

Date:

16/06/2022

Qty. Description TPED 100-250/2 A-F-A-BQQE-NDB 1 Note! Product picture may differ from actual product Product No.: On request 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 vellow indicator lights) or has stopped (permanently vellow 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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### Qty. | Description

- 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)

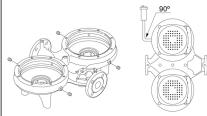
This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

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.

The pump is mounted with a base plate.

### 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

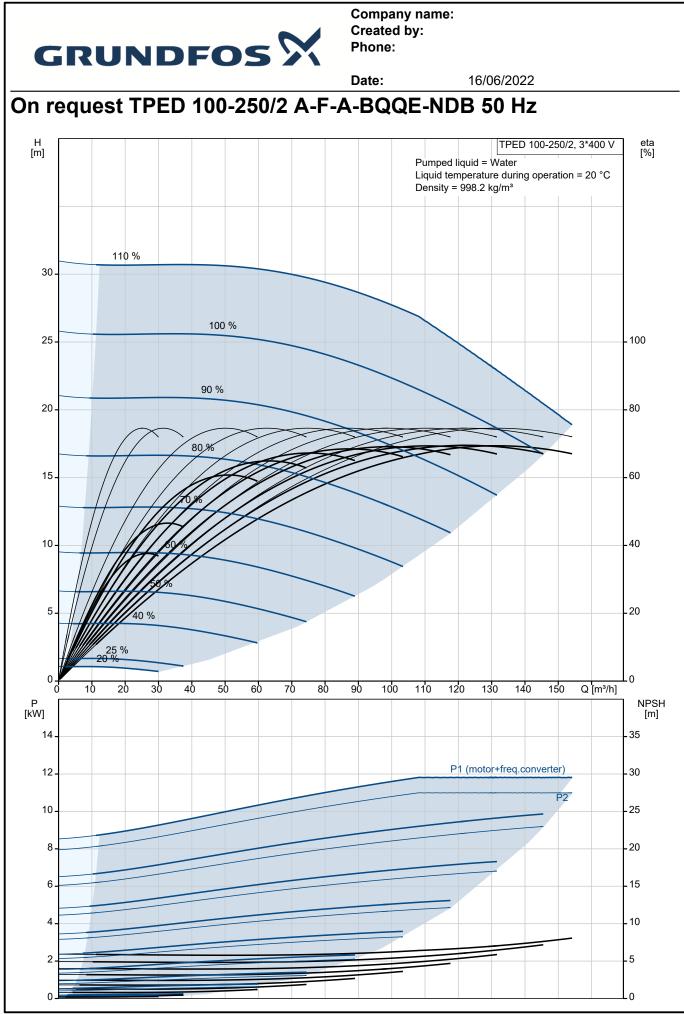
Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

Technical data	
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Controls: Frequency converter:	Built-in	
Liquid:		
Pumped liquid:	Water	
Liquid temperature range:	-25 120 °C	



Description			
Selected liquid temperature: Density:	20 °C 998.2 kg/m³		
-	5		
Гесhnical: <sup>ว</sup> ump speed on which pump data	are based 203	0 rpm	
Rated flow:	135 m <sup>3</sup> /h	o ipin	
Rated head:	18.2 m		
Actual impeller diameter:	145 mm		
Code for shaft seal:	BQQE		
Curve tolerance:	ISO9906:2012 3E	3	
Antoniala.			
Materials: <sup>o</sup> ump housing:	Cast iron		
amp nedeling.	EN-GJL-250		
	ASTM class 35		
mpeller:	Cast iron		
inpelier.	EN-GJL-200		
	ASTM class 30		
nstallation: Range of ambient temperature:	-20 50 °C		
Maximum operating pressure:	-20 50 C		
Max pressure at stated temp:	16 bar / 120 °C		
Type of connection:	DIN		
Size of connection:			
	DN 100 PN 16		
Pressure rating for connection:			
Port-to-port length: Flange size for motor:	550 mm FF300		
-			
Electrical data:	160141		
Motor type:	160MH		
E Efficiency class:	IE5		
Rated power - P2:	11 kW		
Mains frequency:	50 Hz		
Rated voltage:	3 x 380-500 V		
Rated current:	20.3-16.0 A		
Cos phi - power factor:	0.93-0.90		
Rated speed:	360-4000 rpm		
Efficiency:	93.1%		
Notor efficiency at full load:	93.1 %		
Number of poles:	2		
Enclosure class (IEC 34-5):	IP55		
nsulation class (IEC 85):	F		
Motor No:	98971081		
Others:			
Minimum efficiency index, MEI ≥:	0.70		
Net weight:	301 kg		
Gross weight:	342 kg		
Shipping volume:	1.14 m³		
Country of origin:	HU		
Custom tariff no.:	84137065		





