

Date:

16/06/2022

1/9

Qty. Description TPED 80-180/2 A-F-A-BQQE-JDB 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". 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 ຈ 1: Pump housing 2: Impeller 3: Stub shaft 4: Pump head/motor stool Printed from Grundfos Product Centre [2022.26.009]



16/06/2022

Qty. | Description

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:

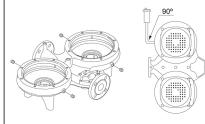
- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: silicon carbide (SiC)

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

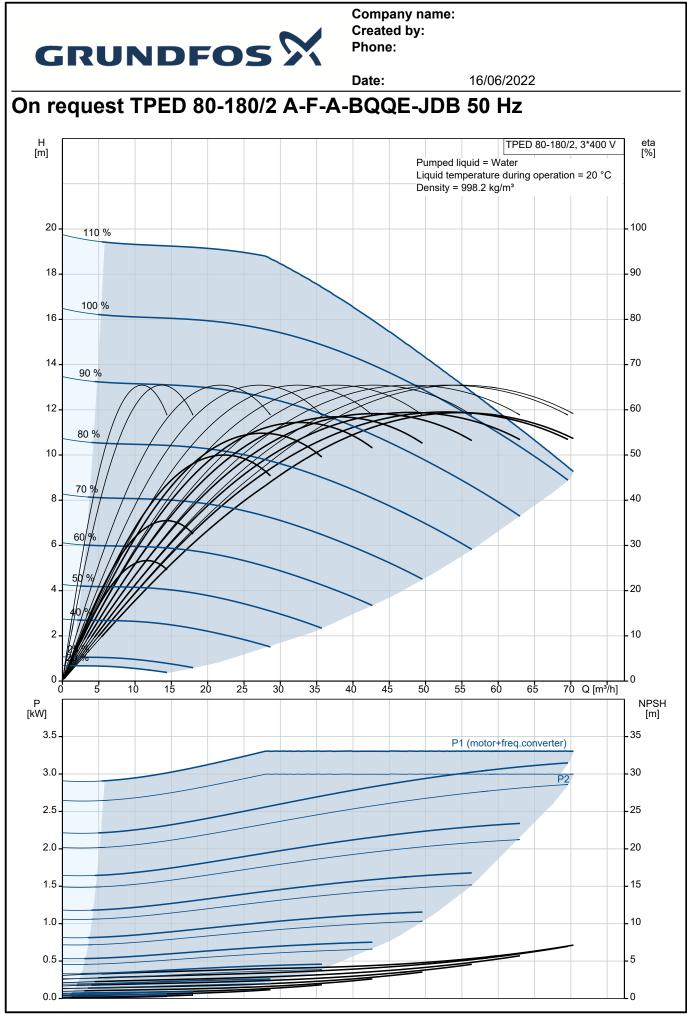
Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

Technical data

Controls: Frequency converter:	Built-in
Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water -25 120 °C 20 °C 998.2 kg/m³
Technical:	



	Description		Date:	16/06/2022		
	-	are beende of	10 rpm			
Pump speed on which pump data are based: 2910 rpm Rated flow: 48.2 m³/h						
	Rated head:	13.2 m				
	Actual impeller diameter:	115 mm				
	Code for shaft seal:	BQQE				
	Curve tolerance:	ISO9906:2012 3	52			
	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:	DIN				
	Size of connection:	DN 80				
	Pressure rating for connection:	PN 16				
	Port-to-port length:	360 mm				
	Flange size for motor:	FF215				
	Electrical data:	4001.4				
	Motor type:	100LA				
	IE Efficiency class:	IE5				
	Rated power - P2:	3 kW				
	Mains frequency:	50 Hz				
	Rated voltage:	3 x 380-500 V				
	Rated current:	5.80-4.80 A				
	Cos phi - power factor:	0.91-0.86				
	Rated speed:	360-4000 rpm				
	Efficiency:	90.7%				
	Motor efficiency at full load:	90.7 %				
	Number of poles:	2				
	Enclosure class (IEC 34-5):	-				
		IP55 F				
	Insulation class (IEC 85): Motor No:	⊢ 98971186				
		90911100				
	Others:					
	Minimum efficiency index, MEI ≥:	0.69				
	Net weight:	131 kg				
	Gross weight:	155 kg				
	Shipping volume:	0.65 m ³				
	Country of origin:	HU				
	Custom tariff no.:	84137065				
	Custom tann no	04137003				



