DN25-DN32 oval counter flanges
  DN32/PN6 round counter flanges

SINGLE WITH UNIONS

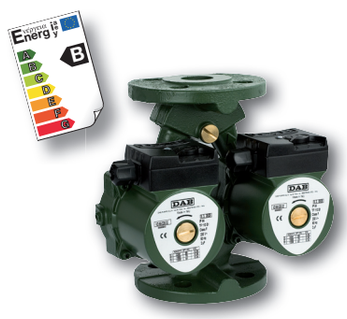


MODEL	Energy	CENTRE DISTANCE mm	ELECTRICAL DATA							UNIONS ON REQUEST		WEIGHT Kg
			VOLTAGE 50 Hz	SPEED	N RPM /min	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	STANDARD	SPECIAL	
VA 25/130	B	130	1 x 230 V ~	3 2 1	2655 2380 1680	43 38 381	0,19 0,17 0,15	1,5	450	1" F	3/4" F - 1 1/4" M	2,65
VA 25/180	B	180								1" F	3/4" F - 1 1/4" M	2,8
VA 25/180 X	B	180								1 1/4" F	–	2,8
VA 35/130	B	130	1 x 230 V ~	3 2 1	2465 1930 1150	56 50 35	0,25 0,22 0,16	1,7	450	1" F	3/4" F - 1 1/4" M	2,65
VA 35/130 1/2"	B									–	–	2,65
VA 35/180	B	180								1" F	3/4" F - 1 1/4" M	2,8
VA 35/180 X	B									1 1/4" F	–	2,8
VA 55/130	B	130	1 x 230 V ~	3 2 1	2400 1600 930	70 58 36	0,3 0,26 0,17	1,7	450	1" F	3/4" F - 1 1/4" M	2,65
VA 55/130 1/2"	B									–	–	2,65
VA 55/180	B	180								1" F	3/4" F - 1 1/4" M	2,8
VA 55/180 X	B									1 1/4" F	–	2,9
VA 65/130	B	130	1 x 230 V ~	3 2 1	2310 1532 880	78 59 37	0,34 0,26 0,17	2	450	1" F	3/4" F - 1 1/4" M	2,65
VA 65/130 1/2"	C									–	–	2,65
VA 65/180	C	180								1" F	3/4" F - 1 1/4" M	3,15
VA 65/180 1/4"	C											
VA 65/180 X	C									1 1/4" F	–	3,15

SINGLE FLANGED

MODEL	Energy	CENTRE DISTANCE mm	ELECTRICAL DATA							UNIONS ON REQUEST		WEIGHT Kg
			VOLTAGE 50 Hz	SPEED	N RPM /min	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	STANDARD	SPECIAL	
VB 35/120	B	120	1 x 230 V ~	3 2 1	2465 1930 1150	56 50 35	0,25 0,22 0,16	1,7	450	DN 25	DN20 DN32	3,15
VB 55/120	B	120	1 x 230 V ~	3 2 1	2400 1600 930	70 58 36	0,3 0,26 0,17	1,7	450	DN 25	DN20 DN32	3,15
VB 65/120	B	120	1 x 230 V ~	3 2 1	2310 1532 880	78 59 37	0,34 0,26 0,17	2	450	DN 25	DN20 DN32	3,15

TWIN FLANGED



MODEL	Energy	CENTRE DISTANCE mm	ELECTRICAL DATA							UNIONS ON REQUEST		WEIGHT Kg
			VOLTAGE 50 Hz	SPEED	N RPM /min	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	STANDARD	SPECIAL	
VD 55/220.32	C	220	1 x 230 V ~	3 2 1	2400 1600 930	70 58 36	0,3 0,26 0,17	1,7	450	DN 32 - PN6-PN10		8,1
VD 65/220.32	C	220	1 x 230 V ~	3 2 1	2310 1532 880	78 59 37	0,34 0,26 0,17	2	450	DN 32 - PN6-PN10		9

DAB PUMPS reserve the right to make modifications without prior notice

CIRCULATORS FOR WATER SYSTEMS

Pump for circulating hot domestic water in closed and pressurised or open tank systems.
Also suitable for solar power systems. Single body comprising bronze hydraulic unit and wet rotor motor.
Die-cast aluminium motor casing.
Technopolymer impeller. Ceramic driving shaft mounted on graphite bearings 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

