

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

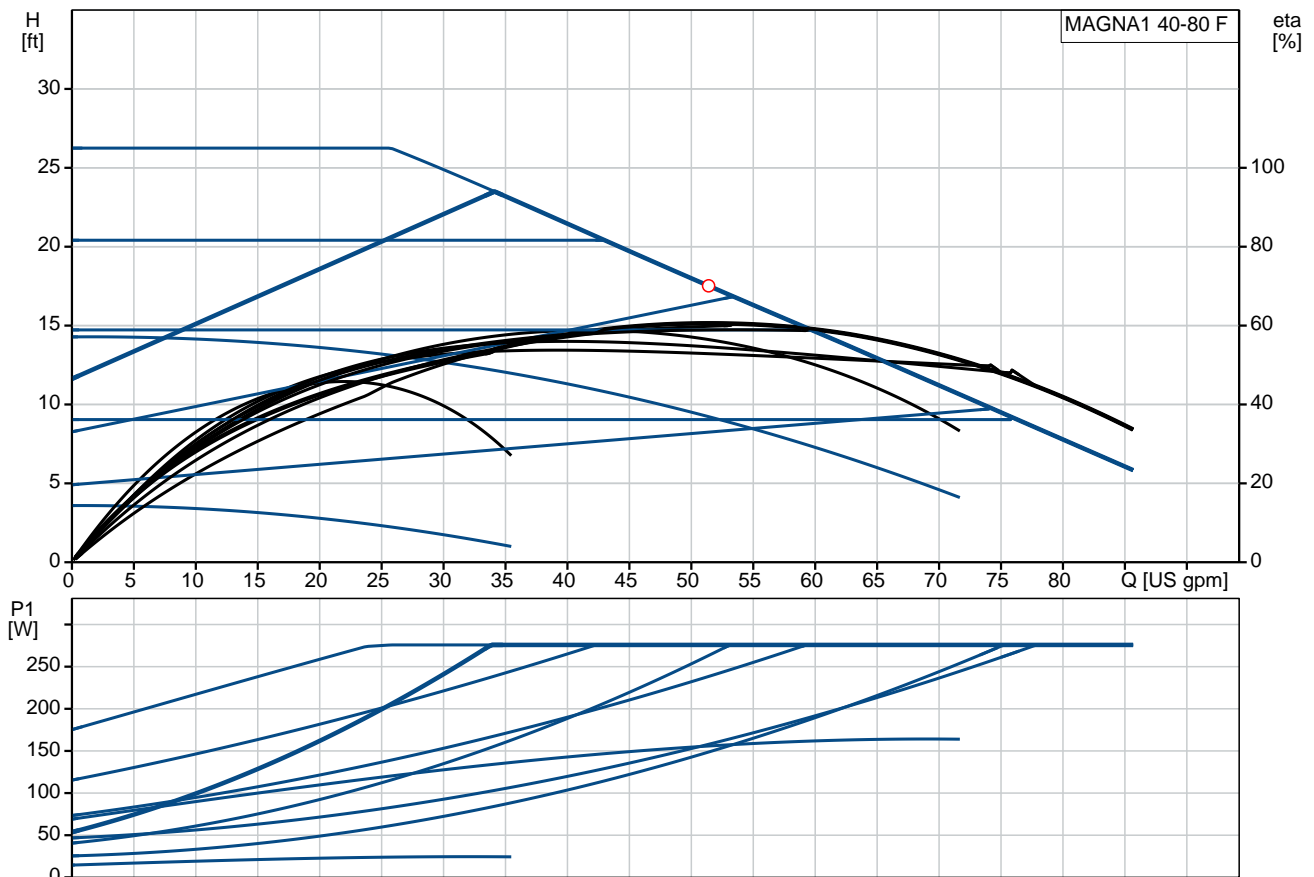


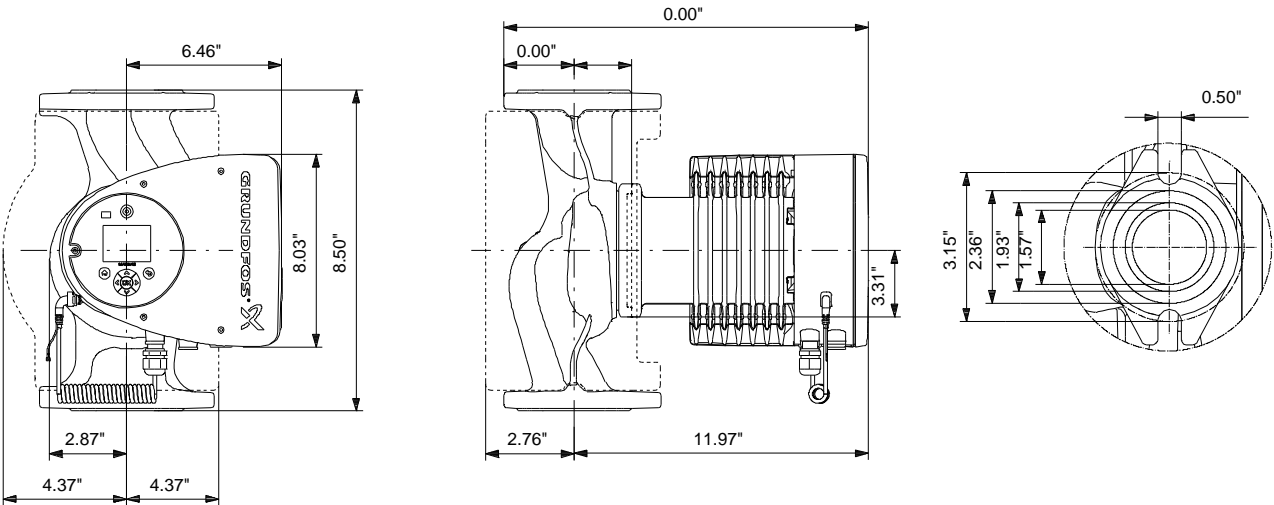
## MAGNA1 40-80 F

Full range of intelligent, high-efficiency circulators for heating, cooling, ground source heat pump systems and domestic hot water applications

Product photo could vary from the actual product

| Conditions of Service   | Pump Data                              | Motor Data            |
|-------------------------|--|-----------------------|
| Flow: _____             | Maximum operating pressure: 174 psi    | P1 max: 17 .. 280 W   |
| Head: _____             | Liquid temperature range: 14 .. 230 °F | Rated voltage: 115 V  |
| Efficiency: _____       | Maximum ambient temperature: 104 °F    | Main frequency: 60 Hz |
| Liquid: Water           | Approvals: 98544607                    | Enclosure class: X4D  |
| Temperature: 140 °F     | Flange standard: GF                    | Insulation class: F   |
| NPSH required: ft       | Pipe connection: GF15/26/40/43         |                       |
| Viscosity: _____        | Product number: 98126799               |                       |
| Specific Gravity: 0.985 |  |                       |





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

## Tender Text



Product photo could vary from the actual product

Product No.: [98126799](#)

### MAGNA1 40-80 F

MAGNA1 circulator pump with easy selection of pump setting

The pump is of the canned-rotor type, i.e. pump and motor form an integral unit without shaft seal and with only two gaskets for sealing.

The bearings are lubricated by the pumped liquid.

In order to avoid problems in connection with disposal, great importance has been attached to using as few different materials as possible.

A pump with no maintenance requirements and extremely low life cycle cost.

