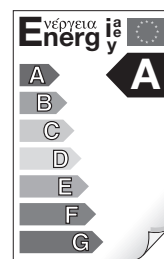


ELECTRONIC CIRCULATORS FOR HEATING SYSTEMS



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:

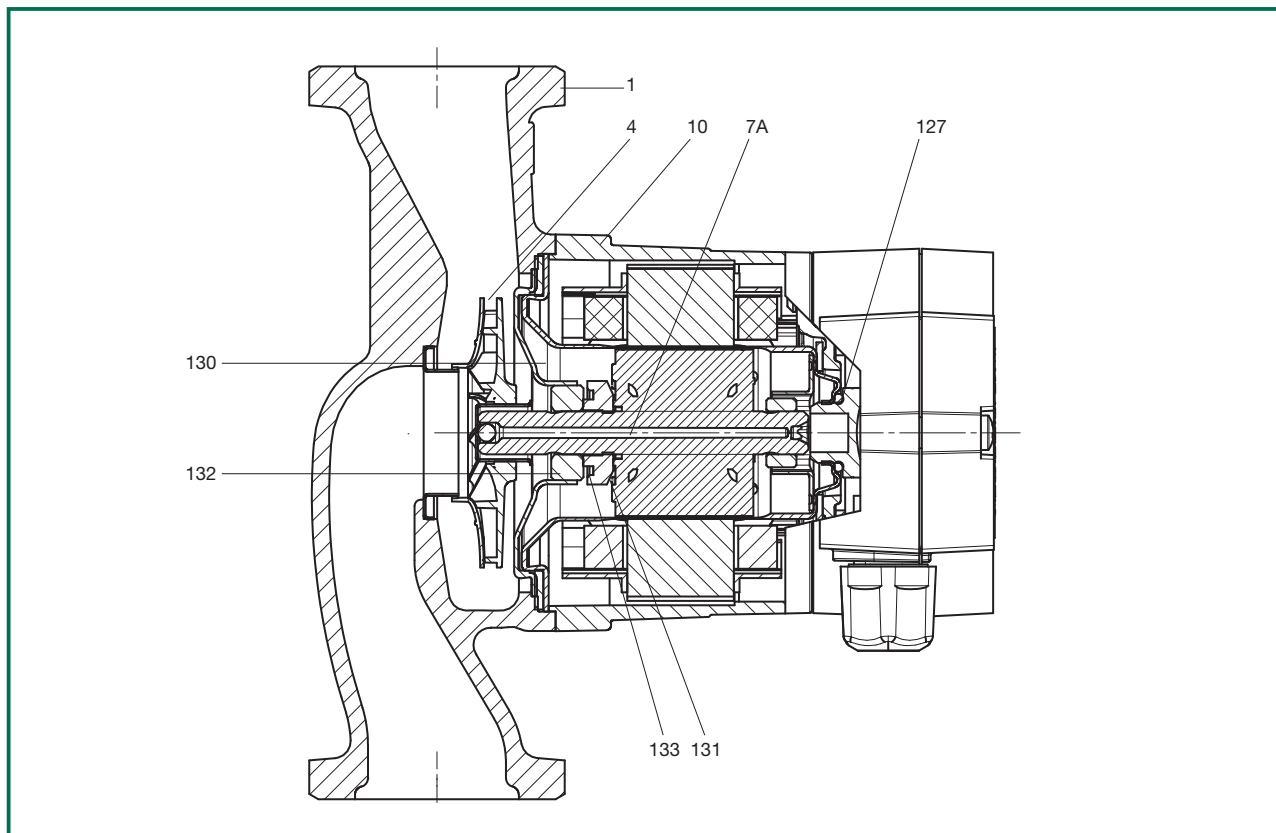
- proportional pressure 
- constant pressure 
- constant speed 

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 m³/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

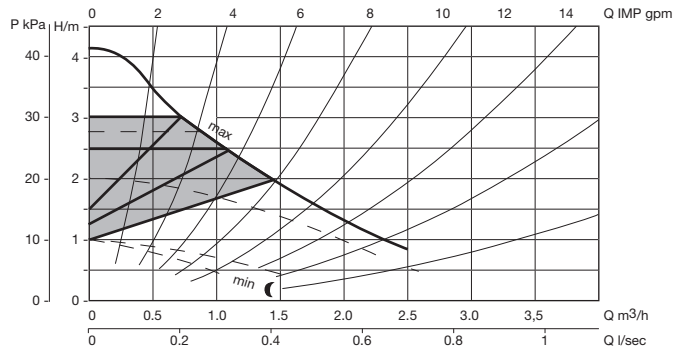
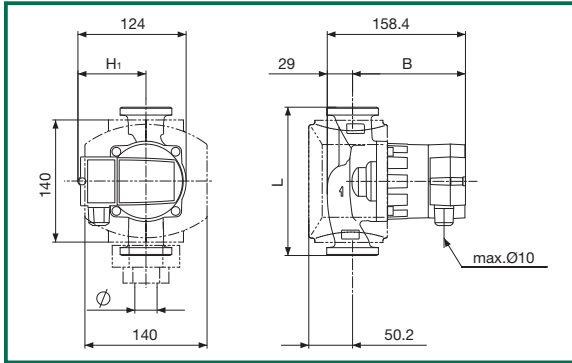
Clean, free of solids and mineral oils,
non-viscous, chemically neutral,
and approximating the properties of water
(max. glycol contents 50%)

