

MAGNA3 D 50-180 F 280 1x230V PN16

Grundfos pump 97924488



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<https://www.lenntech.com/grundfos/MAGNA3D/97924488/MAGNA3-D-50-180-F.html>

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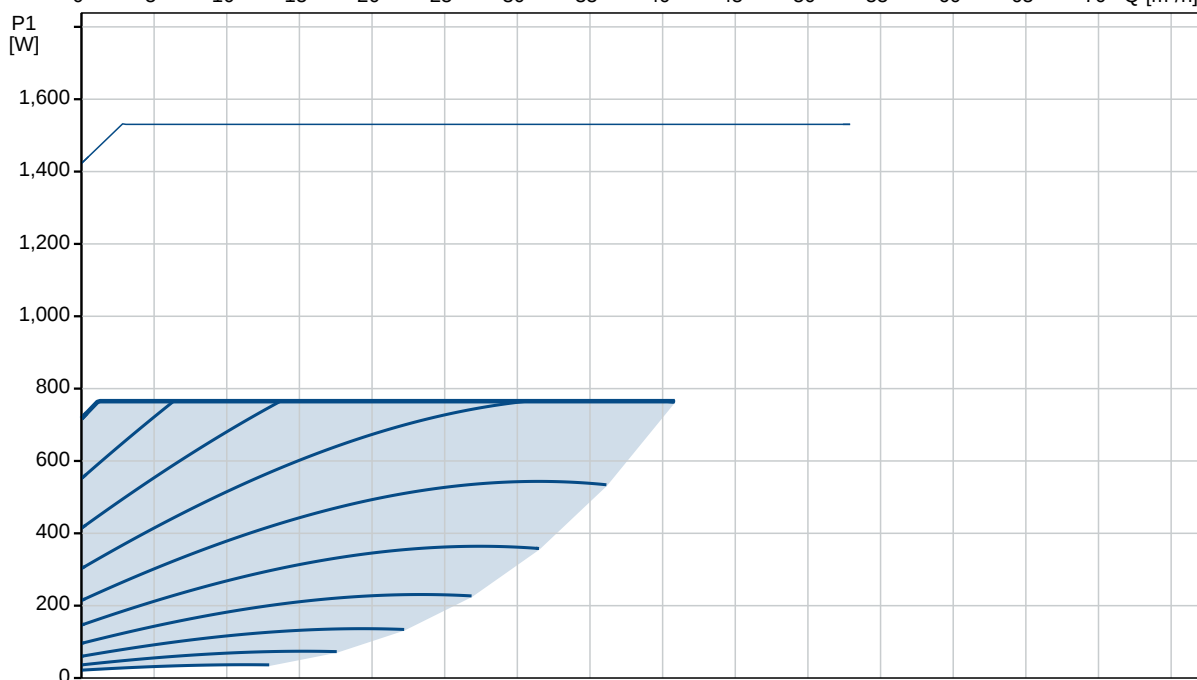
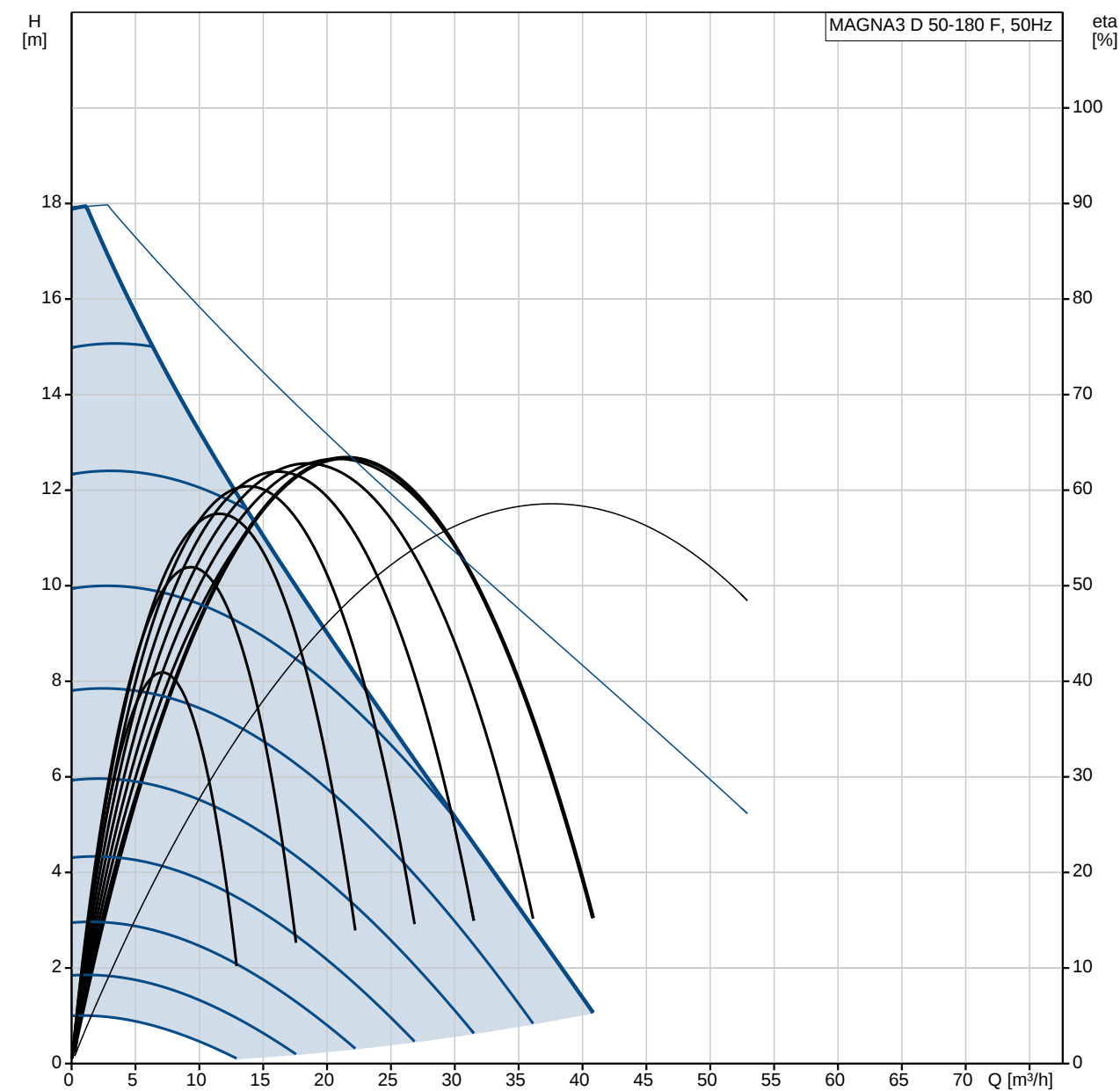
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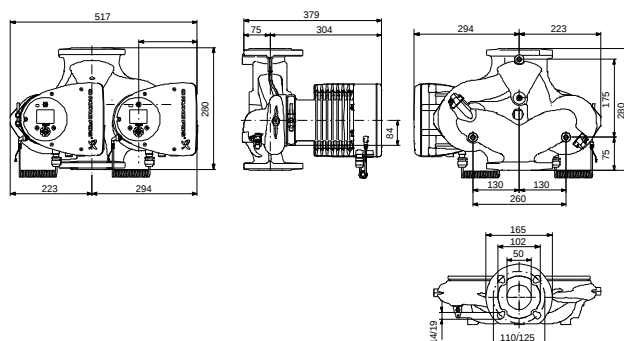
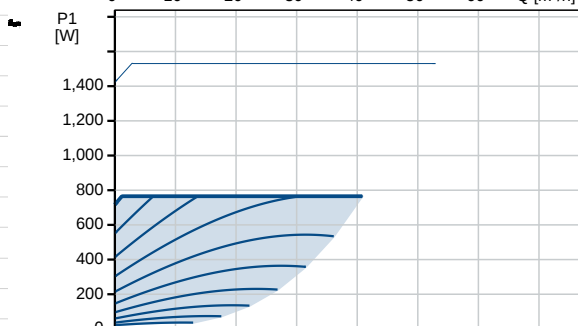
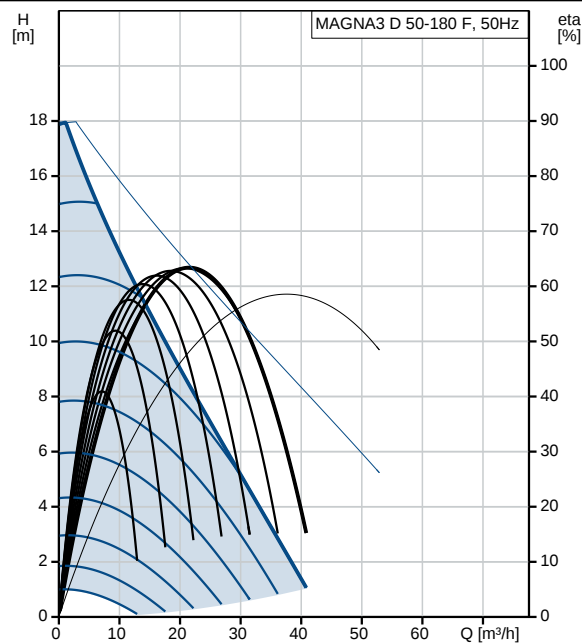
Position	Qty.	Description
	1	MAGNA3 D 50-180 F  Product No.: On request With its unrivalled efficiency, all-encompassing range and built-in communication capabilities, the MAGNA3 is ideal for engineers and specifiers looking to create high-performance heating and cooling systems. MAGNA3 is the ideal choice for almost any building project – old or new. The pump is of the canned-rotor type, which means that 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 MAGNA3 is a pump with no maintenance requirements and with extremely low life cycle cost. Characteristic features • AUTOADAPT • FLOWADAPT and FLOWLIMIT (reduces the need for pump throttling valves) • Proportional-pressure control • Constant-pressure control • Constant-temperature control • Differential temperature control (requires an additional temperature sensor) • Constant-curve duty • Maximum and minimum curve duty • Automatic night setback • Heat energy monitor • No external motor protection required • Innovative clamp ring with only one screw enabling easy repositioning of the pump head • Insulating shells supplied with single-head pumps for heating systems • Large temperature range due to air cooled electronics Communication • Wireless communication with the Grundfos GO Remote app • Fieldbus communication via CIM modules • Digital inputs • Relay outputs • Analog input Product details The MAGNA3 is a single-phase pump and 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 (also available in stainless steel versions) • Carbon-fibre-reinforced composite rotor can • Stainless-steel bearing plate and rotor cladding • Aluminium alloy stator housing • Air-cooled power electronics 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. Liquid: Pumped liquid: Water Liquid temperature range: -10 .. 110 °C Liquid temperature during operation: 60 °C