#### Heating systems

- Main pump
- mixing loops
- heating surfaces
- air-conditioning surfaces.

The MAGNA1 circulator pumps are designed for

circulating liquids in heating systems with variable flows where it is desirable to optimize the setting of the pump duty point, thus reducing energy costs. The pumps are also suitable for domestic hot-water systems.

To ensure correct operation, it is important that the sizing range of the system falls within the duty range of the pump.

The pump is also suitable for systems with hot-water priority as an external signal can

immediately force the pump to operate according to the max. curve, for example in solar-heating systems.

#### Benefits

- Safe selection.
- Simple installation.
- Low energy consumption. All MAGNA1 pumps comply with the EuP requirements.
- Nine light fields for indication of pump setting. Three proportional-pressure curves, three constant-pressure curves and three fixed-speed curves are available.
- Low noise level.
- No maintenance and long life.

#### Liquid:

Pumped liquid: Water  
Liquid temperature range: 14 .. 230 °F  
Liquid temperature during operation: 140 °F  
Density: 61.35 lb/ft<sup>3</sup>

#### Technical:

TF class: 110  
Approvals on nameplate: 98544607

#### Materials:

Pump housing: Cast iron  
EN-GJL-250



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Impeller: ASTM A48-250B  
PES 30%GF

**Installation:**


Range of ambient temperature: 32 .. 104 °F  
Maximum operating pressure: 174 psi  
Flange standard: GF  
Pipe connection: GF15/26/40/43  
Pressure stage: PN12  
Port-to-port length: 8 9/16 in

**Electrical data:**

Power input - P1: 17 .. 280 W  
Main frequency: 60 Hz  
Rated voltage: 1 x 115 V  
Maximum current consumption: 0.26 .. 2.52 A  
Enclosure class (IEC 34-5): X4D  
Insulation class (IEC 85): F

