

| | | |
|-----------------------|------------------|-------------|
| PROJECT: | UNIT TAG: | QUANTITY: |
| REPRESENTATIVE: _____ | TYPE OF SERVICE: | DATE: _____ |
| ENGINEER: | SUBMITTED BY: | DATE: |
| CONTRACTOR: | APPROVED BY: | DATE: |
| | ORDER NO.: | DATE: |

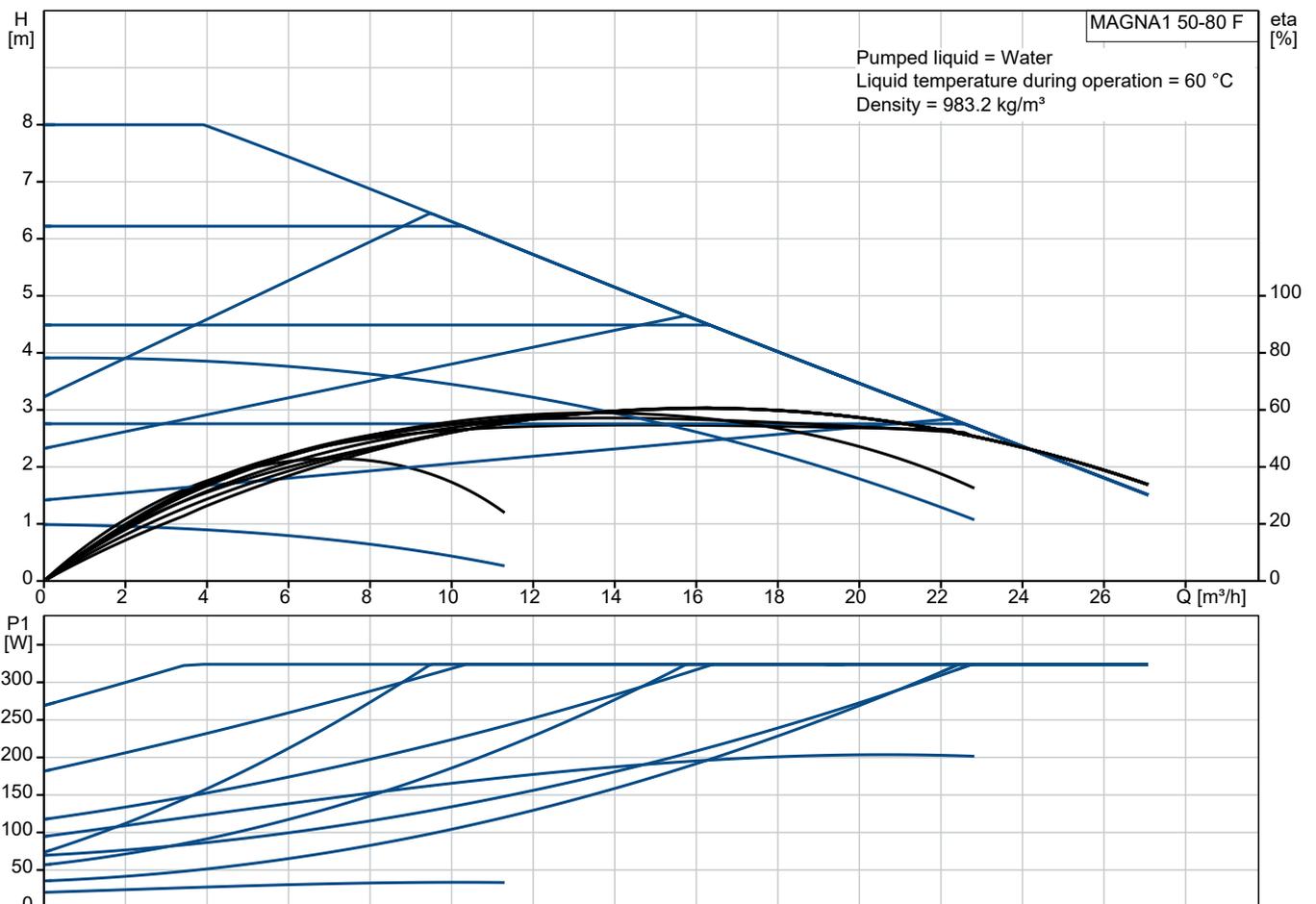


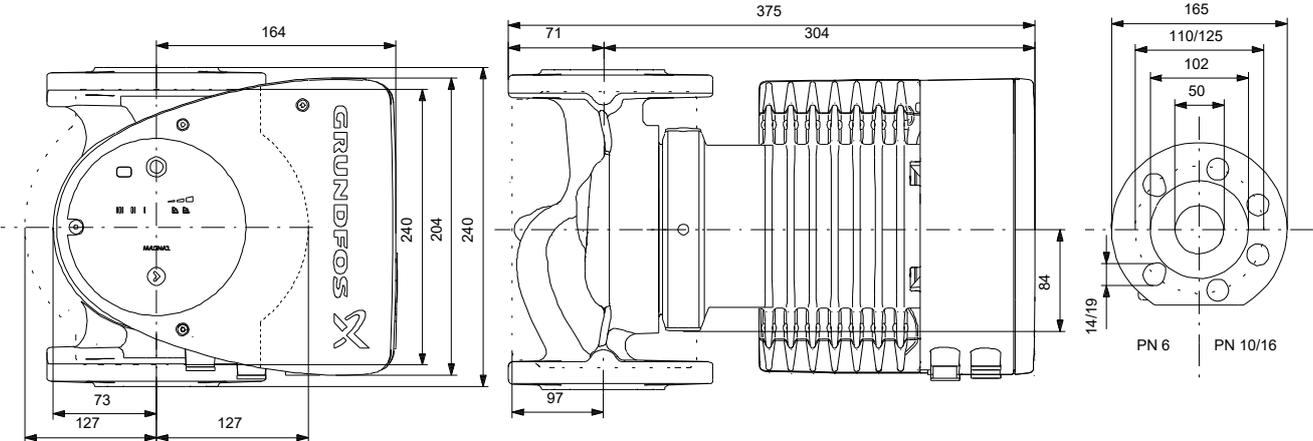
MAGNA1 50-80 F

The Grundfos MAGNA1 circulator pump is ideal for basic performance needs in heating and cooling applications. The pump offers basic system control and monitoring and can communicate via a fault relay and digital start/stop.

Note! Product picture may differ from actual product

| Conditions of Service | | Pump Data | | Motor Data | |
|-----------------------|-------|------------------------------|---------------|-------------------|----------------|
| Liquid: | Water | Maximum operating pressure: | 10 bar | P1 max: | 20.91 .. 331 W |
| Temperature: | 60 °C | Liquid temperature range: | -10 .. 110 °C | Mains frequency: | 50 / 60 Hz |
| Specific Gravity: | 0.985 | Maximum ambient temperature: | 40 °C | Enclosure class: | X4D |
| | | Flange standard: | DIN | Insulation class: | F |
| | | Pipe connection: | DN 50 | | |
| | | Product number: | On request | | |





Materials:
 Pump housing: Cast iron
 Pump housing: EN-GJL-250
 Pump housing: ASTM A48-250B
 Impeller: PES 30%GF

| Qty. | Description |
|------|-------------|
|------|-------------|

| | |
|---|----------------|
| 1 | MAGNA1 50-80 F |
|---|----------------|



Note! Product picture may differ from actual product

Product No.: On request

The Grundfos MAGNA1 circulator pump is the simple option for a job well done.

With its high energy efficiency the product lives up to the EuP 2015 regulations ensuring substantial savings on electricity, and with its intuitive, user-friendly interface and maintenance-free design, MAGNA1 is the ideal circulator pump for basic performance needs in applications where basic system control and monitoring are desired.

With this range of circulator pumps, everything from setup to basic control and monitoring are made easy. The pump is maintenance-free due to the canned-rotor type design.

MAGNA1 offers the possibility of monitoring the pump via the fault relay output. The digital start/stop input remotely controls the pump.

The pump communicates wirelessly with the Grundfos GO Remote app.

MAGNA1 can work as main pump in both heating and cooling applications, including:

- Mixing loops
- Heating surfaces
- Air-conditioning surfaces
- Ground-source heat pump systems
- Smaller chiller applications.

MAGNA1 is a single-phase pump and characterised by having the controller and operating panel integrated in the control box.