Position	Qty.	Description
		Density: 983.2 kg/m³ Technical: Rated flow: 20.1 m³/h Rated head: 8.2 m TF class: 110 Approvals on nameplate: CE,VDE,EAC,CN ROHS,WEEE 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: 16 bar Flange standard: DIN Pipe connection: DN 50 Pressure rating: PN16 (@): 280 mm Electrical data: Power input - P1: 23 .. 766 W Mains frequency: 50 Hz Rated voltage: 1 x 230 V Maximum current consumption: 0.24 .. 3.42 A Enclosure class (IEC 34-5): X4D Insulation class (IEC 85): F Others: Energy (EEI): 0.18 Net weight: 35.8 kg Gross weight: 43.5 kg Shipping volume: 0.132 m³

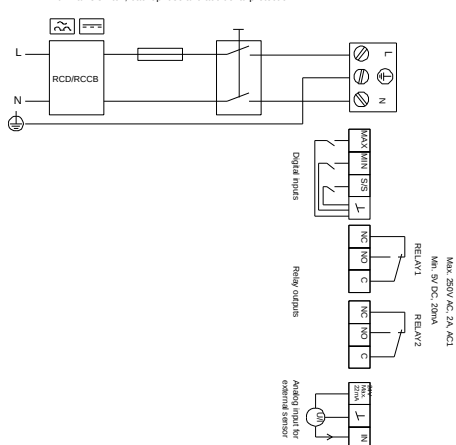
On request MAGNA3 D 50-180 F 50 Hz



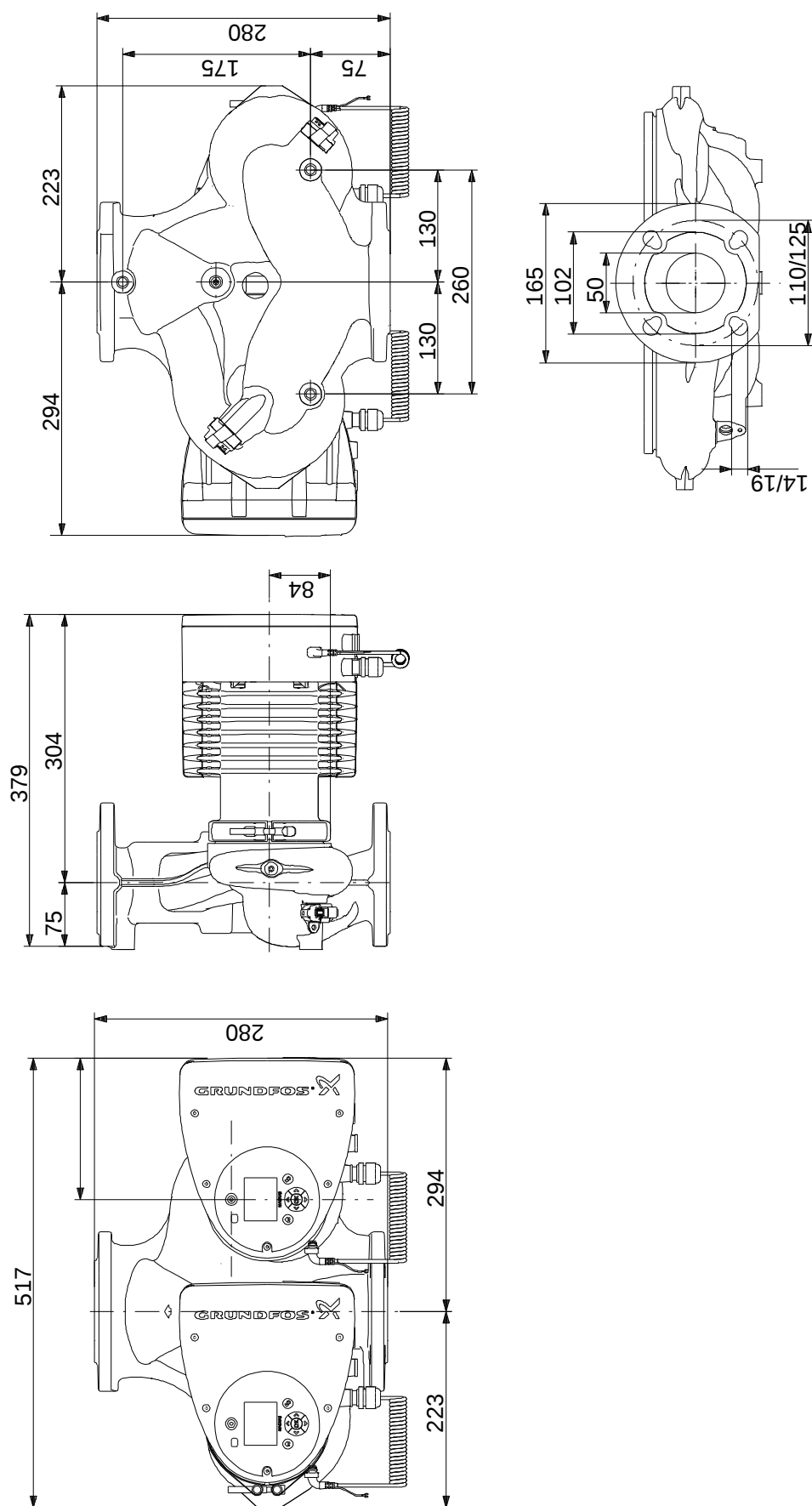
Description	Value
General information:	
Product name:	MAGNA3 D 50-180 F
Product No:	On request
EAN number:	On request
Technical:	
Rated flow:	20.1 m³/h
Rated head:	8.2 m
Head max:	180 dm
TF class:	110
Approvals on nameplate:	CE,VDE,EAC,CN ROHS,WEEE D
Model:	
Materials:	
Pump housing:	Cast iron EN-GJL-250 ASTM A48-250B
Impeller:	PES 30%GF
Installation:	
Range of ambient temperature:	0 .. 40 °C
Maximum operating pressure:	16 bar
Flange standard:	DIN
Pipe connection:	DN 50
Pressure rating:	PN16
(@)	280 mm
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-10 .. 110 °C
Liquid temperature during operation:	60 °C
Density:	983.2 kg/m³
Electrical data:	
Power input - P1:	23 .. 766 W
Mains frequency:	50 Hz
Rated voltage:	1 x 230 V
Maximum current consumption:	0.24 .. 3.42 A
Enclosure class (IEC 34-5):	X4D
Insulation class (IEC 85):	F
Others:	
Energy (EEI):	0.18
Net weight:	35.8 kg
Gross weight:	43.5 kg
Shipping volume:	0.132 m³