- **Operating range:** from 0.6 to 4.2 m^3/h with head up to 6.3 metres.
- **Liquid temperature range:** from +2°C to + 85°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
- **Special versions on request:** other voltages and/or frequencies.
- **Accessories:** unions measuring 1/2"F - 3/4"F - 1"F
  unions measuring for copper tube to solder: Ø 22 mm
  Ø 28 mm

MODEL	Energy	CENTRE DISTANCE mm	ELECTRICAL DATA						UNIONS ON REQUEST	MINIMUM HEAD PRESSURE	WEIGHT Kg
			VOLTAGE 50 Hz	N RPM /min	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc			
VS 8/150	B	150	1 x 230 V ~	1340	22	0,14	1,5	450	BRASS: 1/2" F - 3/4" F - 1" F COPPER: Ø 22 - Ø 28	t° +60°C m.c.a. 1,5	2,6

MODEL	Energy	CENTRE DISTANCE mm	ELECTRICAL DATA						UNIONS ON REQUEST	MINIMUM HEAD PRESSURE	WEIGHT Kg
			VOLTAGE 50 Hz	N RPM /min	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc			
VS 16/150	B	150	1 x 230 V ~	2784	41	0,19	1,5	450	BRASS: 1/2" F - 3/4" F - 1" F COPPER: Ø 22 - Ø 28	t° +60°C m.c.a. 1,5	2,6

MODEL	Energy	CENTRE DISTANCE mm	ELECTRICAL DATA						UNIONS ON REQUEST	MINIMUM HEAD PRESSURE	WEIGHT Kg
			VOLTAGE 50 Hz	N RPM /min	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc			
VS 35/150	B	150	1 x 230 V ~	2470	55	0,24	1,7	450	BRASS: 1/2" F - 3/4" F - 1" F COPPER: Ø 22 - Ø 28	t° +60°C m.c.a. 1,5	2,6

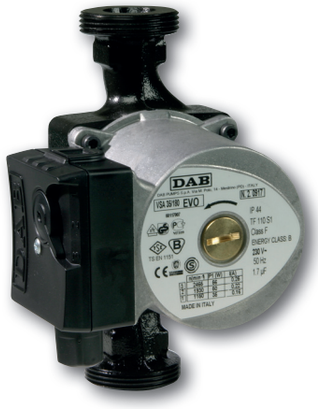
MODEL	Energy	CENTRE DISTANCE mm	ELECTRICAL DATA						UNIONS ON REQUEST	MINIMUM HEAD PRESSURE	WEIGHT Kg
			VOLTAGE 50 Hz	N RPM /min	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc			
VS 65/150	B	150	1 x 230 V ~	2317	77	0,34	2	450	BRASS: 1/2" F - 3/4" F - 1" F COPPER: Ø 22 - Ø 28	t° +60°C m.c.a. 1,5	2,6

CIRCULATORS FOR SOLAR PANEL HEATING

Pump for circulation of fluid media in solar panel powered heating systems.
VSA wet rotor circulators can function perfectly also with high glycol concentrations (up to 60%).
Monobloc body composed of hydraulic section in cast iron and wet rotor motor.
Special electrophoresis coating of the pump body to ensure resistance to glycol attack. Motor casing in diecast aluminium. Rotor in engineering polymer, motor shaft in hardened stainless steel held in graphite bearings lubricated by the pumping medium.
Rotor protective jacket, stator jacket, and closing flange in stainless steel.
Ceramic thrust ring, ethylene propylene seals and brass air breather plug.
Two-pole asynchronous motor with squirrel cage rotor designed to run at three alternative speeds on the basis of the setting of a selector on the terminal board in order to adapt circulator operation to the characteristics of the system.

Protection level: IP 44
Insulation class: F
Working voltage: single-phase 230 V / 50 Hz
Special versions on request.: alternative voltages and/or frequencies
- OEM multipack version

