

**Date:** 27/09/2021

Qty. | Description

1 TP 100-240/2 A-F-A-GQQE



Note! Product picture may differ from actual product

Product No.: 96109183

Single-stage, close-coupled, volute pump with in-line suction and discharge ports of identical diameter.

The pump is of the top-pull-out design, i.e. the power head (motor, pump head and impeller) can be removed for maintenance or service while the pump housing remains in the pipework.

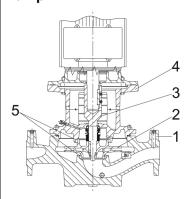
The pump is fitted with an unbalanced rubber bellows seal.

The shaft seal is according to EN 12756. Pipework connection is via PN 16 DIN flanges (EN 1092-2 and ISO 7005-2).

The pump is fitted with a fan-cooled asynchronous motor.

Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

#### **Pump**



- 1: Pump housing
- 2: Impeller
- 3: Stub shaft
- 4: Pump head/motor stool
- 5: Wear rings

The pump housing is provided with a replaceable brass neck ring to reduce the amount of liquid running from the outlet side of the impeller to the inlet side.

The impeller is secured to the shaft with a nut.

The shaft seal is an unbalanced rubber bellows seal with reduced seal face.

Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft.

The narrow seal face makes the seal perform well in high-viscosity and anti-freezing liquids. Primary seal:

- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: silicon carbide (SiC)

This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.



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Secondary seal material: EPDM (ethylene-propylene rubber)

EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.

A circulation of liquid through the duct of the air vent screw ensures lubrication and cooling of the shaft seal.

The flanges have tappings for mounting of pressure gauges.

The motor stool forms connection between the pump housing and the motor, and is equipped with a manual air vent screw for venting of the pump housing and the shaft seal chamber. The sealing between motor stool and pump housing is an O-ring.

The central part of the motor stool is provided with guards for protection against the shaft and coupling. The pump shaft is fastened directly on the motor shaft with key and set screws.

#### Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.

The motor is flange-mounted with free-hole flange (FF).

Motor-mounting designation in accordance with IEC 60034-7: IM B 5, IM V 1 (Code I) / IM 3001, IM 3011 (Code II).

The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.

The motor has thermistors (PTC sensors) in the windings in accordance with DIN 44081/DIN 44082. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

Thermal switches must be connected to an external control circuit in a way which ensures that the automatic reset cannot cause accidents. The motors must be connected to a motor-protective circuit breaker according to local regulations.

The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.

### **Further product details**

### **Technical data**

Liquid:

Liquid temperature range: -25 .. 60 °C Selected liquid temperature: 20 °C

Technical:

Materials:

Installation:

Range of ambient temperature: -30 .. 60 °C Maximum operating pressure: 16 bar

Electrical data:

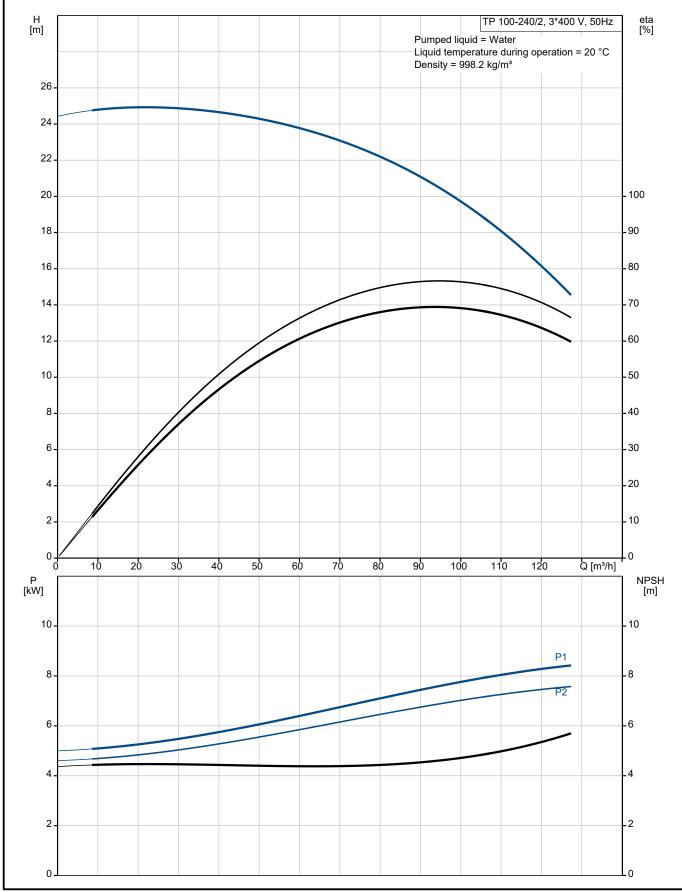
Starting current: 780-910 %

Others:



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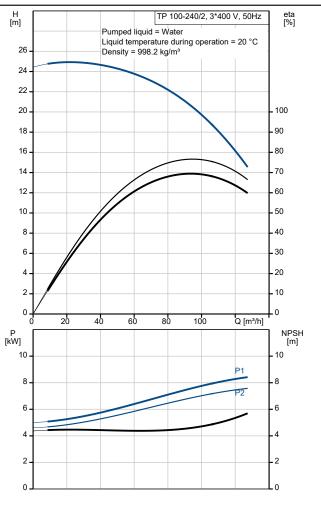
## 96109183 TP 100-240/2 A-F-A-GQQE 50 Hz





