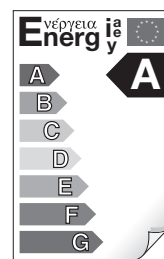


# ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS



## GENERAL DATA




### Applications

Low power consumption pump for circulation of hot water, suitable for all types of domestic heating systems.

### Benefits

Thanks to the advanced technology employed, the **permanent magnet synchronous motor**, and the **frequency converter**, the new range of AC circulators ensures high efficiency in all applications, bringing appreciable benefits in terms of energy saving. That's why the entire series of **AC** circulators is included in energy efficiency class A. The circulator features an electronic device that detects the changes demanded by the heating system and automatically adapts circulator performance accordingly, always ensuring optimal efficiency and minimum energy consumption. Straightforward operation and an easy-to-ready control panel with display that shows the real power consumption in Watts at each moment of operation.

The AC series circulator can function in three different control modes:

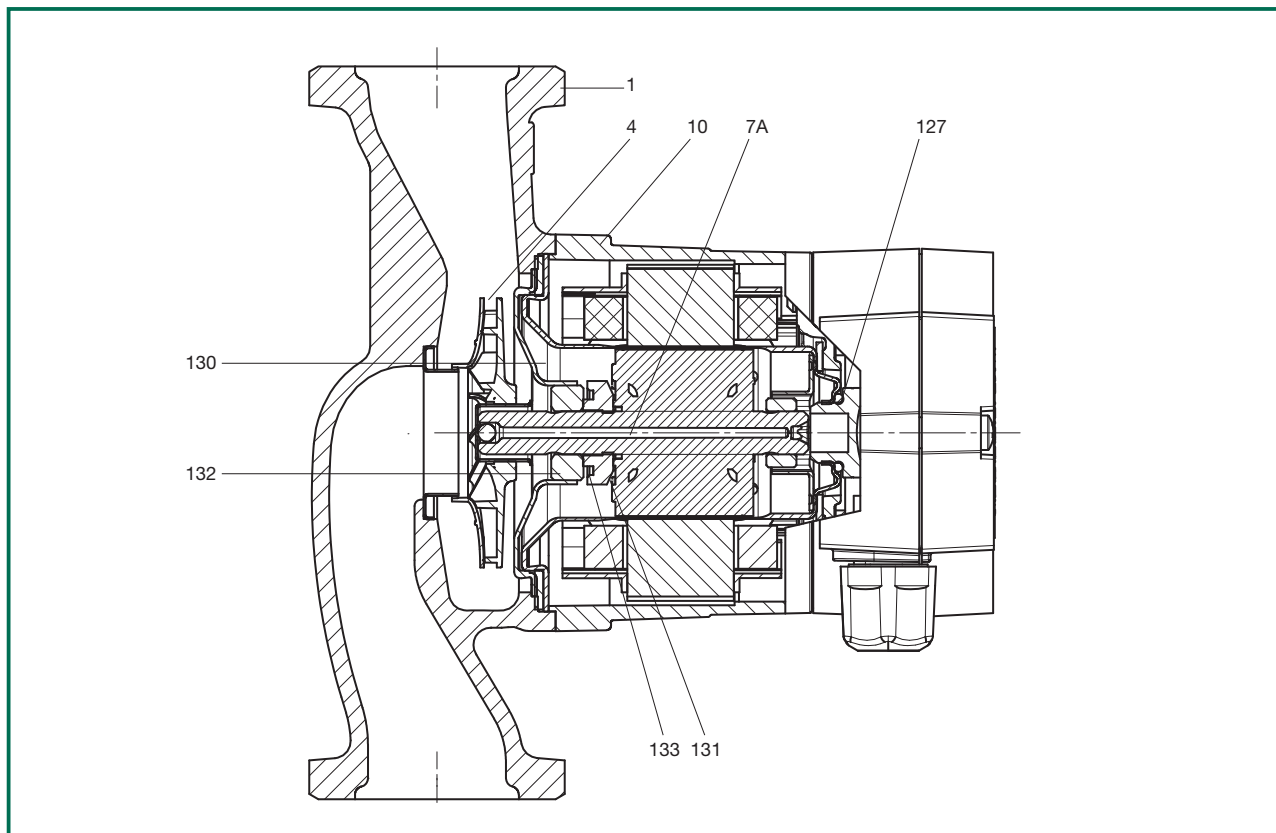
- proportional pressure 
- constant pressure 
- constant speed 

Facility for operation in economy mode (automatic night-time reduction Aut C.).

