

Created by: Phone:

Date: 23/06/2022

Qty. | Description

1 TPED 80-270/4 A-F-A-BQQE-MDA



Note! Product picture may differ from actual product

Product No.: 99114629

Single-stage, close-coupled, volute twin-head pump with in-line suction and discharge ports of identical diameter. The twin-head pump is designed with two parallel power-heads.

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.

Each power head 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).

Each power head is fitted with a fan-cooled, permanent-magnet synchronous motor of identical size. The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.

A cable ensures communication between the two power heads. The selector switch in the terminal boxes enables changeover between the operating modes "alternating operation" and "standby operation".

The product's minimum efficiency index (MEI) is greater or equal to 0.70. This is by the Commission Regulation (EU) considered as an indicative benchmark for best-performing water pump available on the market as from 1 January 2013

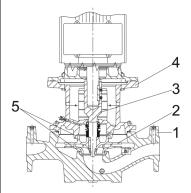
An operating panel on the motor terminal box enables setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop". The Grundfos Eye indicator on the operating panel provides visual indication of pump status:

- "Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights)
- "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights)
- "Alarm": Motor has stopped (flashing red indicator lights).

Communication with the pump is possible by means of Grundfos GO Remote (accessory). The remote control enables further settings as well as reading out of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power consumption".

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



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

The twin-head pump is designed with two parallel power-heads. A non-return flap valve in the common discharge port is opened by the flow of the pumped liquid and prevents backflow of liquid into the idle pump head.

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 pump is fitted with an unbalanced rubber bellows seal with torque transmission across the spring and around the bellows. Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft.

Seal faces:

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

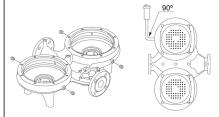
This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

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 pump housing has four Rp 1/8 tappings for mounting of automatic air vents. Fit an air vent to the upper pump housing if the twin-head pump is to be installed in a horizontal pipeline with horizontal pump shaft.



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 efficiency is classified as IE5 in accordance with IEC 60034-30-2.

The motor requires no external motor protection. The motor control unit incorporates protection against slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

Further product details

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.

Technical data

Controls:

Frequency converter: Built-in

Liquid:

Pumped liquid: Water
Liquid temperature range: -25 .. 120 °C
Selected liquid temperature: 20 °C



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Density: 998.2 kg/m³

Technical:

Pump speed on which pump data are based: 1455 rpm

Rated flow: 72 m³/h
Rated head: 22 m
Actual impeller diameter: 279 mm
Code for shaft seal: BQQE

Curve tolerance: ISO9906:2012 3B2

Materials:

Pump housing: Cast iron

EN-GJL-250 ASTM class 35

Impeller: Cast iron

EN-GJL-200 ASTM class 30

Installation:

Range of ambient temperature: -20 .. 50 °C Maximum operating pressure: 16 bar

Max pressure at stated temp: 16 bar / 120 °C

Type of connection:

Size of connection:

Pressure rating for connection:

Port-to-port length:

Flange size for motor:

DIN

DN 80

PN 16

620 mm

Flange size for motor:

FF265

Electrical data:

Motor type: 132MH IE Efficiency class: IE5 Rated power - P2: 7.5 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-500 V Rated current: 14.1-11.1 A Cos phi - power factor: 0.93-0.89 Rated speed: 180-2200 rpm Efficiency: 92.2% Motor efficiency at full load: 92.2 %

Number of poles: 4
Enclosure class (IEC 34-5): IP55
Insulation class (IEC 85): F

Motor No: 98971185

Others:

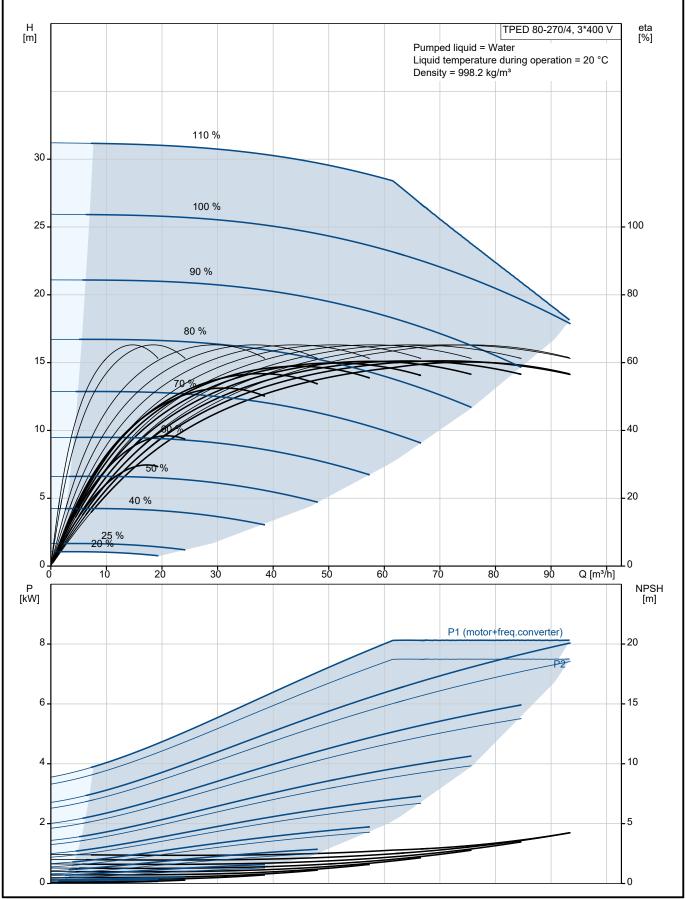
Minimum efficiency index, MEI ≥: 0.70
Net weight: 342 kg
Gross weight: 374 kg
Shipping volume: 1.14 m³
Country of origin: HU
Custom tariff no.: 84137065



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99114629 TPED 80-270/4 A-F-A-BQQE-MDA 50 Hz