SINGLE WITH UNIONS



MODEL	Energy	CENTRE DISTANCE mm	ELECTRICAL DATA							UNIONS ON REQUEST		WEIGHT Kg
			VOLTAGE 50 Hz	SPEED	N RPM /min	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	STANDARD	SPECIAL	
VSA 25/130	B	130	1 x 230 V ~	3	2655	43	0,19	1,5	450	1" F	3/4" F - 1 1/4" M	2,65
VSA 25/180	B	180		2	2380	38	0,17			1" F	3/4" F - 1 1/4" M	2,8
VSA 25/180 X	B	180		1	1680	381	0,15			1 1/4" F	–	2,8
VSA 35/130	B	130	1 x 230 V ~	3	2465	56	0,25	1,7	450	1" F	3/4" F - 1 1/4" M	2,65
VSA 35/130 1/2"	B			2	1930	50	0,22			–	–	2,65
VSA 35/180	B	180		1	1150	35	0,16			1" F	3/4" F - 1 1/4" M	2,8
VSA 35/180 X	B									1 1/4" F	–	2,8
VSA 55/130	B	130	1 x 230 V ~	3	2400	70	0,3	1,7	450	1" F	3/4" F - 1 1/4" M	2,65
VSA 55/130 1/2"	B			2	1600	58	0,26			–	–	2,65
VSA 55/180	B	180		1	930	36	0,17			1" F	3/4" F - 1 1/4" M	2,8
VSA 55/180 X	B									1 1/4" F	–	2,9
VSA 65/130	B	130	1 x 230 V ~	3	2310	78	0,34	2	450	1" F	3/4" F - 1 1/4" M	2,65
VSA 65/130 1/2"	C			2	1532	59	0,26			–	–	2,65
VSA 65/180	C	180		1	880	37	0,17			1" F	3/4" F - 1 1/4" M	3,15
VSA 65/180 1/4"	C											
VSA 65/180 X	C									1 1/4" F	–	3,15

CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

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.

Operating range: from 1 to 12 m^3/h with head up to 11 metres.
Liquid temperature range: from -10°C to +110°C.
Pumped liquid characteristics: clean, free from solids and mineral oils, not viscous, chemically neutral, close to the characteristics of water (max 30% glycol).
Maximum working pressure: 10 bar (1000 kPa).
Protection level: IP 44
Insulation class: F
Cable grommet: PG 11
Installation: with motor axis horizontal.

SINGLE WITH UNIONS

MODEL	VOLTAGE 50Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	SPEED	ELECTRICAL DATA					MINIMUM HEAD PRESSURE
					N RPM/min	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
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 m.c.a. 1,5
A 50/180 M	1x230 V ~	180	1 1/2"G	3 2 1	2766 2616 2215	195 194 180	0,95 0,95 0,85	4	400	t° +90°C m.c.a. 1,5
A 50/180 XT	3x400 V ~	180	2"G	2 1	2838 2520	201 129	0,50 0,23	-	-	t° +90°C m.c.a. 1,5
A 50/180 T	3x400 V ~	180	1 1/2"G	2 1	2827 2502	197 139	0,52 0,25	-	-	t° +90°C m.c.a. 1,5
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 m.c.a. 1,5
A 56/180 M	1x230 V ~	180	1 1/2"G	3 2 1	2636 2226 1485	282 287 228	1,23 1,30 1,06	7	400	t° +90°C m.c.a. 1,5
A 56/180 XT	3x400 V ~	180	2"G	2 1	2708 2178	291 200	0,60 0,32	-	-	t° +90°C m.c.a. 1,5
A 56/180 T	3x400 V ~	180	1 1/2"G	2 1	2704 2178	297 200	0,60 0,33	-	-	t° +90°C m.c.a. 1,5
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 m.c.a. 2,5
A 80/180 M	1x230 V ~	180	1 1/2"G	3 2 1	2674 2356 1615	264 262 223	1,15 1,20 1,00	7	400	t° +90°C m.c.a. 2,5
A 80/180 XT	3x400 V ~	180	2"G	2 1	2727 2227	272 186	0,57 0,30	-	-	t° +90°C m.c.a. 2,5
A 80/180 T	3x400 V ~	180	1 1/2"G	2 1	2724 2226	271 187	0,57 0,31	-	-	t° +90°C m.c.a. 2,5
A 110/180 M	1x230 V ~	180	1 1/2"G	3 2 1	2746 2552 2052	410 393 361	1,77 1,78 1,64	12	450	t° +90°C m.c.a. 2,5
A 110/180 XM	1x230 V ~	180	2"G	3 2 1	2746 2552 2052	410 393 361	1,77 1,78 1,64	12	450	t° +90°C m.c.a. 2,5
A 110/180 T	3x400 V ~	180	1 1/2"G	2 1	2759 2341	403 289	0,88 0,48	-	-	t° +90°C m.c.a. 2,5
A 110/180 XT	3x400 V ~	180	2"G	2 1	2759 2341	403 289	0,90 0,48	-	-	t° +90°C m.c.a. 2,5