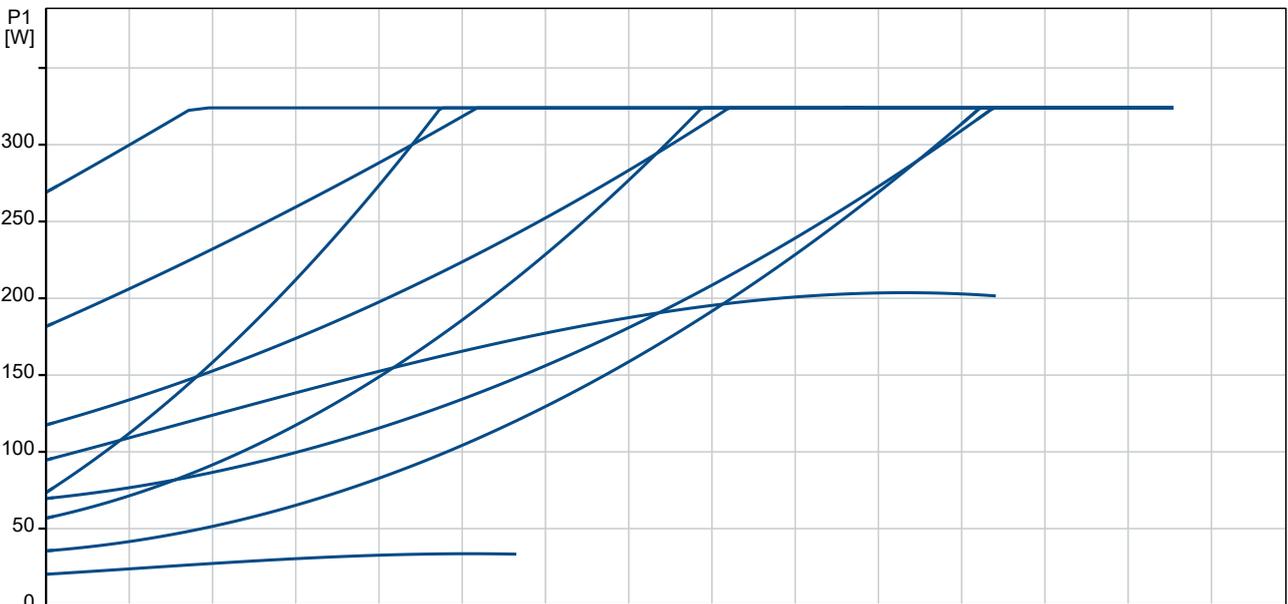
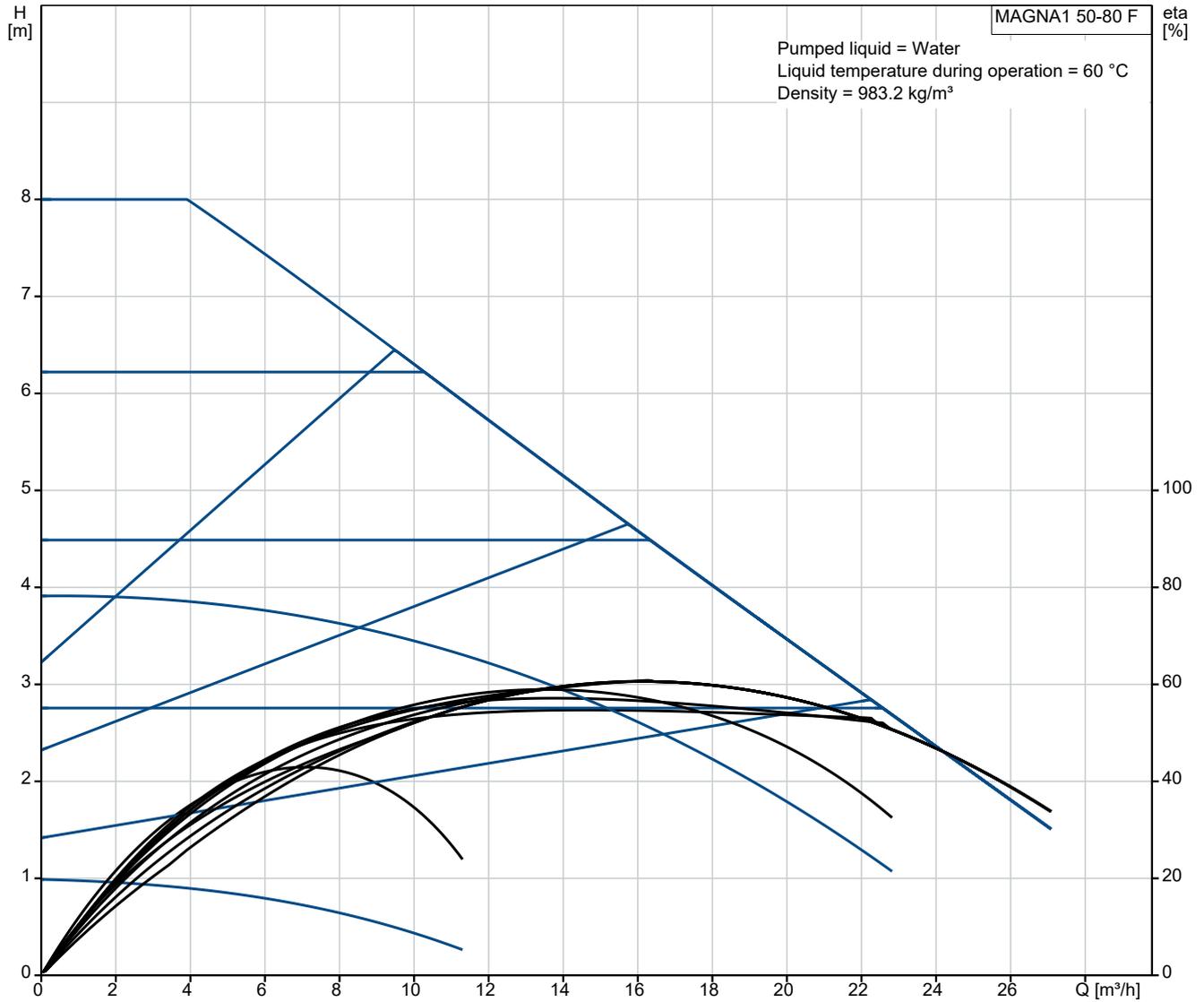
The pump housing is available in both cast-iron and stainless-steel versions.