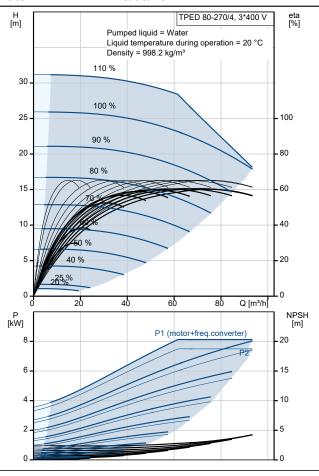


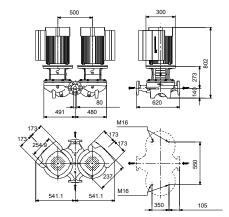


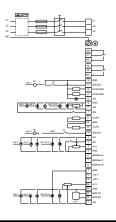
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Description	Value
General information:	
Product name:	TPED 80-270/4 A-F-A-BQQE-MDA
Product No:	99114629
EAN number:	5712607032852
echnical:	0112001002002
Pump speed on which pump data are	1455 rpm
pased:	1400 Ipili
Rated flow:	72 m³/h
Rated head:	22 m
Maximum head:	270 dm
Actual impeller diameter:	279 mm
Code for shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B2
Pump version:	Α
Materials:	
Pump housing:	Cast iron
Pump housing:	EN-GJL-250
Pump housing:	ASTM class 35
Impeller:	Cast iron
Impeller:	EN-GJL-200 ASTM class 30
mpeller: Material code:	ASTM class 30
naterial code. Installation:	A
Range of ambient temperature:	-20 50 °C
Maximum operating pressure:	16 bar
Max pressure at stated temp:	16 bar / 120 °C
Type of connection:	DIN
Size of connection:	DN 80
Pressure rating for connection:	PN 16
Port-to-port length:	620 mm
Flange size for motor:	FF265
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-25 120 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m³
Electrical data:	
Motor type:	132MH
E Efficiency class:	IE5
Rated power - P2:	7.5 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-500 V
Rated current:	14.1-11.1 A
Cos phi - power factor:	0.93-0.89
Rated speed:	180-2200 rpm
Efficiency:	92.2%
Motor efficiency at full load:	92.2 %
Number of poles: Enclosure class (IEC 34-5):	4 IP55
Insulation class (IEC 85):	F
	ELEC
Built-in motor protection: Motor No:	98971185
Controls:	50911105
Controls:	HMI200 - Standard
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
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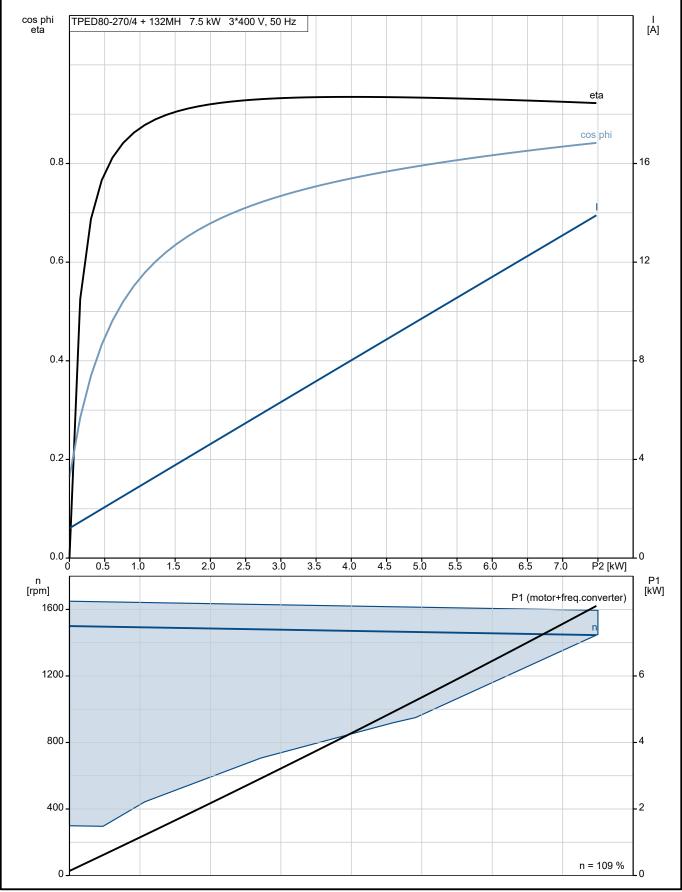
Description	Value
Minimum efficiency index, MEI ≥:	0.70
Net weight:	342 kg
Gross weight:	374 kg
Shipping volume:	1.14 m³
Config. file no:	99100733
Country of origin:	HU
Custom tariff no.:	84137065



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99114629 TPED 80-270/4 A-F-A-BQQE-MDA 50 Hz

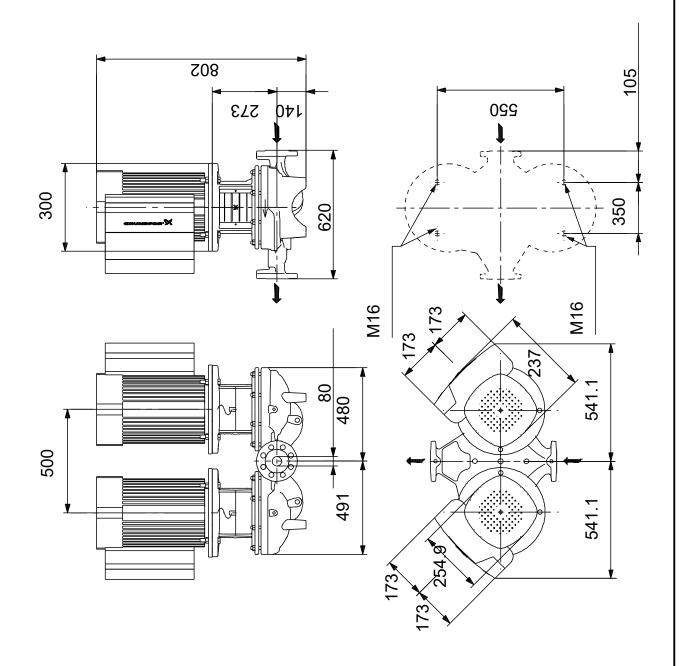




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99114629 TPED 80-270/4 A-F-A-BQQE-MDA 50 Hz



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



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Order Data:

Product name: TPED 80-270/4

Amount: 1

Product No: 99114629

Total: Price on request