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. 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)

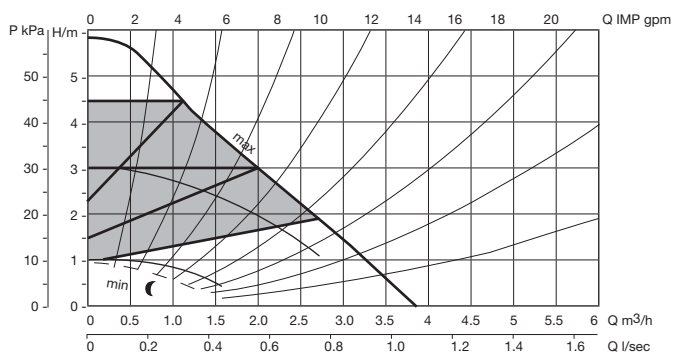
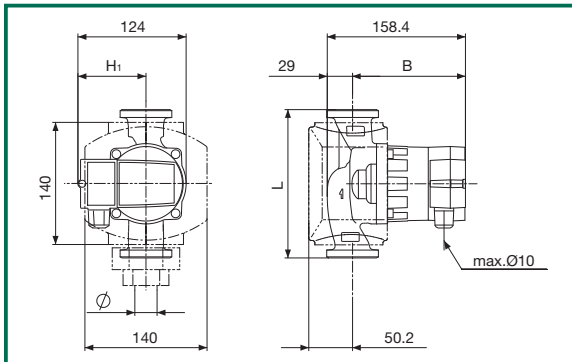
AC 35 SINGLE WITH UNIONS



| MODEL | L | B | H1 | PACK DIMENSIONS | | | VOLUME m ³ | 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 ³ | 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 |

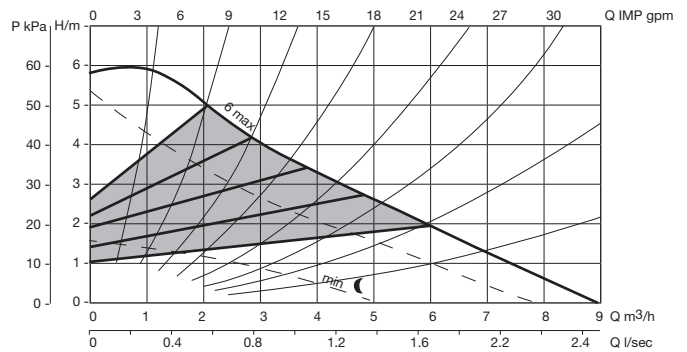
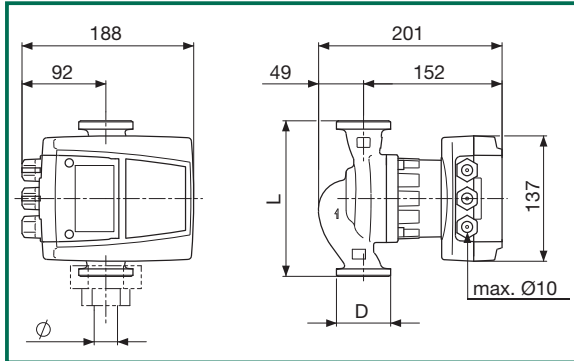
| MODEL | POWER SUPPLY 50 Hz | CENTRE DISTANCE mm | UNIONS ON REQUEST | | ELECTRICAL DATA | | | | | MINIMUM SUCTION PRESSURE |
|------------|-----------------------|--------------------------|-------------------|-------------------|-----------------|-------------|--------------|--------------------|---|--------------------------------|
| | | | 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 mm²/s and density equivalent to 1000 kg/m³. 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)