The composite rotor can is carbon-fibre reinforced, the bearing plate and rotor cladding are made of stainless steel and the stator housing is made of aluminium.

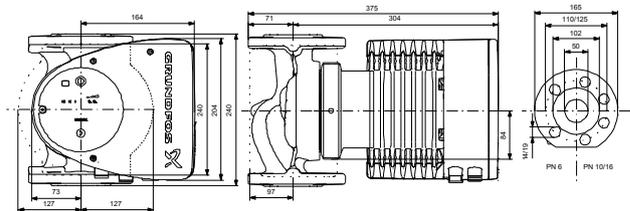
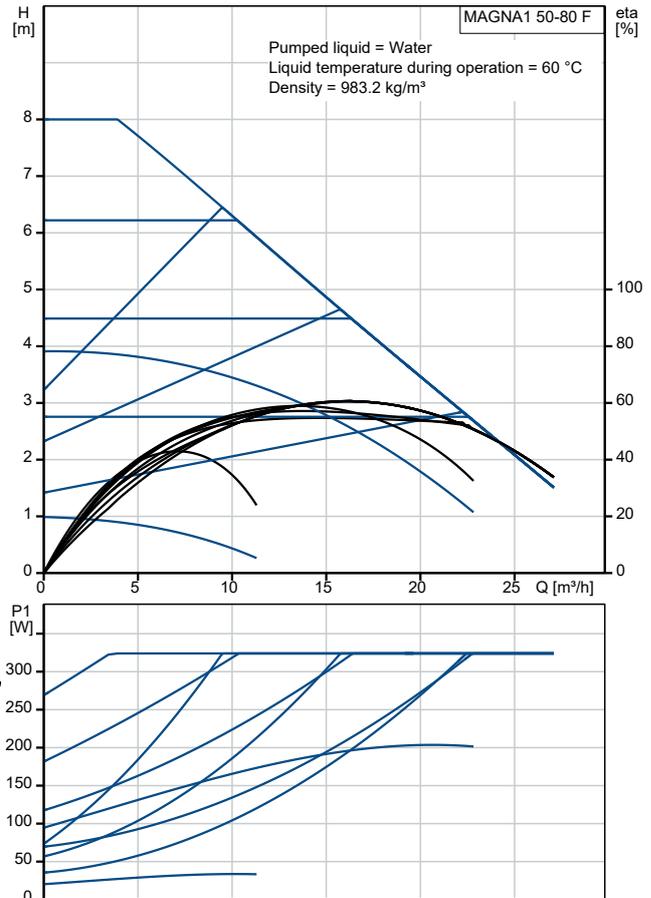
The power electronics are air-cooled.