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Description Company informations	Value
General information:	TD 100 040/0
Product name:	TP 100-240/2 A-F-A-GQQE
Product No:	96109183
EAN number:	5700396981604
Price:	
Technical:	
Pump speed on which pump data are based:	2910 rpm
Rated flow:	94.5 m³/h
Rated head:	20.3 m
Maximum head:	240 dm
Actual impeller diameter:	137 mm
Code for shaft seal:	GQQE
Curve tolerance:	ISO9906:2012 3B
Pump version:	Α
Materials:	
Pump housing:	Cast iron
Pump housing:	EN-JL1040
Pump housing:	A48-40 B
Impeller:	Cast iron
Impeller:	EN-JL1030
Impeller:	A48-30 B
Material code:	A
Installation:	
Range of ambient temperature:	-30 60 °C
Maximum operating pressure:	16 bar
Type of connection:	DIN
Size of connection:	DN 100
Pressure rating for connection:	PN 16
Port-to-port length:	500 mm F
Connect code:  Liquid:	Г
Pumped liquid:	Water
Liquid temperature range:	-25 60 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m³
Electrical data:	555.2 kg/m
Motor type:	132SB
IE Efficiency class:	IE3
Rated power - P2:	7.5 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-415D/660-690Y V
Rated current:	14,4-14,0/8,30-8,10 A
Starting current:	780-910 %
Cos phi - power factor:	0.88-0.86
Rated speed:	2910-2920 rpm
Efficiency:	IE3 90,1% - IE3 90,4%
Motor efficiency at full load:	90.1-90.4 %
Motor efficiency at 3/4 load:	90.8 %
Motor efficiency at 1/2 load:	90.8 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	87370232
Others:	
Minimum efficiency index, MEI ≥:	0.58





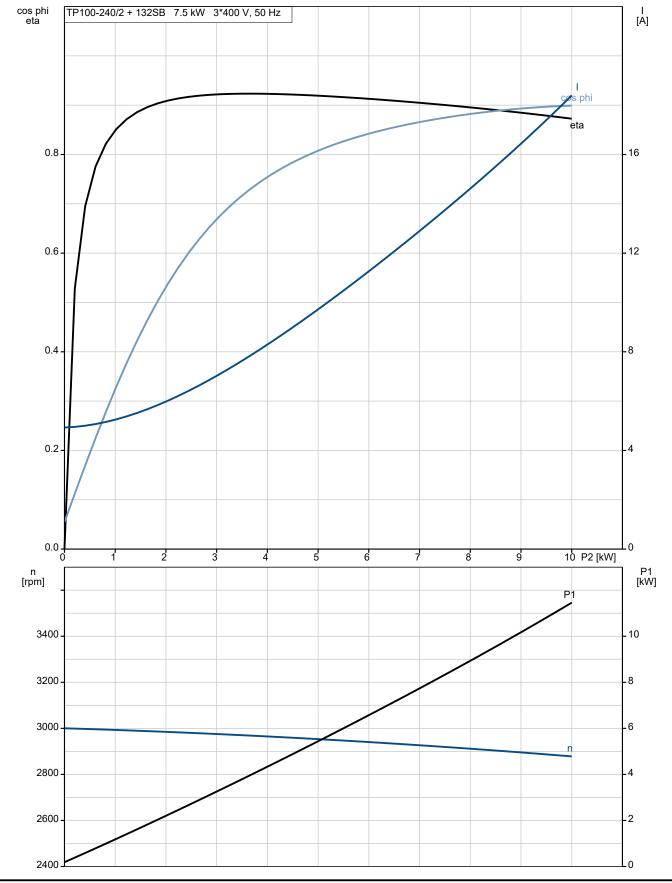
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Description	Value
Net weight:	115 kg
Gross weight:	132 kg
Shipping volume:	1.12 m³



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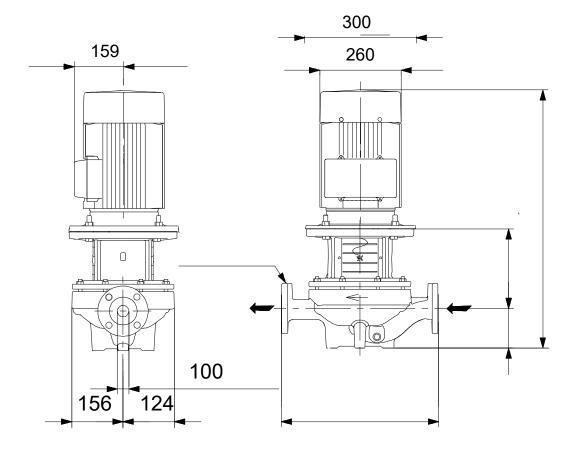
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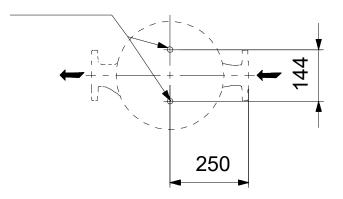




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Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.