**Others:**

Energy (EEI): 0.19  
Net weight: 36.3 lb  
Gross weight: 40.2 lb  
Shipping volume: 1060 ft<sup>3</sup>

| Position | Count | Description   |
|----------|-------|---|
|          | 1     | <p><b>MAGNA1 40-80 F</b></p>  <p>Product photo could vary from the actual product</p> <p>Product No.: <a href="#">98126799</a></p> <p>MAGNA1 circulator pump with easy selection of pump setting<br/>           The pump is of the canned-rotor type, i.e. pump and motor form an integral unit without shaft seal and with only two gaskets for sealing.<br/>           The bearings are lubricated by the pumped liquid.<br/>           In order to avoid problems in connection with disposal, great importance has been attached to using as few different materials as possible.<br/>           A pump with no maintenance requirements and extremely low life cycle cost.</p> <p>Heating systems</p> <ul style="list-style-type: none"> <li>• Main pump</li> <li>• mixing loops</li> <li>• heating surfaces</li> <li>• air-conditioning surfaces.</li> </ul> <p>The MAGNA1 circulator pumps are designed for circulating liquids in heating systems with variable flows where it is desirable to optimize the setting of the pump duty point, thus reducing energy costs. The pumps are also suitable for domestic hot-water systems.</p> <p>To ensure correct operation, it is important that the sizing range of the system falls within the duty range of the pump.</p> <p>The pump is also suitable for systems with hot-water priority as an external signal can immediately force the pump to operate according to the max. curve, for example in solar-heating systems.</p> <p>Benefits</p> <ul style="list-style-type: none"> <li>• Safe selection.</li> <li>• Simple installation.</li> <li>• Low energy consumption. All MAGNA1 pumps comply with the EuP requirements.</li> <li>• Nine light fields for indication of pump setting. Three proportional-pressure curves, three constant-pressure curves and three fixed-speed curves are available.</li> <li>• Low noise level.</li> <li>• No maintenance and long life.</li> </ul> <p><b>Liquid:</b></p> <p>Pumped liquid: Water<br/>           Liquid temperature range: 14 .. 230 °F<br/>           Liquid temperature during operation: 140 °F<br/>           Density: 61.35 lb/ft<sup>3</sup></p> <p><b>Technical:</b></p> <p>TF class: 110<br/>           Approvals on nameplate: 98544607</p> <p><b>Materials:</b></p> <p>Pump housing: Cast iron</p> |



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| Position | Count | Description                                 |
|----------|-------|---|
|          |       | EN-GJL-250<br>ASTM A48-250B<br>PES 30%GF    |
|          |       | Impeller:                                   |
|          |       | <b>Installation:</b>                        |
|          |       | Range of ambient temperature: 32 .. 104 °F  |
|          |       | Maximum operating pressure: 174 psi         |
|          |       | Flange standard: GF                         |
|          |       | Pipe connection: GF15/26/40/43              |
|          |       | Pressure stage: PN12                        |
|          |       | Port-to-port length: 8 9/16 in              |
|          |       | <b>Electrical data:</b>                     |
|          |       | Power input - P1: 17 .. 280 W               |
|          |       | Main frequency: 60 Hz                       |
|          |       | Rated voltage: 1 x 115 V                    |
|          |       | Maximum current consumption: 0.26 .. 2.52 A |
|          |       | Enclosure class (IEC 34-5): X4D             |
|          |       | Insulation class (IEC 85): F                |
|          |       | <b>Others:</b>                              |
|          |       | Energy (EEI): 0.19                          |
|          |       | Net weight: 36.3 lb                         |
|          |       | Gross weight: 40.2 lb                       |
|          |       | Shipping volume: 1060 ft <sup>3</sup>       |



Company name:

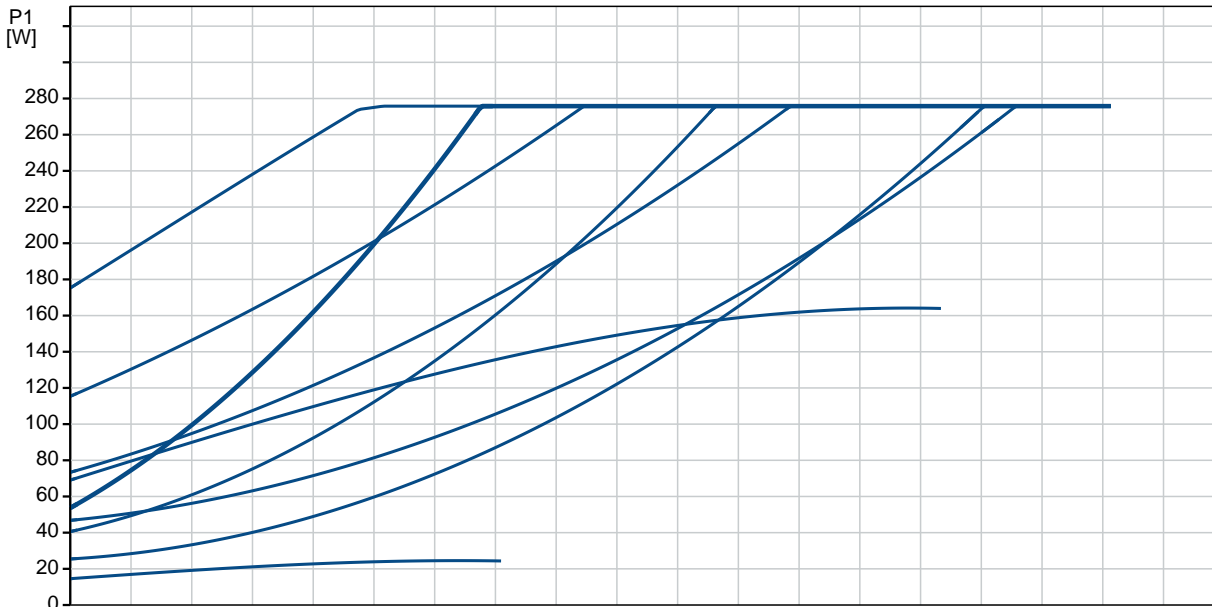
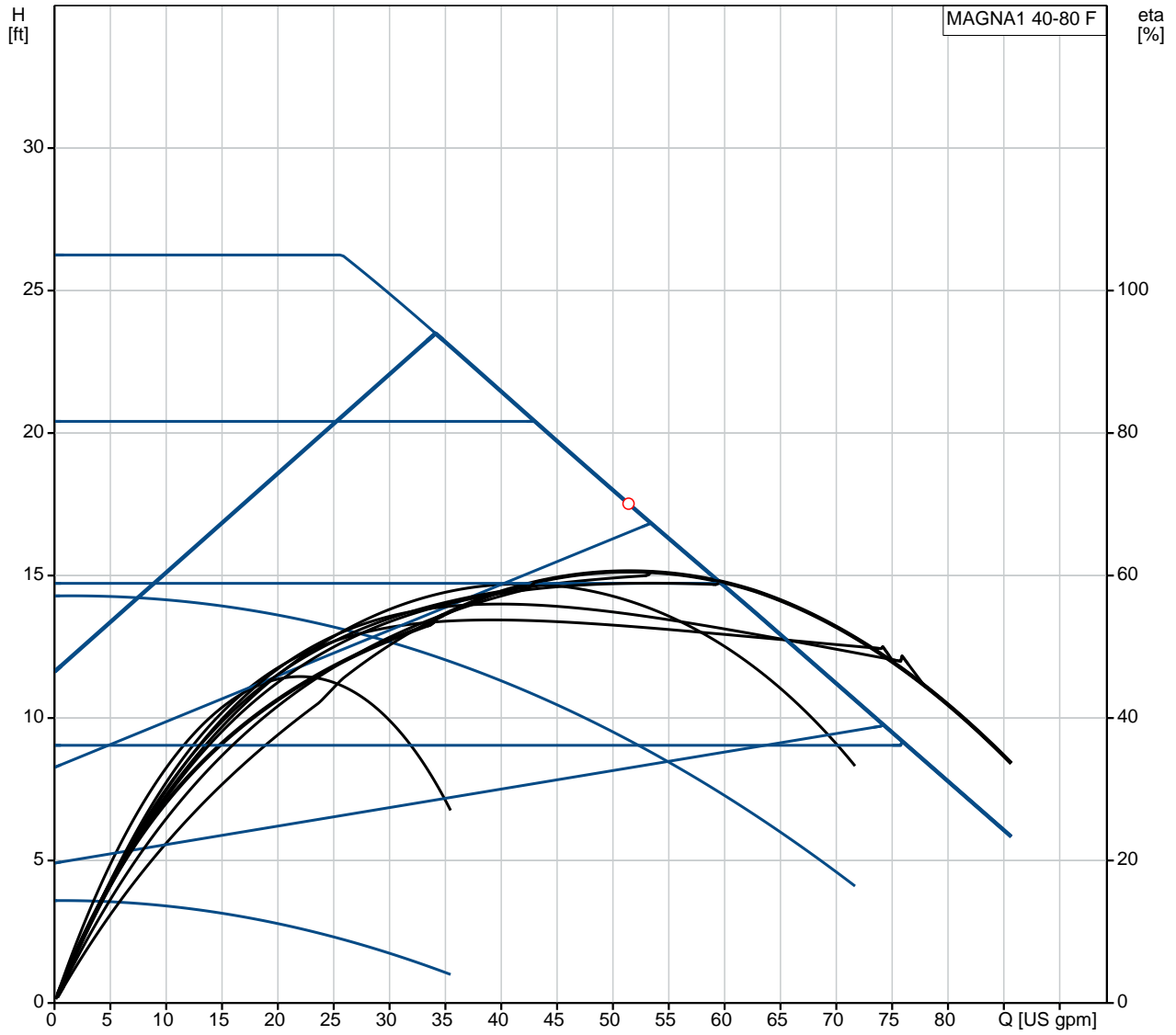
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Date:

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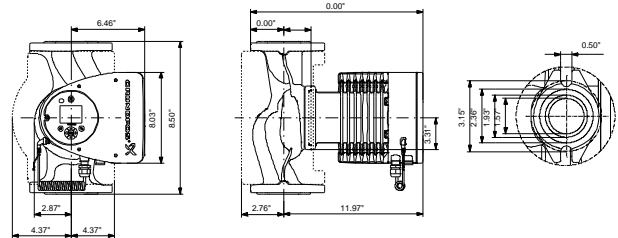
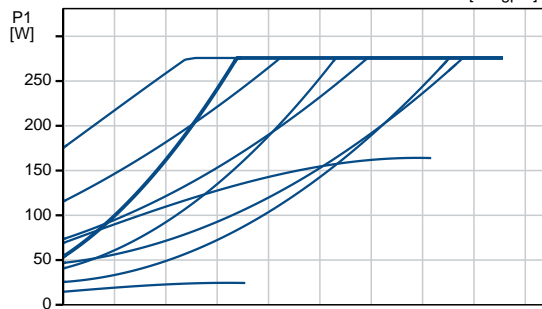
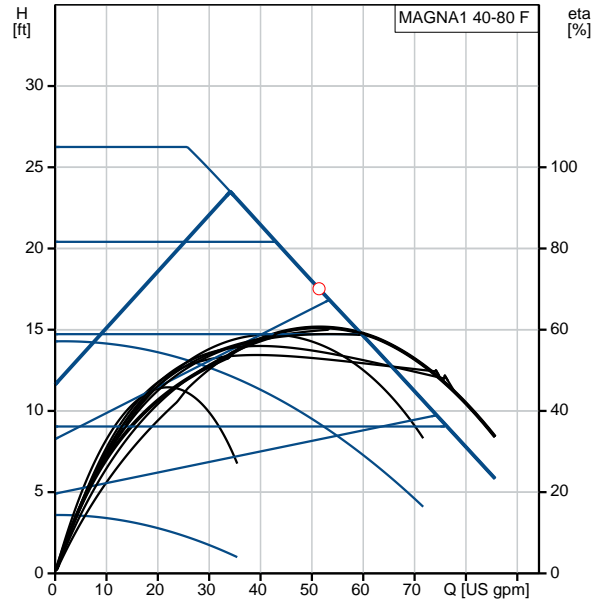
### 98126799 MAGNA1 40-80 F 60 Hz



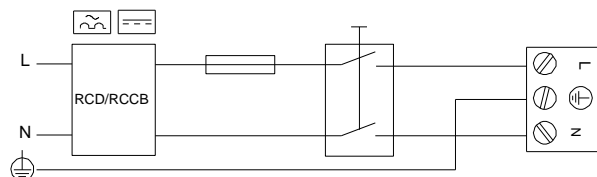
| Description                          | Value                                    |
|--------------------------------------|--|
| <b>General information:</b>          |  |
| Product name:                        | MAGNA1 40-80 F                           |
| Product No.:                         | 98126799                                 |
| EAN:                                 | 5710629499615                            |
| <b>Technical:</b>                    |  |
| Head max:                            | 26.25 ft                                 |
| TF class:                            | 110                                      |
| Approvals on nameplate:              | 98544607                                 |
| Model:                               | B  |
| <b>Materials:</b>                    |  |
| Pump housing:                        | Cast iron<br>EN-GJL-250<br>ASTM A48-250B |
| Impeller:                            | PES 30%GF                                |
| <b>Installation:</b>                 |  |
| Range of ambient temperature:        | 32 .. 104 °F                             |
| Maximum operating pressure:          | 174 psi                                  |
| Flange standard:                     | GF                                       |
| Pipe connection:                     | GF15/26/40/43                            |
| Pressure stage:                      | PN12                                     |
| Port-to-port length:                 | 8 9/16 in                                |
| <b>Liquid:</b>                       |  |
| Pumped liquid:                       | Water                                    |
| Liquid temperature range:            | 14 .. 230 °F                             |
| Liquid temperature during operation: | 140 °F                                   |
| Density:                             | 61.35 lb/ft <sup>3</sup>                 |

|                              |                |
|------------------------------|----------------|
| <b>Electrical data:</b>      |                |
| Power input - P1:            | 17 .. 280 W    |
| Main frequency:              | 60 Hz          |
| Rated voltage:               | 1 x 115 V      |
| Maximum current consumption: | 0.26 .. 2.52 A |
| Enclosure class (IEC 34-5):  | X4D            |
| Insulation class (IEC 85):   | F              |

|                  |                      |
|------------------|----------------------|
| <b>Others:</b>   |                      |
| Energy (EEL):    | 0.19                 |
| Net weight:      | 36.3 lb              |
| Gross weight:    | 40.2 lb              |
| Shipping volume: | 1060 ft <sup>3</sup> |