The pump incorporates a 4-pole synchronous, permanent-magnet motor (PM motor). This motor type is characterised by higher efficiency than a conventional asynchronous squirrel-cage motor. The pump speed is controlled by an integrated frequency converter.

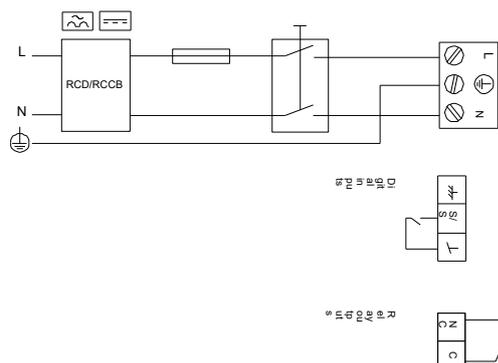
On request MAGNA1 50-80 F



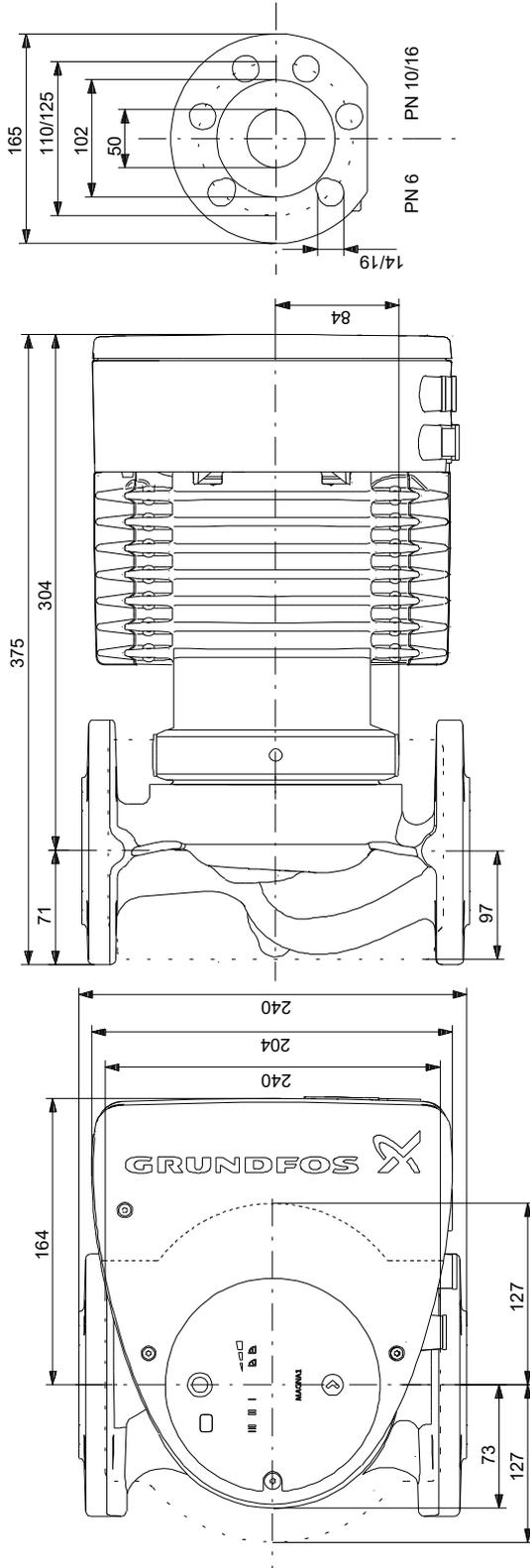
| Description | Value |
|-------------------------------|--|
| General information: | |
| Product name: | MAGNA1 50-80 F |
| Product No: | On request |
| EAN number: | On request |
| Technical: | |
| Head max: | 80 dm |
| TF class: | 110 |
| Approvals: | CE,VDE,EAC,MOROCCO,UKCA, TSERCM,UkrSEPRO |
| Model: | C |
| Materials: | |
| Pump housing: | Cast iron |
| Pump housing: | EN-GJL-250 |
| Pump housing: | ASTM A48-250B |
| Impeller: | PES 30%GF |
| Installation: | |
| Range of ambient temperature: | 0 .. 40 °C |
| Maximum operating pressure: | 10 bar |
| Flange standard: | DIN |
| Pipe connection: | DN 50 |
| Pressure rating: | PN 6/10 |
| Port-to-port length: | 240 mm |
| Liquid: | |
| Pumped liquid: | Water |
| Liquid temperature range: | -10 .. 110 °C |
| Selected liquid temperature: | 60 °C |
| Density: | 983.2 kg/m ³ |
| Electrical data: | |
| Power input - P1: | 20.91 .. 331 W |
| Mains frequency: | 50 / 60 Hz |
| Rated voltage [V]: | 1 x 230 V |
| Maximum current consumption: | 0.22 .. 1.48 A |
| Enclosure class (IEC 34-5): | X4D |
| Insulation class (IEC 85): | F |
| Others: | |
| Energy (EEL): | 0.20 |
| Environmental approvals: | CN ROHS,WEEE |
| Net weight: | 17.4 kg |
| Gross weight: | 19.6 kg |
| Shipping volume: | 0.046 m ³ |
| Finnish LVI No.: | 4615194 |
| Country of origin: | DE |
| Custom tariff no.: | 84137030 |