SINGLE FLANGED

MODEL	VOLTAGE 50Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	SPEED	ELECTRICAL DATA					MINIMUM HEAD PRESSURE
					N RPM/min	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
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 m.c.a. 1,5
B 50/250.40 T	3x400 V~	250	DN 40	2 1	2827 2502	197 139	0,52 0,25	-	-	t° +90°C m.c.a. 1,5
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 m.c.a. 1,5
B 56/250.40 T	3x400 V~	250	DN 40	2 1	2704 2178	297 200	0,60 0,33	-	-	t° +90°C m.c.a. 1,5
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 m.c.a. 2,5
B 80/250.40 T	3x400 V~	250	DN 40	2 1	2724 2226	271 187	0,57 0,31	-	-	t° +90°C m.c.a. 2,5
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 m.c.a. 2,5
B 110/250.40 T	3x400 V~	250	DN 40	2 1	2759 2341	403 289	0,90 0,48	-	-	t° +90°C m.c.a. 2,5

TWIN FLANGED

MODEL	VOLTAGE 50Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	SPEED	ELECTRICAL DATA					MINIMUM HEAD PRESSURE
					N RPM/min	P1 MAX W	In A	CAPACITOR µF	CAPACITOR Vc	
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 m.c.a. 1,5
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 m.c.a. 1,5
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 m.c.a. 1,5
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 m.c.a. 1,5
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 m.c.a. 2,5
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 m.c.a. 2,5
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 m.c.a. 2,5
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 m.c.a. 2,5

CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS

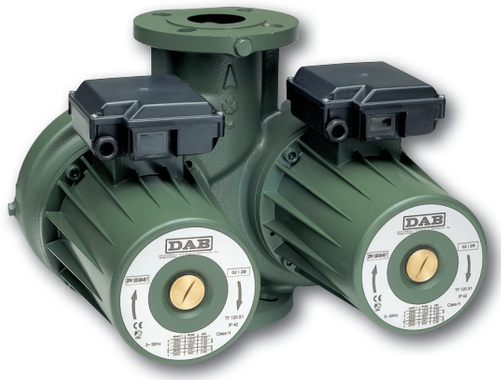
Pump for circulating hot water in small closed and pressurised or open tank civil and industrial community heating systems. Cast iron body and wet rotor motor. Die-cast aluminium motor casing.Threaded inlet and delivery mouths, fitted with threaded unions for pressure gauges. Technopolymer impeller, tempered stainless steel driving shaft. Stainless steel protective rotor sleeve and stator sleeve. Four pole asynchronous motor for the BMH and DMH versions, two pole motor for the BPH and DPH versions. The Single-phase Circulator has been designed to work at three speeds - 230V, while the Three-phase Circulator has been designed to work at two speeds - 230 V and at three speeds - 400 V. Thermal overload protection incorporated in the single-phase version. For the three-phase version the motor must be connected to the power supply through an external contactor. 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; a blank flange is also supplied standard if one of the two motors must be serviced.
Protection level: IP 42
Insulating class: H

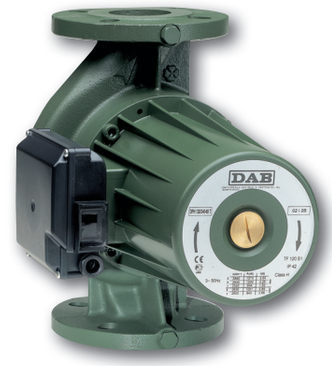
Cable grommet: PG 11
This product complies with EN 60335-2-51 European standard
- **Operating range:** from 1.5 to 78 m^3/h with head up to 15 metres.
- **Liquid temperature range:** from -10°C to +120°C (+110°C for the BPH-DPH 150/340.65 T, BPH-DPH 150/360.80 T, BPH-DPH 180/340.65 T, BPH-DPH 180/360.80 T). For the single-phase version: 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 holes)
- **Installation:** with MOTOR AXIS HORIZONTAL
- **Flanging on request:** DN 80 in PN 10/PN 16 (8 holes)

