

Company name: Created by: Phone:

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MAGNA3 D 100-120 F



Product No.: 98126865

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-fiber-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)

Motor and electronic controller



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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: 14 .. 230 °F
Selected liquid temperature: 140 °F
Density: 61.35 lb/ft³

Technical:

Rated flow: 165 US gpm
Rated head: 31.83 ft
TF class: 110
Approvals on nameplate: 98544605

Materials:

Pump housing: Cast iron

EN-GJL-250 ASTM A48-250B

Impeller: PES 30%GF

Installation:

Range of ambient temperature: 32 .. 104 °F Maximum operating pressure: 174.05 psi

Flange standard: GF
Pipe connection: GF100
Pressure stage: PN12
Port-to-port length: 17 3/4 in

Electrical data:

Power input - P1: 35 .. 1550 W
Main frequency: 60 Hz
Rated voltage: 1 x 208-230 V
Maximum current consumption: 0.35 .. 6.94 A

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

Others:

Energy (EEI): 0.17

Net weight: 138 lb

Gross weight: 160 lb

Shipping volume: 7.35 ft³

Country of origin: DE

Custom tariff no.: 8413.70.2015