Example of mains-connected motor with mains switch, backup fuse and additional protection



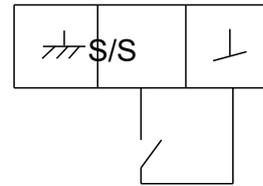
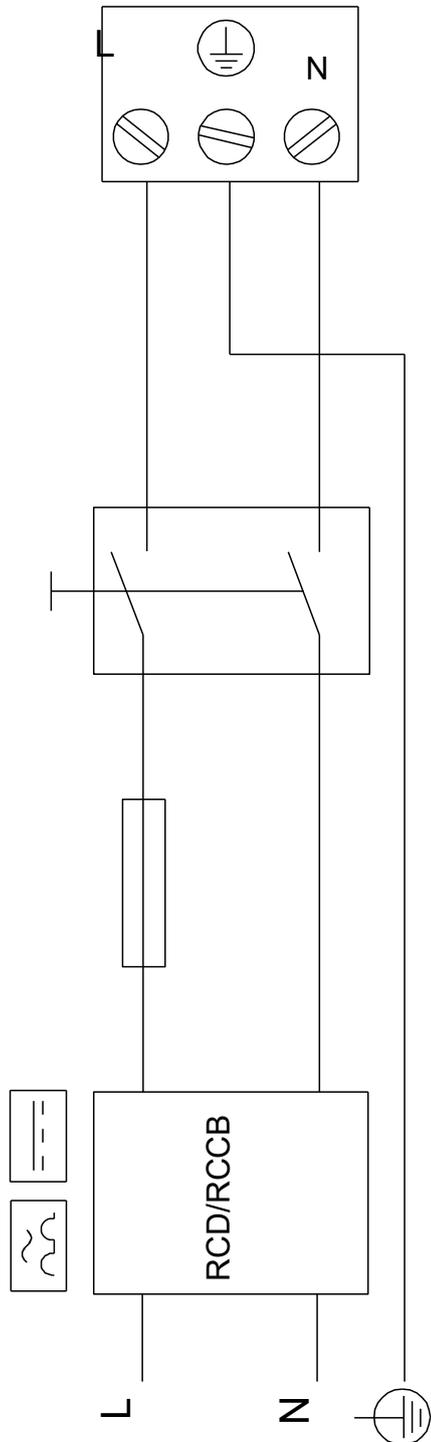
On request MAGNA1 50-80 F



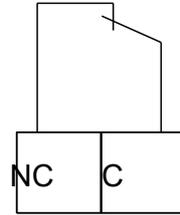
Note! All units are in [mm] unless others are stated.
 Disclaimer: This simplified dimensional drawing does not show all details.

On request MAGNA1 50-80 F

Example of mains-connected motor with mains switch, backup fuse and additional protection