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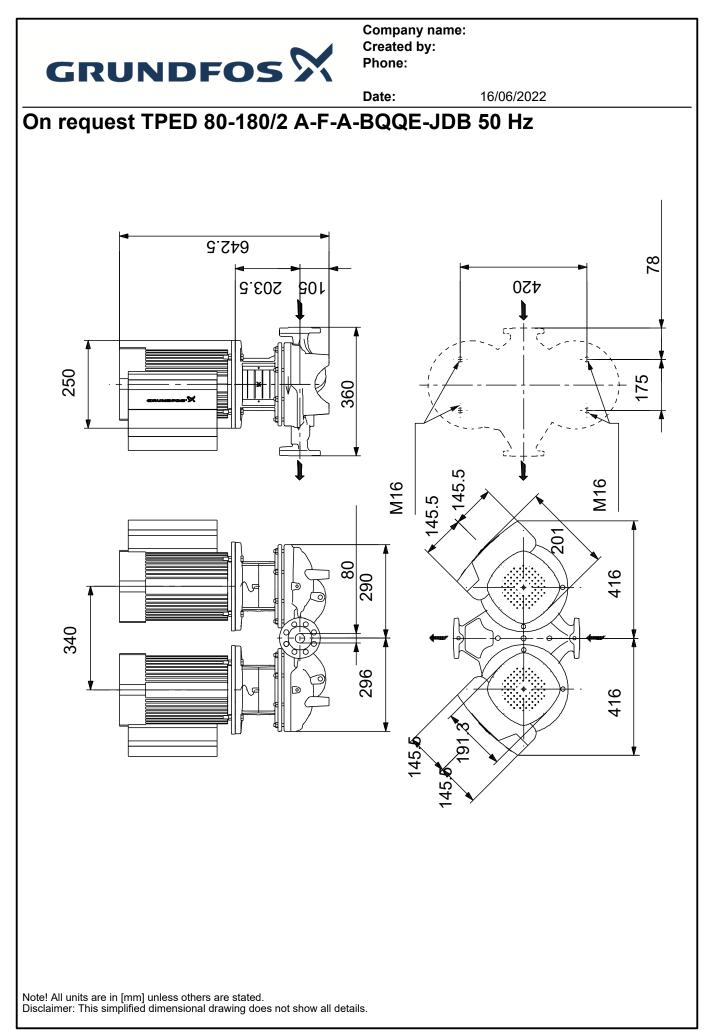