Thanks to the internal protection of the motor, the pump does not require any form of external protection cutout.

# ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

## TECHNICAL DATA



N.	PARTS	MATERIALS
1	PUMP BODY	CAST IRON
4	IMPELLER	TECHNOPOLYMER
7A	MOTOR SHAFT	CERAMIC
10	MOTOR CASING	ALUMINIUM
127	SEAL RING EPDM	EPDM
130	CLOSING FLANGE	STAINLESS STEEL
131	THRUST RING SUPPORT	EPDM
132	BUSHINGS	CERAMIC
133	THRUST RING	GRAPHITE

Operating range AC 35 - AC 55 - AC 65 - AC 80 - AC 110:

Liquid temperature range:

Working pressure:

Protection rating:

Insulation class:

Installation:

Standard power supply:

Liquid quality requirements:

from 0.4 to 10.2 m<sup>3</sup>/h with head of up to 11 m.

from +2°C to +110°C

10 bar (1000 kPa).

IP 44

F

with horizontal motor shaft

single-phase 1 x 230 V / 50 Hz

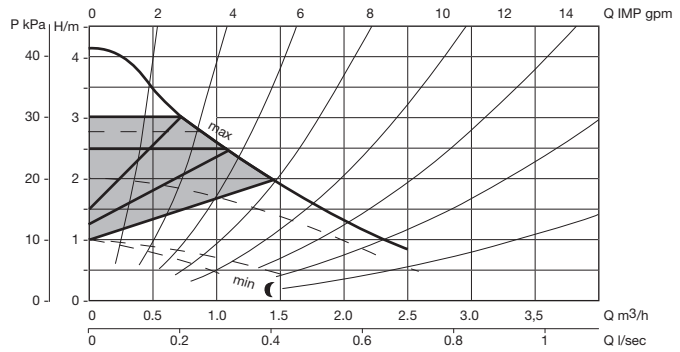
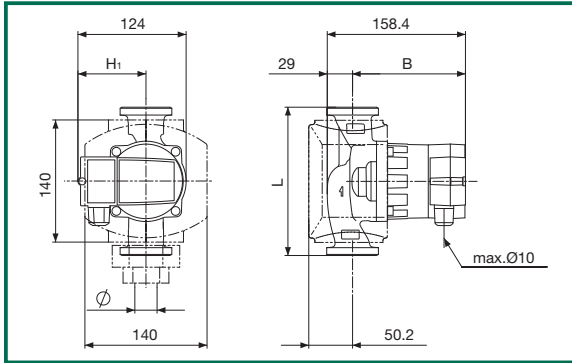
Clean, free of solids and mineral oils,  
non-viscous, chemically neutral,  
and approximating the properties of water  
**(max. glycol contents 50%)**

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

Liquid temperature range: from +2°C to +110°C  
Maximum working pressure: 10 bar (1000 kPa)

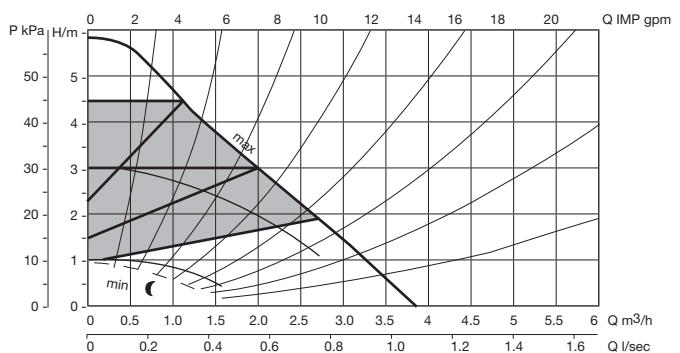
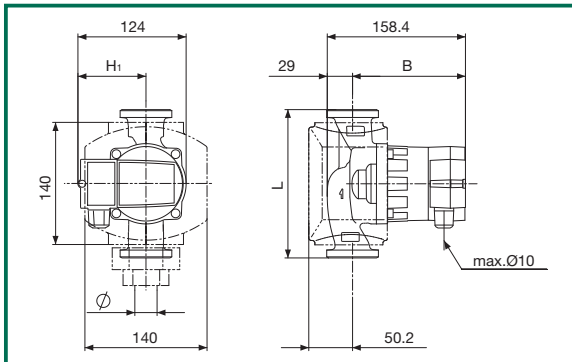
## AC 35 SINGLE WITH UNIONS