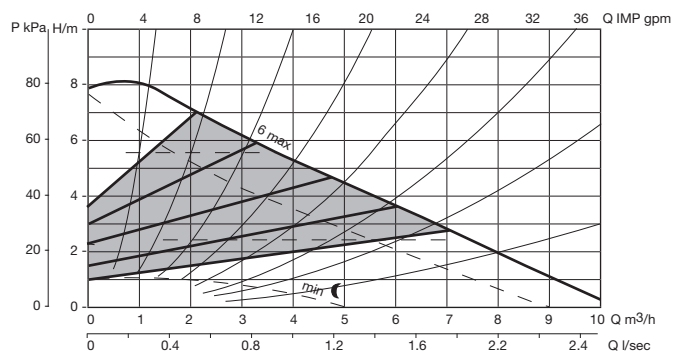
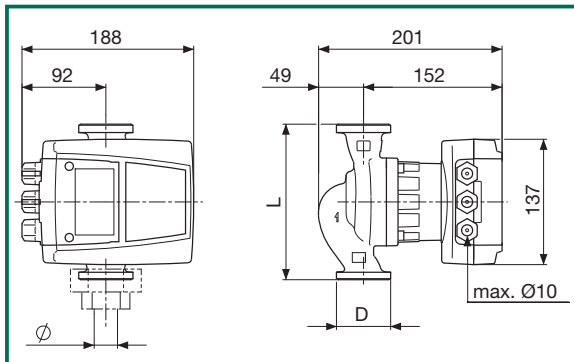
AC 65 SINGLE WITH UNIONS



| MODEL | L | B | H1 | PACK DIMENSIONS | | | VOLUME m ³ | WEIGHT Kg |
|-------------------|-----|-----|----|-----------------|-----|-----|--------------------------|--------------|
| | | | | L | B | H | | |
| AC 65/180 | 180 | 152 | 92 | 230 | 187 | 200 | 0,012 | 3,8 |
| AC 65/180X | 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 | | |
| AC 65/180 | 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 |
| AC 65/180X | 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 ³ | WEIGHT Kg |
|-------------------|-----|-----|----|-----------------|-----|-----|--------------------------|--------------|
| | | | | L | B | H | | |
| AC 80/180 | 180 | 152 | 92 | 230 | 187 | 200 | 0,012 | 3,8 |
| AC 80/180X | 180 | 152 | 92 | 230 | 187 | 200 | 0,012 | 3,8 |

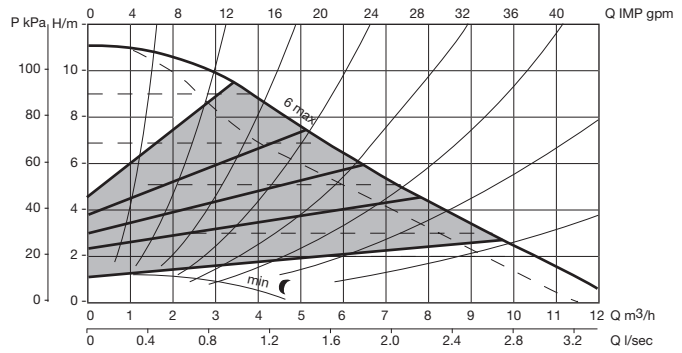
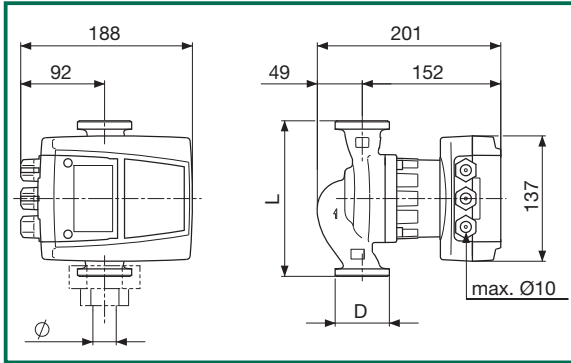
| MODEL | POWER SUPPLY 50 Hz | CENTRE DISTANCE mm | UNIONS ON REQUEST | | ELECTRICAL DATA | | | | | MINIMUM SUCTION PRESSURE |
|-------------------|-----------------------|--------------------------|-------------------|-------------------|-----------------|-------------|------------|--------------------|---|--------------------------------|
| | | | STANDARDIZED | SPECIAL | SPEED | P1 MAX W | In A | CAPACITOR µF Vc | | |
| AC 80/180 | 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 |
| AC 80/180X | 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 mm²/s and density equivalent to 1000 kg/m³. 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 ³ | WEIGHT Kg |
|--------------------|-----|-----|----|-----------------|-----|-----|--------------------------|--------------|
| | | | | L | B | H | | |
| AC 110/180X | 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 | | |
| AC 110/180X | 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 |