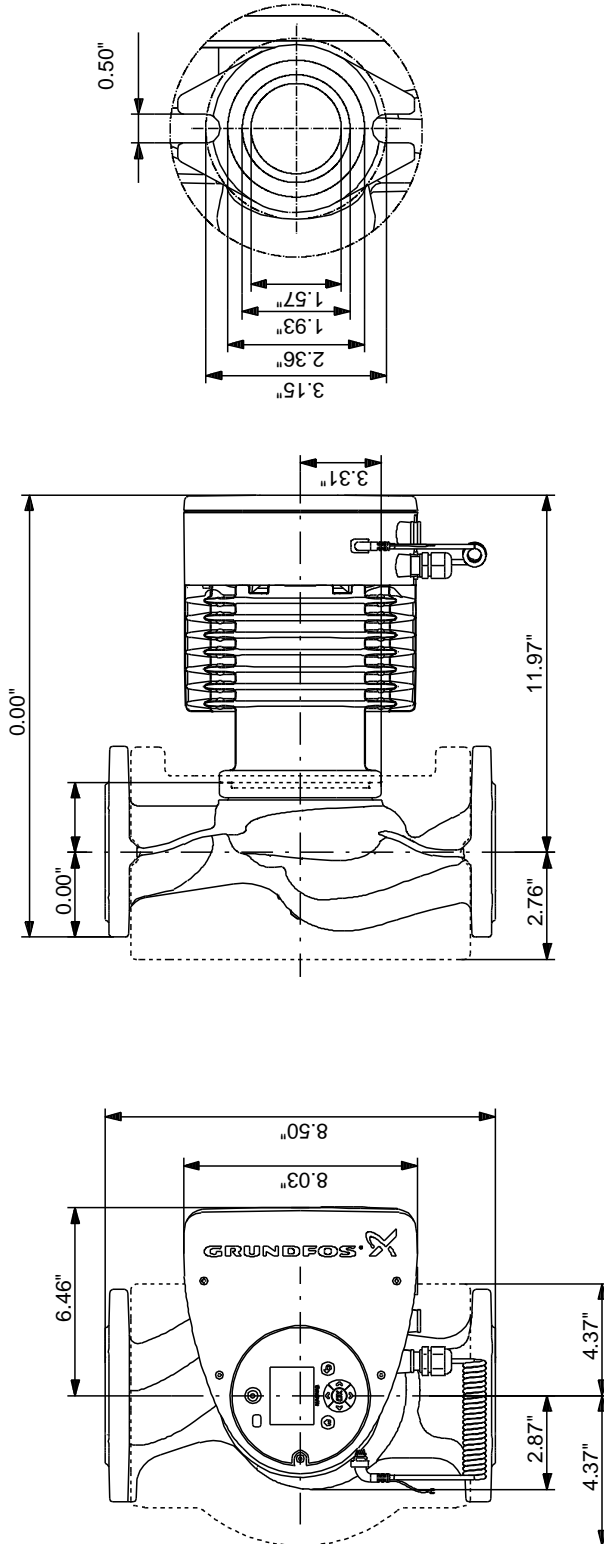


Example of mains-connected motor with mains switch, backup fuse and additional protection