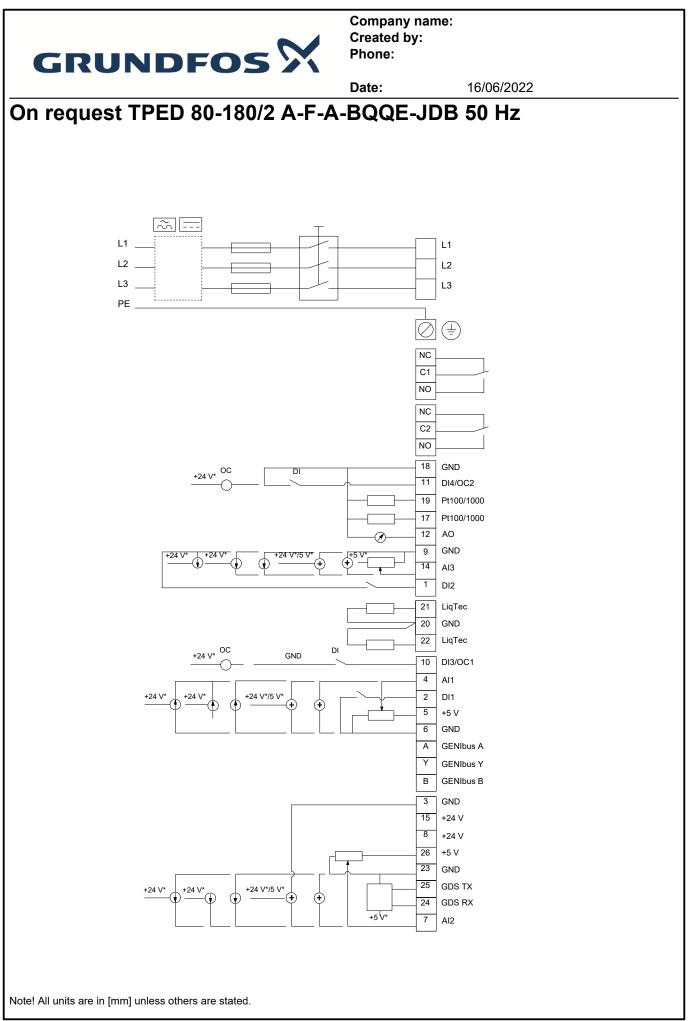
		Date:	16/06/2022	
Description	Value	H [m]	TPED 80-180/2, 3*400 V	et [%
General information:			Pumped liquid = Water	
Product name:	TPED 80-180/2	20 - 110	Liquid temperature during operation = 20 °C Density = 998.2 kg/m ³	100
	A-F-A-BQQE-JDB			
Product No:	On request	18 -		- 90
EAN number:	On request	16	%	- 80
Technical:		10 -		Γ
Pump speed on which pump data are based:	2910 rpm	14 - 90 %		- 70
Rated flow:	48.2 m³/h	12 -		- 60
Rated head:	13.2 m	80 %		
Maximum head:	180 dm	10-		- 50
Actual impeller diameter:	115 mm	8 70 %		_40
Code for shaft seal:	BQQE			
Curve tolerance:	ISO9906:2012 3B2	6 60 %		- 30
Pump version:	A	50/9		
Materials:	<u>Λ</u>	4-40		- 20
	Ocat inc.	2		- 10
Pump housing:	Cast iron			
Pump housing:	EN-GJL-250	0		Lo
Pump housing:	ASTM class 35	0	10 20 30 40 50 60 Q [m³/h]] NF
Impeller:	Cast iron	P [kW]		
Impeller:	EN-GJL-200		P1 (motor+freq.converter)	Γ
Impeller:	ASTM class 30	3.0 -	P2	- 30
Material code:	A	2.5		- 25
Installation:		2.0		20
Range of ambient temperature:	-20 50 °C			
Maximum operating pressure:	16 bar	1.5		- 15
Maximum operating pressure: Max pressure at stated temp:	16 bar / 120 °C	1.0		- 10
Type of connection:	DIN	0.5		-5
Size of connection:	DN 80	0.0		Lo
Pressure rating for connection:	PN 16			
Port-to-port length:	360 mm	3	140 <u>250</u>	
Flange size for motor:	FF215			
Connect code:	F			
Liquid:				
Pumped liquid:	Water			
Liquid temperature range:	-25 120 °C			
Selected liquid temperature:	20 °C			
Density:	998.2 kg/m³	296		
Electrical data:		145.0	M16 145.5	
Motor type:	100LA	145.5	×145.5	
IE Efficiency class:	IE5			
Rated power - P2:	3 kW	— IVZ		
		— <u>†</u> ,5	M16 AL	
Mains frequency:	50 Hz	416		
Rated voltage:	3 x 380-500 V		- 113 - 16 16	
Rated current:	5.80-4.80 A			
Cos phi - power factor:	0.91-0.86	20		
Rated speed:	360-4000 rpm			
Efficiency:	90.7%			
Motor efficiency at full load:	90.7 %			
Number of poles:	2			
Enclosure class (IEC 34-5):	IP55	0 0 0		
Insulation class (IEC 85):	F			
Built-in motor protection:	ELEC			
Motor No:	98971186			
Controls:	00071100			
Control panel:	HMI200 - Standard		* 650ma Y # 640ma N # 640ma N	
Function Module:	FM300 - Advanced			
Frequency converter:	Built-in			
Others:				

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Date: 16/06/2022 Description Value Minimum efficiency index, MEI ≥: 0.69 Net weight: 131 kg Gross weight: 155 kg Shipping volume: 0.65 m³ Config. file no: 99100549 Country of origin: ΗU Custom tariff no.: 84137065







16/06/2022

Order Data:

Product name:TPED 80-180/2Amount:1Product No:On request

Total: Price on request