		Date:	16/06/2022
Description	Value	H [m]	TPED 100-250/2, 3*400 V
General information:	Value	[]	Pumped liquid = Water
Product name:	TPED 100-250/2 A-F-A-BQQE-NDB		Liquid temperature during operation = 20 °C Density = 998.2 kg/m <sup>3</sup>
Product No:	On request	30 -	110 %
EAN number:	On request		
Technical:	•		100 %
Pump speed on which pump data are based:	2930 rpm	25 -	90 %
Rated flow:	135 m³/h	20 -	
Rated head:	18.2 m		80%
Maximum head:	250 dm	15	60
Actual impeller diameter:	145 mm		
Code for shaft seal:	BQQE		
Curve tolerance:	ISO9906:2012 3B	10 - //	40
Pump version:	Α		
Materials:		5 -	40 % 20
Pump housing:	Cast iron		25.%
Pump housing:	EN-GJL-250		
Pump housing:	ASTM class 35	0	20 40 60 80 100 120 Q [m <sup>3</sup> /h]
Impeller:	Cast iron	P [kW]	N
Impeller:	EN-GJL-200		
Impeller:	ASTM class 30	12	P1 (motor+freq.converter) - 30
Material code:	A	10 -	P2 _ 25
Installation:		8	-20
Range of ambient temperature:	-20 50 °C		
Maximum operating pressure:	16 bar	6 -	15
Max pressure at stated temp:	16 bar / 120 °C	4	10
Type of connection:	DIN	2	-5
Size of connection:	DN 100	0	
Pressure rating for connection:	PN 16		
Port-to-port length:	550 mm		
Flange size for motor:	FF300	50	
Connect code:	F		
Liquid:			
Pumped liquid:	Water		
Liquid temperature range:	-25 120 °C		
Selected liquid temperature:	20 °C		
Density:	998.2 kg/m³	414	395 550 M16
Electrical data:		173	
Motor type:	160MH		
IE Efficiency class:	IE5		
Rated power - P2:	11 kW		
Mains frequency:	50 Hz	541.1	541.1 M16 220 110
Rated voltage:	3 x 380-500 V		
Rated current:	20.3-16.0 A		
Cos phi - power factor:	0.93-0.90		
Rated speed:	360-4000 rpm		<b>₽₽</b> Ĩ
Efficiency:	93.1%	ш ес	
Motor efficiency at full load:	93.1 %		
Number of poles:	2		
Enclosure class (IEC 34-5):	IP55	C	
Insulation class (IEC 85):	F		
Built-in motor protection:	ELEC		
Motor No:	98971081		
Controls:			
Control panel:	HMI200 - Standard		
Function Module:	FM300 - Advanced		5 5000m 0   1 000   15 -44 V
Frequency converter:	Built-in		
Others:		<u></u>	