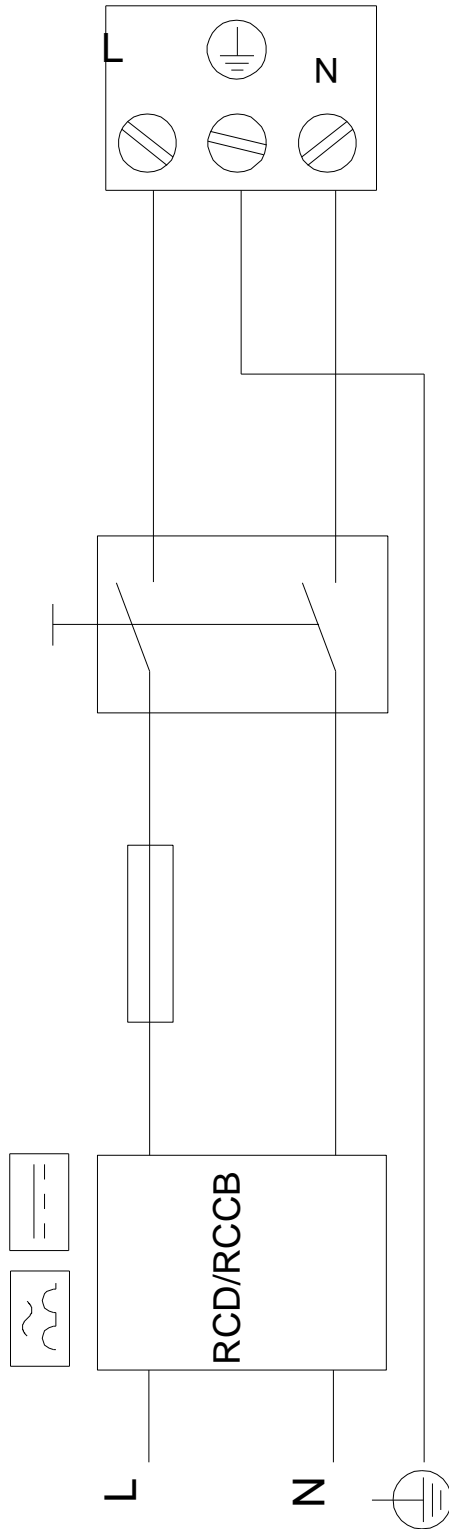
**98126799 MAGNA1 40-80 F 60 Hz**



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

## 98126799 MAGNA1 40-80 F 60 Hz

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



All units are [mm] unless otherwise presented.