MODEL	L	B	H1	PACK DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT Kg
				L	B	H		
AC 35/130	130	129,4	78	188	145	180	0,0038	2,3
AC 35/180	180	129,4	78	188	145	180	0,0038	2,3
AC 35/180X	180	129,4	78	188	145	180	0,0038	2,3

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM SUCTION PRESSURE
			STANDARDIZED	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR μF Vc		
AC 35/130	1x230 V ~	130	1" F	3/4" F - 1 1/4" M	MIN MAX	5 22	0,05 0,19	-	-	t° +90°C m.c.a. 4,5
AC 35/180	1x230 V ~	180	1" F	3/4" F - 1 1/4" M	MIN MAX	5 22	0,05 0,19	-	-	t° +90°C m.c.a. 4,5
AC 35/180X	1x230 V ~	180	2" G	1 1/4" F	MIN MAX	5 22	0,05 0,19	-	-	t° +90°C m.c.a. 4,5

## AC 55 SINGLE WITH UNIONS



MODEL	L	B	H1	PACK DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT Kg
				L	B	H		
AC 55/130	130	129,4	78	188	145	180	0,0038	2,3
AC 55/180	180	129,4	78	188	145	180	0,0038	2,3
AC 55/180X	180	129,4	78	188	145	180	0,0038	2,3

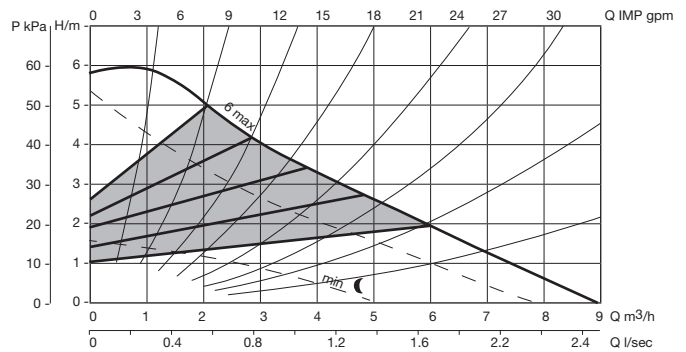
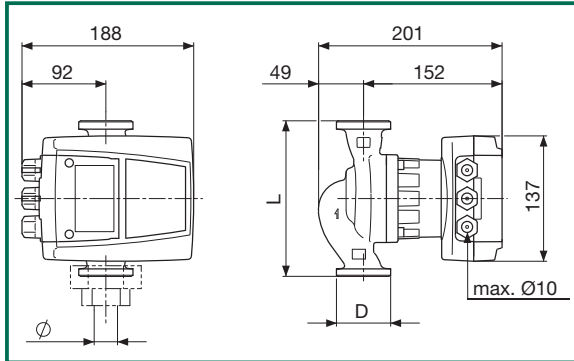
MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM SUCTION PRESSURE
			STANDARDIZED	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR μF Vc		
AC 55/130	1x230 V ~	130	1" F	3/4" F - 1 1/4" M	MIN MAX	5 45	0,05 0,38	-	-	t° +90°C m.c.a. 4,5
AC 55/180	1x230 V ~	180	1" F	3/4" F - 1 1/4" M	MIN MAX	5 45	0,05 0,38	-	-	t° +90°C m.c.a. 4,5
AC 55/180X	1x230 V ~	180	2" G	1 1/4" F	MIN MAX	5 45	0,05 0,38	-	-	t° +90°C m.c.a. 4,5

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

Liquid temperature range: from +2°C to +110°C  
Maximum working pressure: 10 bar (1000 kPa)

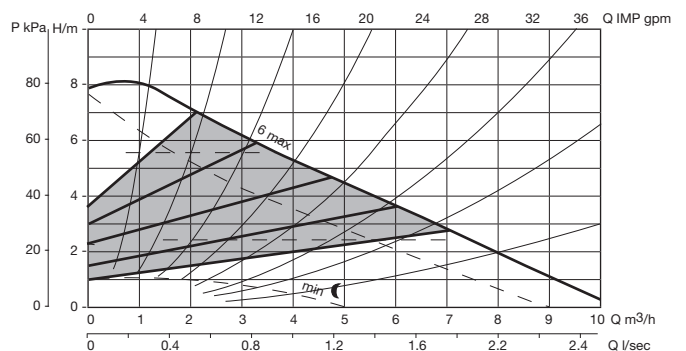
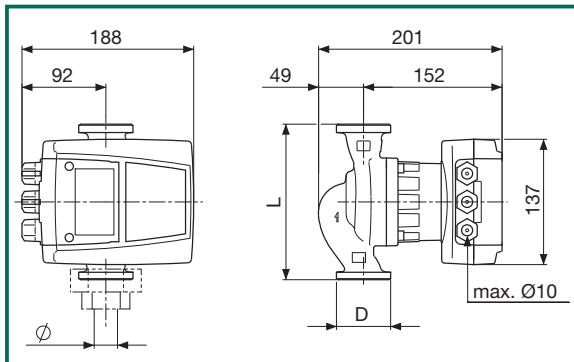
## AC 65 SINGLE WITH UNIONS