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



On request MAGNA3 D 50-180 F 50 Hz



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

Exploded view



Sectional drawing (TM058200 for TPE2,TPE3)



TM058200

Exploded view (TM057026 for MGE model H/I)



Parts list MAGNA3 D 50-180 F, Product No. On request
Valid from 17.5.2012 (1220)

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
-	Pump housing cpl.				1	pcs
6	Pump housing				1	
18	Pipe plug				2	
45	Neck ring cpl.				2	
215	Guide pin				1	
217	Valve flap				1	
92	Clamp cpl.				2	pcs
- 163	Control box				2	pcs
-	Control box				1	
	Box				1	
	Socket head cap screw				12	
166	Powerboard, Leaded				1	
166c	Socket head cap screw				1	
167	Cover				1	
167a	Pan head tapping screw				4	
192	Cooling paste				0	
-	Control box				1	
	Spacer				1	
7a	Combi Slot Torx screw				1	
159	Controlboard Leaded				1	
159a	Cable w/plug				1	
159b	Connector plug 3-pole				1	
159b	Connector plug 3-pole				2	
159b	Connector plug 4-pole				1	
159c	Pan washer head screw				1	
159d	Board				1	
160	Spacer				1	
163b	Compression spring				4	
164	Cover				1	
164a	Screw DELTA PT				5	
273b	Battery				1	
501	Displayboard cpl.				1	
163a	Pan head screw				4	pcs
163d	Pan head screw				2	pcs
301	Pump head				2	pcs
301b	Protector				2	pcs
- 531	Sensor				1	pcs
531a	Seal cap				1	
534	Bracket				2	pcs
534a	Pan head thread forming screw				2	pcs

Disclaimer: The information about the Grundfos pump in this document may be outdated.

Data may be subject to alterations without further notice.

Please contact us to verify the data above is still accurate/up-to-date.

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