MODEL		VOLTAGE 50Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	SPEED	ELECTRICAL DATA			MINIMUM HEAD PRESSURE
SINGLE	TWIN *					N RPM /min	P1 MAX W	In A	
BMH 30/250.40 T	**DMH 30/250.40 T**	3x230 V ~	250	DN 40 - PN 10	2 1	1340 1260	100 88	0,48 0,39	t° 75°C 90°C 110°C 120°C m.c.a. 0,9 4 – 18
		3x400 V ~			3 2 1	1440 1430 1260	192 155 88	0,78 0,58 0,23	
BPH 60/250.40 M	**DPH 60/250.40 M**	1x230 V ~	250	DN 40 - PN 10	3 2 1	2830 2750 2410	316 309 292	1,43 1,53 1,51	t° 75°C 90°C 110°C 120°C m.c.a. 1,6 4 14 –
BPH 60/250.40 T	**DPH 60/250.40 T**	3x230 V ~	250	DN 40 - PN 10	2 1	2570 2420	253 229	0,81 0,72	t° 75°C 90°C 110°C 120°C m.c.a. 1,6 4 – 19
		3x400 V ~			3 2 1	2850 2810 2430	348 316 232	0,99 0,75 0,42	
BPH 120/250.40 M	**DPH 120/250.40 M**	1x230 V ~	250	DN 40 - PN 10	3 2 1	2650 2320 1520	510 498 376	2,24 2,35 1,96	t° 75°C 90°C 110°C 120°C m.c.a. 6 9 18 –
BPH 120/250.40 T	**DPH 120/250.40 T**	3x230 V ~	250	DN 40 - PN 10	2 1	2300 2070	395 340	1,2 1,07	t° 75°C 90°C 110°C 120°C m.c.a. 6 9 – 23
		3x400 V ~			3 2 1	2780 2710 2080	536 499 339	1,16 0,98 0,62	
BMH 30/280.50T	**DMH 30/280.50 T**	3x230 V ~	280	DN 50 - PN 10	2 1	1390 1340	148 134	0,7 0,55	t° 75°C 90°C 110°C 120°C m.c.a. 0,9 4 – 18
		3x400 V ~			3 2 1	1460 1450 1350	255 216 131	1,12 0,83 0,32	
BMH 60/280.50T	**DMH 60/280.50 T**	3x230 V ~	280	DN 50 - PN 10	2 1	1210 1120	272 240	0,94 0,8	t° 75°C 90°C 110°C 120°C m.c.a. 4 7,5 – 21
		3x400 V ~			3 2 1	1400 1360 1130	410 367 235	1,2 0,95 0,46	
BPH 60/280.50 M	**DPH 60/280.50 M**	1x230 V ~	280	DN 50 - PN 10	3 2 1	2840 2730 2200	595 540 506	2,79 2,45 2,58	t° 75°C 90°C 110°C 120°C m.c.a. 1,6 6 14 –
BPH 60/280.50 T	**DPH 60/280.50 T**	3x230 V ~	280	DN 50 - PN 10	2 1	2670 2570	464 432	1,35 1,23	t° 75°C 90°C 110°C 120°C m.c.a. 1,6 6 – 19
		3x400 V ~			3 2 1	2890 2860 2570	589 546 423	1,31 1,1 0,71	
BPH 120/280.50 T	**DPH 120/280.50 T**	3x230 V ~	280	DN 50 - PN 10	2 1	2430 2240	683 605	1,95 1,75	t° 75°C 90°C 110°C 120°C m.c.a. 2 5 – 20
		3x400 V ~			3 2 1	2810 2740 2260	898 840 603	1,67 1,47 1	
BPH 150/280.50 T	**DPH 150/280.50 T**	3x230 V ~	280	DN 50 - PN 10	2 1	2553 2420	1130 1032	3,22 3	t° 75°C 90°C 110°C 120°C m.c.a. 2 5 – 20
		3x400 V ~			3 2 1	2850 2802 2425	1470 1360 1030	2,9 2,5 1,7	
BPH 180/280.50 T	**DPH 150/280.50 T**	3x230 V ~	280	DN 50 - PN 10	2 1	2520 2340	1230 1120	3,5 3,2	t° 75°C 90°C 110°C 120°C m.c.a. 2 5 – 20
		3x400 V ~			3 2 1	2830 2780 2360	1630 1540 1130	3 2,70 1,85	

*Hydraulic values refer to one motor.

