

16/06/2022

**TPE 65-250/2 A-F-A-BQQE-KDB** Note! Product picture may differ from actual product

Product No.: On request

Qty.

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Description

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, permanent-magnet synchronous motor. The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.

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.

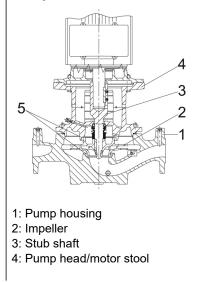
An operating panel on the motor terminal box enables setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop". The Grundfos Eye indicator on the operating panel provides visual indication of pump status:

- "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





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#### 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 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 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**

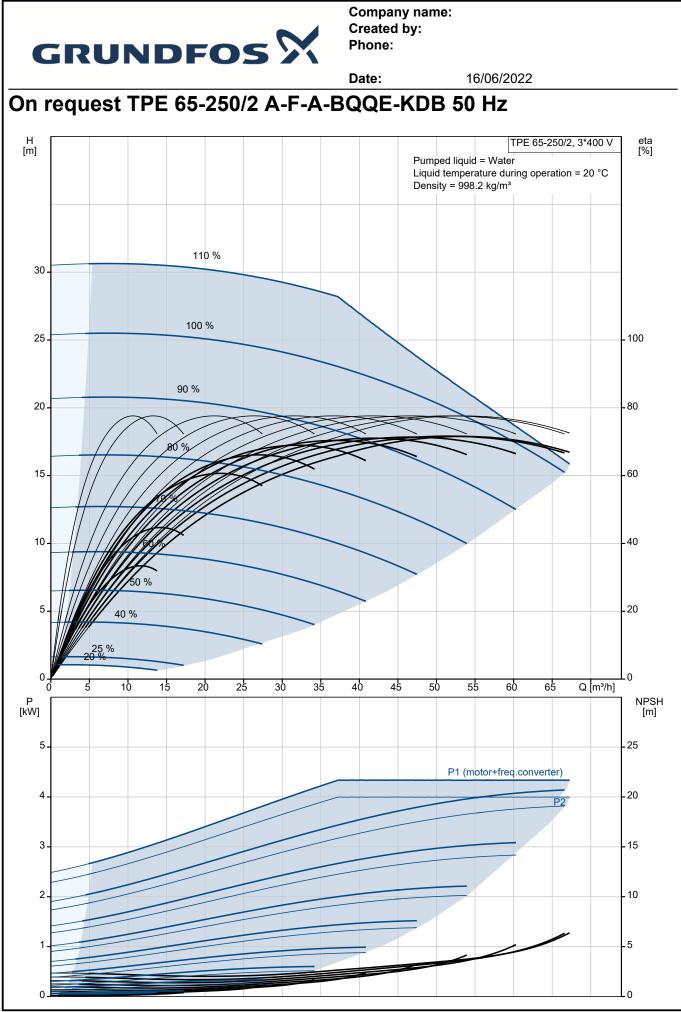
Controls: Frequency converter:	Built-in
Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water -25 120 °C 20 °C 998.2 kg/m³
Technical: Pump speed on which pump data Rated flow: Rated head: Actual impeller diameter: Code for shaft seal: Curve tolerance:	are based: 2930 rpm 51.7 m³/h 20.2 m 138 mm BQQE ISO9906:2012 3B2
Materials: Pump housing: Impeller:	Cast iron EN-GJL-250 ASTM class 35 Cast iron



Date:

16/06/2022

			Date:	16/06/2022	
.	Description				
		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 65			
	Pressure rating for connection:	PN 16			
	Port-to-port length:	360 mm			
	Flange size for motor:	FF215			
	Electrical data:				
	Motor type:	112MC			
	IE Efficiency class:	IE5			
	Rated power - P2:	4 kW			
	Mains frequency:	50 Hz			
	Rated voltage:	3 x 380-500 V			
	Rated current:	7.60-6.20 A			
	Cos phi - power factor:	0.92-0.87			
ļ	Rated speed:	360-4000 rpm			
	Efficiency:	92.2%			
ļ	Motor efficiency at full load:	92.2 %			
ļ	Number of poles:	2			
	Enclosure class (IEC 34-5):	IP55			
	Insulation class (IEC 85):	F			
	Motor No:	98971187			
	Others:				
	Minimum efficiency index, MEI ≥:	0.70			
	Net weight:	63.4 kg			
	Gross weight:	82 kg			
	Shipping volume:	0.39 m <sup>3</sup>			
	Danish VVS No.:	382064250			
	Finnish LVI No.:	4616470			
	Country of origin:	HU			
	Custom tariff no.:	84137051			
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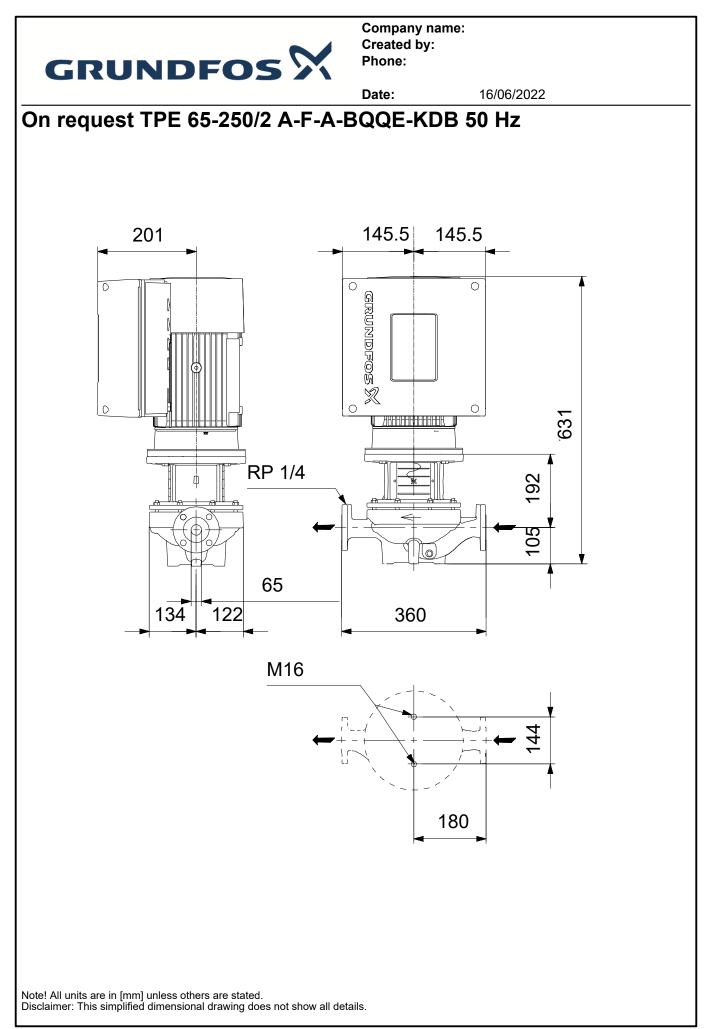