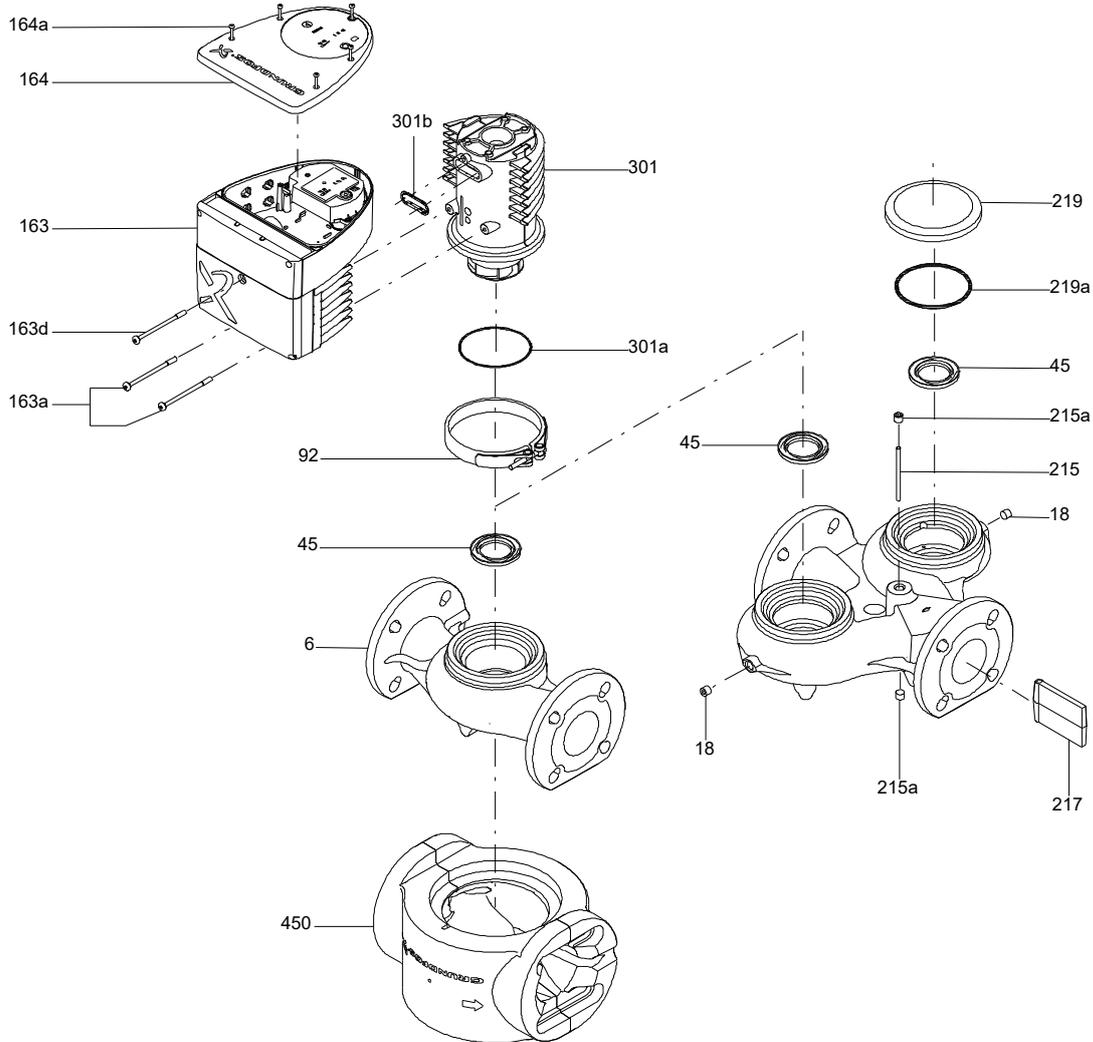
Digital inputs



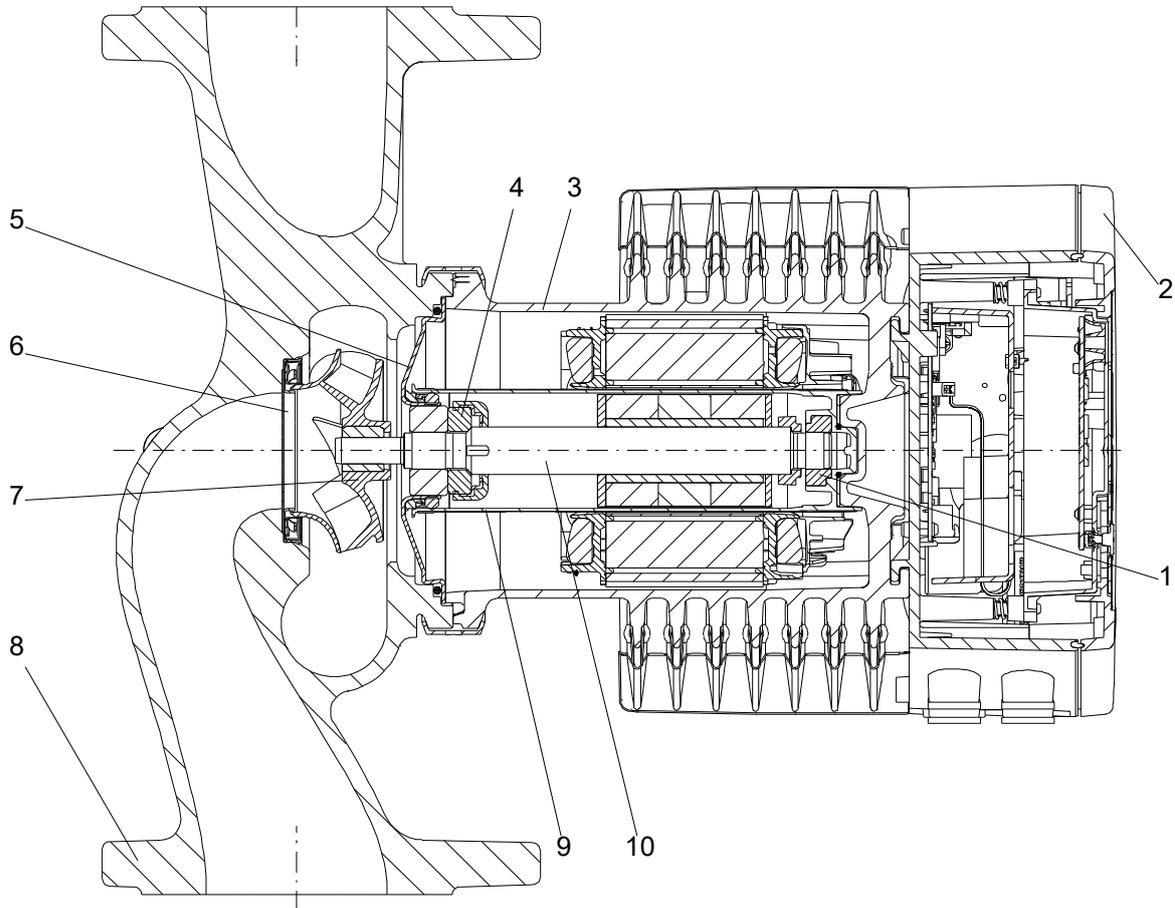
Relay outputs

Note! All units are in [mm] unless others are stated.

(TM054005 for Magna1 750-1600W)



(TM069997 Magna1 ME/LA model C)



**Spare parts MAGNA1 50-80 F, Product No. On request
Produced After 1731 (production year and week number)**

| Pos | Description | Annotation | Classification Data | Part no. | Qty. | Unit |
|------|---------------------------------|------------|---------------------|----------|------|------|
| - | Kit, Control box configured | | | 99426892 | 1 | pcs |
| - | Kit, control box non-configured | | | 99280445 | 1 | |
| - | Control box cpl. | | | | | |
| - | Control box | | | | | |
| 159c | Pan washer head screw | | | | | |
| 164a | Screw DELTA PT | | | | | |
| 164 | Cover | | | | | |
| 163 | Control box | | | | | |
| 163d | Pan head screw | | | | | |
| 163a | Pan head screw | | | | | |
| 301b | Protector | | | | | |
| | GSC | | | | 1 | |
| - | Kit, Cover | | | 99280465 | 1 | pcs |
| 164a | Screw DELTA PT | | | | 5 | |
| 164 | Cover | | | | 1 | |
| - | Kit, Pump head | | | 98148743 | 1 | pcs |
| 92 | Clamp cpl. | | | | 1 | |
| - | 301 Pump head | | | | 1 | |
| - | Stator w/housing cpl. | | | | | |
| 301 | Stator housing | | | | | |
| 303 | Rotor can cpl. | | | | | |
| - | 304 Shaft w/impeller cpl. | | | | | |
| - | Bearing plate cpl. | | | | | |
| 301a | O-ring | | | | | |
| - | Spare, Clamp | | | 98148759 | 1 | pcs |
| 92 | Clamp cpl. | | | | 1 | |
| - | Spare, O-ring | | | 98148761 | 1 | pcs |
| 301a | O-ring | | | | 1 | |
| + | Pump housing cpl. | | | 92721974 | 1 | pcs |
| 450 | Insulation | | | 98159367 | 1 | pcs |