MODEL	L	B	H1	PACK DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT Kg
				L	B	H		
<b>AC 65/180</b>	180	152	92	230	187	200	0,012	3,8
<b>AC 65/180X</b>	180	152	92	230	187	200	0,012	3,8

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM SUCTION PRESSURE
			STANDARDIZED	SPECIAL	SPEED	P1 MAX W	I <sub>n</sub> A	CAPACITOR μF V <sub>c</sub>		
<b>AC 65/180</b>	1x230 V ~	180	1" F	3/4" F - 1 1/4" M	MIN MAX	8 70	0,1 0,5	-	-	t° +90°C m.c.a. 4,5
<b>AC 65/180X</b>	1x230 V ~	180	2" G	1 1/4" F	MIN MAX	8 70	0,1 0,5	-	-	t° +90°C m.c.a. 4,5

## AC 80 SINGLE WITH UNIONS



MODEL	L	B	H1	PACK DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT Kg
				L	B	H		
<b>AC 80/180</b>	180	152	92	230	187	200	0,012	3,8
<b>AC 80/180X</b>	180	152	92	230	187	200	0,012	3,8

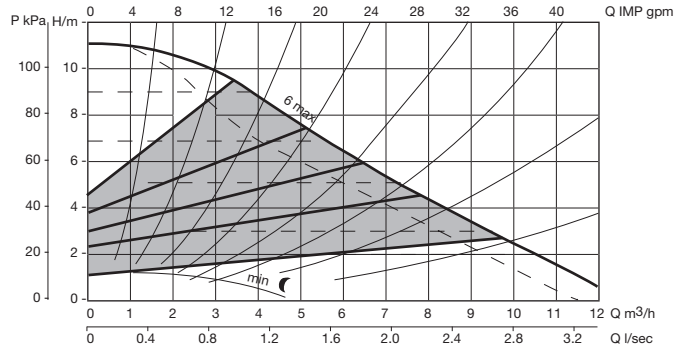
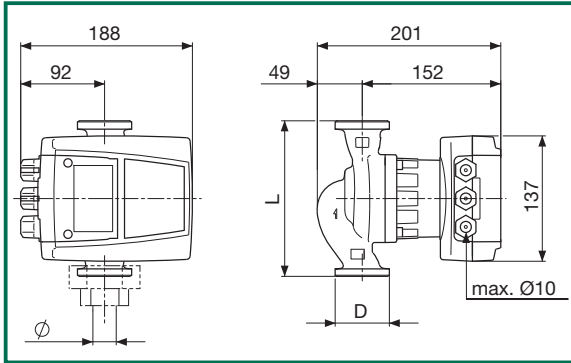
MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM SUCTION PRESSURE
			STANDARDIZED	SPECIAL	SPEED	P1 MAX W	I <sub>n</sub> A	CAPACITOR μF V <sub>c</sub>		
<b>AC 80/180</b>	1x230 V ~	180	1" F	3/4" F - 1 1/4" M	MIN MAX	8 107	0,1 0,8	-	-	t° +90°C m.c.a. 4,5
<b>AC 80/180X</b>	1x230 V ~	180	2" G	1 1/4" F	MIN MAX	8 107	0,1 0,8	-	-	t° +90°C m.c.a. 4,5

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS

Liquid temperature range: from +2°C to +110°C  
Maximum working pressure: 10 bar (1000 kPa)

## AC 110 SINGLE WITH UNIONS



MODEL	L	B	H1	PACK DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT Kg
				L	B	H		
<b>AC 110/180X</b>	180	152	92	230	187	200	0,012	3,8

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM SUCTION PRESSURE
			STANDARDIZED	SPECIAL	SPEED	P1 MAX W	In A	CAPACITOR μF   Vc		
<b>AC 110/180X</b>	1x230 V ~	180	2" G	1 1/4" F	MIN MAX	8 174	0,1 1,25	-	-	t° +90°C m.c.a. 4,5