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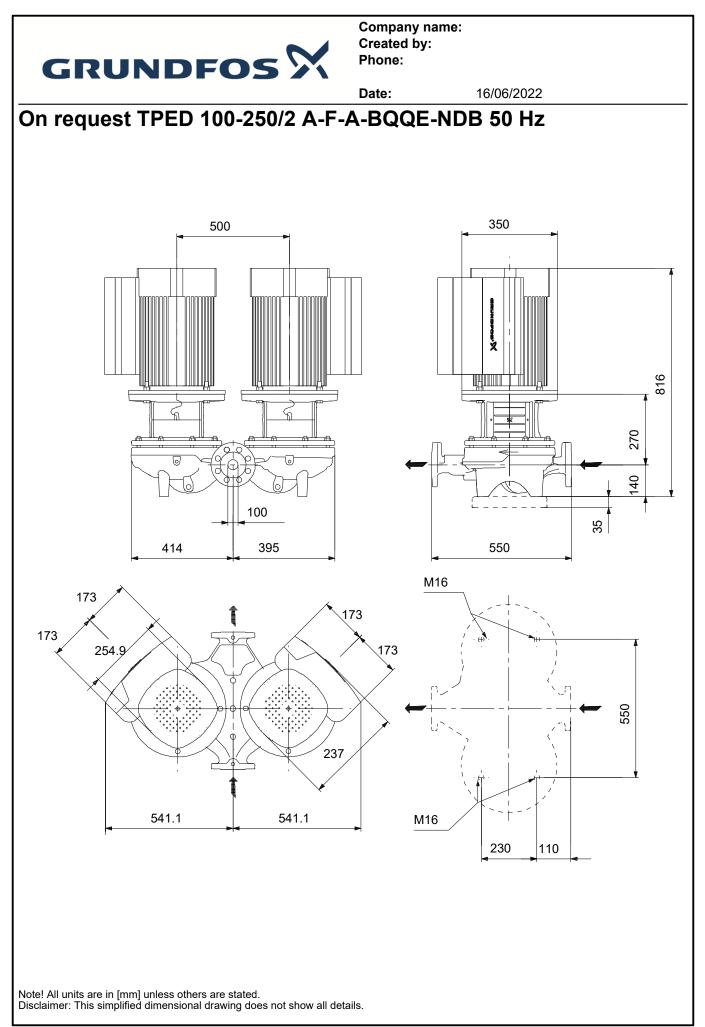
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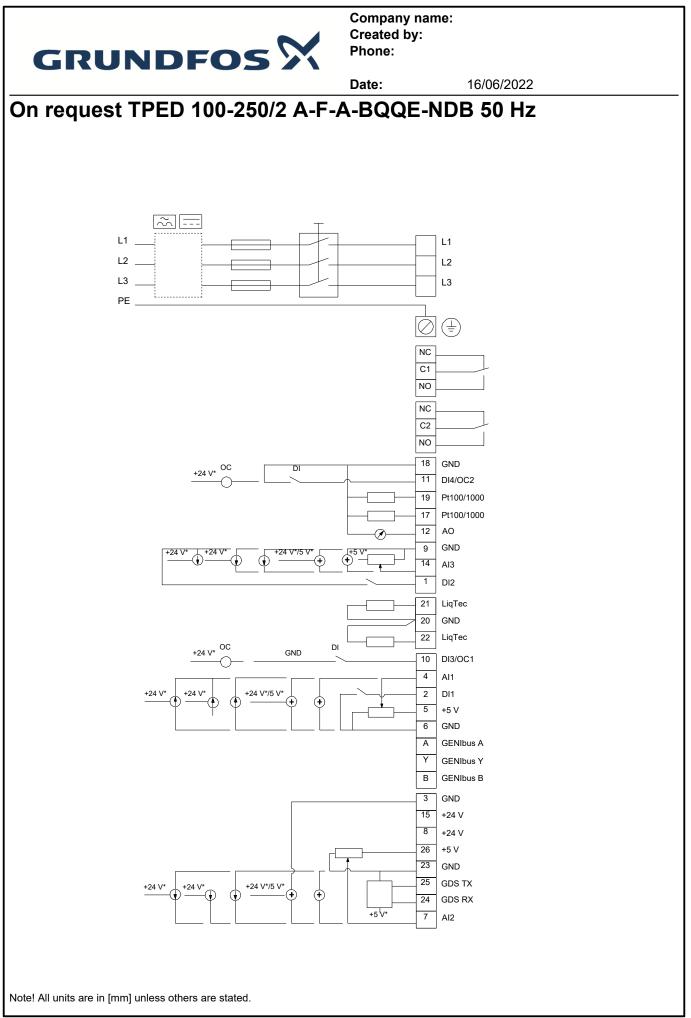
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NPSH [m]



Date: 16/06/2022 Value Description Minimum efficiency index, MEI ≥: 0.70 Net weight: 301 kg Gross weight: 342 kg Shipping volume: 1.14 m<sup>3</sup> Config. file no: 99100723 Country of origin: HU Custom tariff no .: 84137065







16/06/2022

## Order Data:

Product name:TPED 100-250/2Amount:1Product No:On request

Total: Price on request