CIRCULATORS FOR HEATING AND AIR-CONDITIONING SYSTEMS





MODEL		VOLTAGE 50Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	SPEED	ELECTRICAL DATA			MINIMUM HEAD PRESSURE
SINGLE	TWIN *					N RPM /min	P1 MAX W	In A	
BMH 30/340.65 T	**DMH 30/340.65 T**	3x230 V ~	340	DN 65 - PN 10	2 1	1360 1310	170 154	0,73 0,60	t° 75°C 90°C 110°C 120°C m.c.a. 4 7,5 – 21
		3x400 V ~			3 2 1	1450 1430 1310	270 233 150	1,12 0,84 0,35	
BMH 60/340.65 T	**DMH 60/340.65 T**	3x230 V ~	340	DN 65 - PN 10	2 1	1170 1070	295 257	1 0,85	t° 75°C 90°C 110°C 120°C m.c.a. 4 7,5 – 21
		3x400 V ~			3 2 1	1380 1350 1090	445 403 255	1,2 0,97 0,49	
BPH 60/340.65 M	**DPH 60/340.65 M**	1x230 V ~	340	DN 65 - PN 10	3 2 1	2780 2580 1460	735 685 564	3,37 3,13 3,12	t° 75°C 90°C 110°C 120°C m.c.a. 1 4 13 –
BPH 60/340.65 T	**DPH 60/340.65 T**	3x230 V ~	340	DN 65 - PN 10	2 1	2550 2380	582 532	1,67 1,53	t° 75°C 90°C 110°C 120°C m.c.a. 1 4 – 18
		3x400 V ~			3 2 1	2850 2800 2400	756 705 535	1,5 1,3 0,9	
BPH 120/340.65 T	**DPH 120/340.65 T**	3x230 V ~	340	DN 65 - PN 10	2 1	2630 2500	1001 940	2,85 2,66	t° 75°C 90°C 110°C 120°C m.c.a. 6 9 – 22
		3x400 V ~			3 2 1	2880 2830 2520	1275 1200 934	2,64 2,25 1,52	
BPH 150/340.65 T	**DPH 150/340.65 T**	3x230 V ~	340	DN 65 - PN 10	2 1	2410 2250	1345 1188	3,8 3,36	t° 75°C 90°C 110°C 120°C m.c.a. 7 11 18 –
		3x400 V ~			3 2 1	2800 2730 2250	1796 1690 1210	3,25 2,93 2	
BPH 180/340.65 T	**DPH 180/340.65 T**	3x230 V ~	340	DN 65 - PN 10	2 1	2330 2100	1730 1570	4,85 4,5	t° 75°C 90°C 110°C 120°C m.c.a. 7 11 18 –
		3x400 V ~			3 2 1	2760 2680 2150	2760 2330 1560	4,2 3,8 2,5	
BMH 30/360.80 T	**DMH 30/360.80 T**	3x230 V ~	360	DN 80 - PN 10	2 1	1110 1010	313 268	1,05 0,88	t° 75°C 90°C 110°C 120°C m.c.a. 4 7,5 – 21
		3x400 V ~			3 2 1	1370 1330 1030	484 437 266	1,23 1 0,51	
BMH 60/360.80 T	**DMH 60/360.80 T**	3x230 V ~	360	DN 80 - PN 10	2 1	1180 1100	535 465	1,82 1,55	t° 75°C 90°C 110°C 120°C m.c.a. 2 5 – 20
		3x400 V ~			3 2 1	1390 1350 1100	763 663 465	2,04 1,65 0,89	
BPH 120/360.80 T	**DPH 120/360.80 T**	3x230 V ~	360	DN 80 - PN 10	2 1	2500 2340	1410 1292	3,95 3,6	t° 75°C 90°C 110°C 120°C m.c.a. 6 10 – 22
		3x400 V ~			3 2 1	2830 2780 2350	1820 1710 1302	3,3 2,93 2,13	
BPH 150/360.80 T	**DPH 150/360.80 T**	3x230 V ~	360	DN 80 - PN 10	2 1	2140 1900	1984 1695	5,62 4,82	t° 75°C 90°C 110°C 120°C m.c.a. 7 11 18 –
		3x400 V ~			3 2 1	2710 2610 1940	2870 2686 1710	4,64 4,32 2,85	
BPH 180/360.80 T	**DPH 180/360.80 T**	3x230 V ~	360	DN 80 - PN 10	2 1	2380 2170	1670 1490	4,7 4,25	t° 75°C 90°C 110°C 120°C m.c.a. 7 11 18 –
		3x400 V ~			3 2 1	2780 2700 2200	2310 2210 1490	4 3,5 2,4	

*Hydraulic values refer to one motor.

DAB PUMPS reserve the right to make modifications without prior notice

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