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**Order Data:**

Product name: MAGNA1 40-80 F

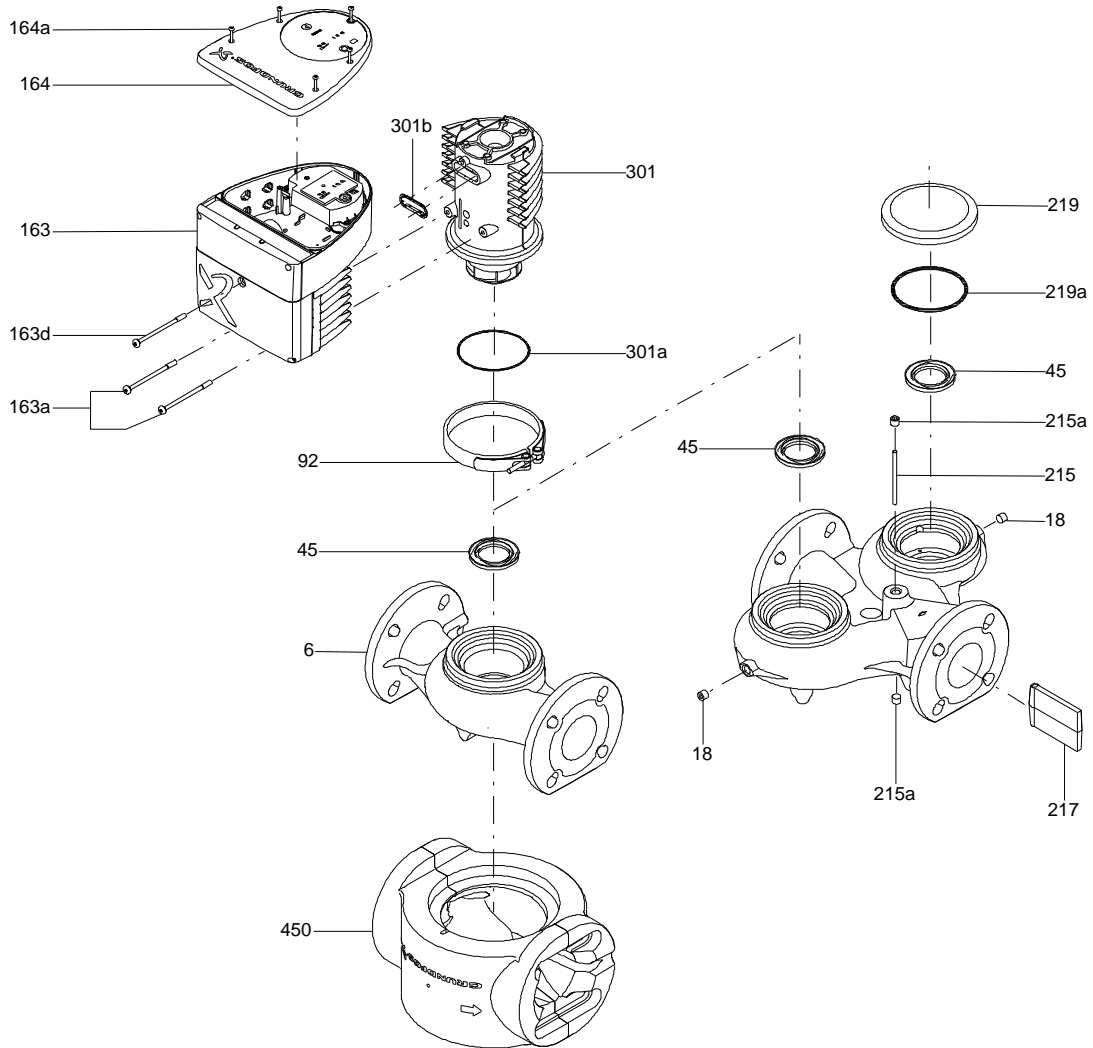
Amount: 1

Product No.: 98126799

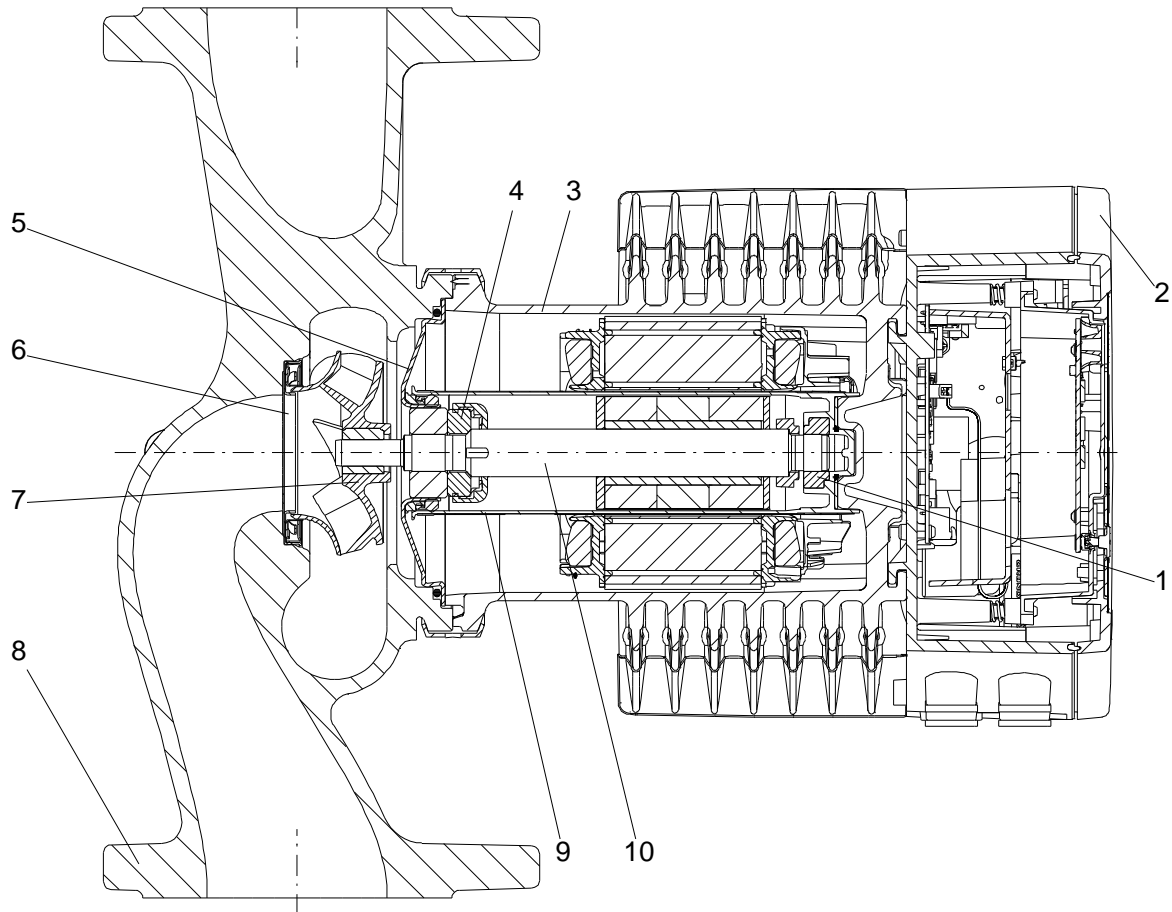
Total: Price on request

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## Exploded view ( TM054005 for Magna1 750-1600W)



Sectional drawing ( TM069997 Magna1 ME/LA model C )





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**Parts list MAGNA1 40-80 F, Prod number 98126799**  
**Valid from 31.7.2017 (1731)**

| Position | Description       | Annotation | Classification data | Part No. | Count | Unit |
|----------|-------------------|------------|---------------------|----------|-------|------|
|          | Gasket            |            |                     |          | 2     | pcs  |
| -        | Control box       |            |                     |          | 1     | pcs  |
| 162      | Control box       |            |                     |          | 1     |      |
| 163      | Control box       |            |                     |          | 1     |      |
| 6        | Pump housing cpl. |            |                     |          | 1     | pcs  |
| 92       | Clamp cpl.        |            |                     |          | 1     | pcs  |
| 163a     | Pan head screw    |            |                     |          | 2     | pcs  |
| 163d     | Pan head screw    |            |                     |          | 1     | pcs  |
| 301      | Pump head cpl.    |            |                     |          | 1     | pcs  |
| 301b     | Protector         |            |                     |          | 1     | pcs  |
| 450      | Insulation        |            |                     |          | 1     | pcs  |