

**Date:** 09/01/2017

Position | Qty. | Description

1 MAGNA3 50-180 F



Product No.: 97924286

#### MAGNA3 - More than a pump

With its unrivalled efficiency, all-encompassing range and built-in communication capabilities plus functionalities replacing system components, the MAGNA3 is ideal for engineers and specifiers looking to create high-performance systems for buildings.

This pump in the Grundfos Master Class will fit both heating and cooling applications perfectly, making it the obvious choice for almost any building project – old or new.

The MAGNA3 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.

The innovative clamp with only one screw enables easy repositioning of the pump head.

The MAGNA3 is a pump with no maintenance requirements and with extremely low Life Cycle Cost.

The pump is characterised by the following:

- controller integrated in the control box
- control panel with TFT display on the control box
- control box prepared for optional CIM modules
- built-in differential-pressure and temperature sensor
- cast-iron pump housing (depending on model)
- carbon-fibre-reinforced composite rotor can
- stainless-steel bearing plate and rotor cladding
- · aluminium alloy stator housing
- air-cooled power electronics

The MAGNA3 is a single-phase pump.

### Characteristic features

- AUTOADAPT.
- FLOWADAPT and FLOWLIMIT (more than a pump function as it reduces the need for pump throttling valves).
- Proportional-pressure control.
- Constant-pressure control.
- Constant-temperature control.
- Constant-curve duty.
- Max. or min. curve duty.
- · Automatic Night Setback.
- No external motor protection required.
- Insulating shells supplied with single-head pumps for heating systems.
- Large temperature range where the liquid temperature and the ambient temperature are independent of each other.

#### Communication

The MAGNA3 enables communication via the following:

- wireless Grundfos GO Remote
- fieldbus communication via CIM modules
- digital inputs
- relay outputs
- analog input (more than a pump function as heat energy meter)



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Motor and electronic controller

The MAGNA3 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.

A differential-pressure and temperature sensor is incorporated in the pump.

Liquid:

Pumped liquid: Water
Liquid temperature range: -10 .. 110 °C
Liquid temp: 60 °C
Density: 983.2 kg/m³

Technical:

TF class: 110

Approvals on nameplate: CE,VDE,EAC

Materials:

Pump housing: Cast iron

EN-GJL-250 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 stage: PN6/10
Port-to-port length: 280 mm

**Electrical data:** 

Power input - P1: 23 .. 762 W
Mains frequency: 50 Hz
Rated voltage: 1 x 230 V
Maximum current consumption: 0.24 .. 3.35 A

Enclosure class (IEC 34-5): X4D Insulation class (IEC 85): F

Others:

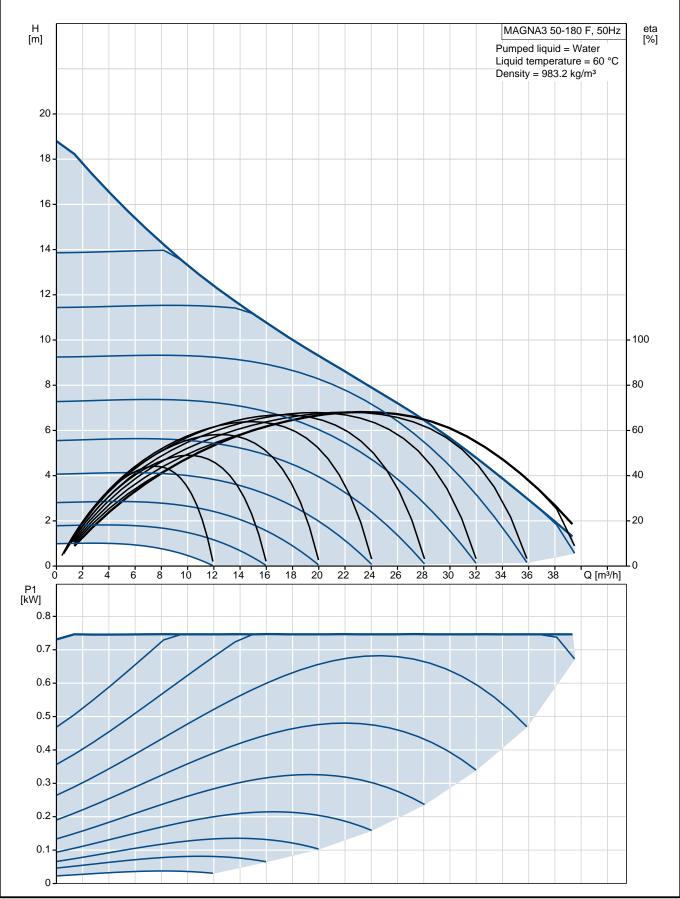
Label: Grundfos Blueflux

Energy (EEI): 0.17
Net weight: 19 kg
Gross weight: 21.2 kg
Shipping volume: 45.9 m³



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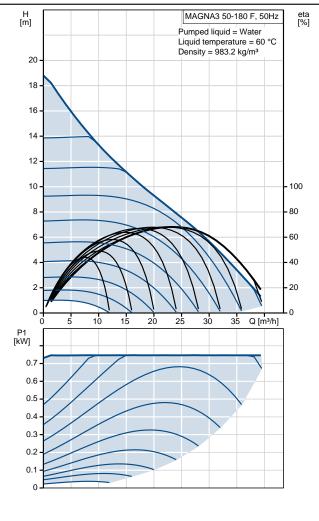
## 97924286 MAGNA3 50-180 F 50 Hz





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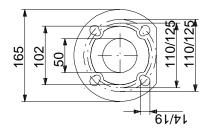
Description	Value
General information:	
Product name:	MAGNA3 50-180 F
Product No:	97924286
EAN number:	5710626493616
Price:	On request
echnical:	
lead max:	180 dm
F class:	110
Approvals on nameplate:	CE,VDE,EAC
Model:	С
laterials:	
ump housing:	Cast iron
	EN-GJL-250
	ASTM A48-250B
mpeller:	PES 30%GF
nstallation:	
ange of ambient temperature:	0 40 °C
laximum operating pressure:	10 bar
ange standard:	DIN
ipe connection:	DN 50
ressure stage:	PN6/10
ort-to-port length:	280 mm
iquid:	
umped liquid:	Water
iquid temperature range:	-10 110 °C
iquid temp:	60 °C
ensity:	983.2 kg/m³
lectrical data:	
ower input - P1:	23 762 W
Nains frequency:	50 Hz
Rated voltage:	1 x 230 V
laximum current consumption:	0.24 3.35 A
nclosure class (IEC 34-5):	X4D
nsulation class (IEC 85):	F
Others:	
abel:	Grundfos Blueflux
nergy (EEI):	0.17
let weight:	19 kg
Gross weight:	21.2 kg
Shipping volume:	45.9 m <sup>3</sup>

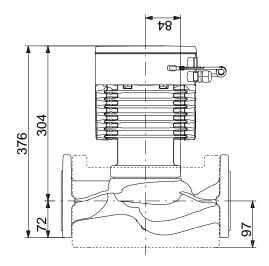


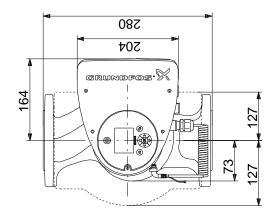


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Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.