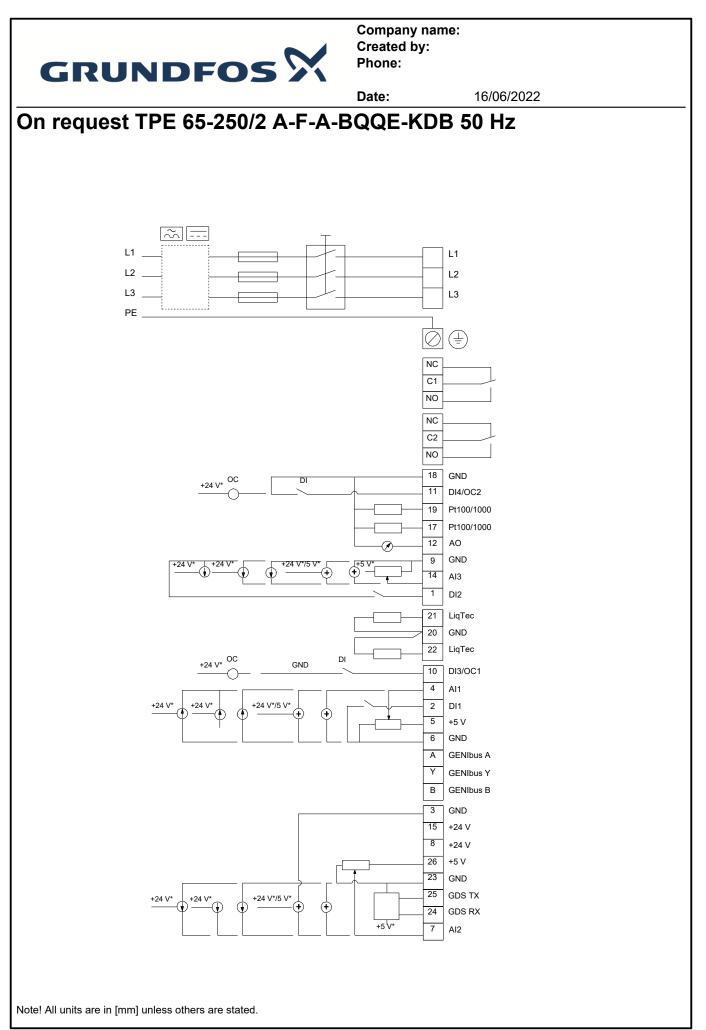
		<b>Date:</b> 16/06/	2022	
Description	Value	H [m]	TPE 65-250/2, 3*400 V	eta [%]
General information:		Pumped liqui	d = Water rature during operation = 20 °C	
Product name:	TPE 65-250/2 A-F-A-BQQE-KDB	Density = 99		
Product No:	On request	30110 %		
EAN number:	On request			
Fechnical:	onroquoor	100 %		
Pump speed on which pump data are based:	2930 rpm	90 %		- 100
Rated flow:	51.7 m³/h	20 -		80
Rated head:	20.2 m		ALC A	
Maximum head:	250 dm	80 %		
Actual impeller diameter:	138 mm	15-		- 60
Code for shaft seal:	BQQE			
Curve tolerance:	ISO9906:2012 3B2	10-10-		40
Pump version:		1/150 %		
	A			
Materials:	O a at ina "	5-40%		- 20
Pump housing:	Cast iron	25%		
Pump housing:	EN-GJL-250			Lo
Pump housing:	ASTM class 35	0 10 20 30 P	40 50 60 Q [m³/h]	NPSH
Impeller:	Cast iron	P [kW]		[m]
Impeller:	EN-GJL-200	5	Dd (mataul from or much a)	- 25
Impeller:	ASTM class 30		P1 (motor+freq.converter)	
Material code:	A	4-	P2	- 20
nstallation:		3-		15
Range of ambient temperature:	-20 50 °C			-
Maximum operating pressure:	16 bar	2-		10
Max pressure at stated temp:	16 bar / 120 °C			
Type of connection:	DIN	1-		- 5
Size of connection:	DN 65			
Pressure rating for connection:	PN 16			<b>L</b> U
Port-to-port length:	360 mm			
Flange size for motor:	FF215	201 145.5 145.5		
Connect code:	F			
	F			
Liquid:				
Pumped liquid:	Water		631	
Liquid temperature range:	-25 120 °C	RP 1/4	T	
Selected liquid temperature:	20 °C		<u>+</u>	
Density:	998.2 kg/m³		<del>† *</del>	
Electrical data:		134 122 360		
Motor type:	112MC	M16		
E Efficiency class:	IE5		+	
Rated power - P2:	4 kW		ŧ	
Mains frequency:	50 Hz	180		
Rated voltage:	3 x 380-500 V	H		
Rated current:	7.60-6.20 A			
Cos phi - power factor:	0.92-0.87			
Rated speed:	360-4000 rpm			
Efficiency:	92.2%			
Motor efficiency at full load:	92.2 %			
Number of poles:	2			
Enclosure class (IEC 34-5):	IP55			
	F			
nsulation class (IEC 85):				
Built-in motor protection:	ELEC			
Motor No:	98971187			
Controls:				
Control panel:	HMI200 - Standard	Λ Gibbas Λ   Υ Gibbas Λ   Ξ Gibbas Β		
Function Module:	FM300 - Advanced	1 000 1 - 34 V 1 - 34 V		
Frequency converter:	Built-in			
Others:				

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Date: 16/06/2022 Description Value Minimum efficiency index, MEI ≥: 0.70 Net weight: 63.4 kg Gross weight: 82 kg Shipping volume: 0.39 m³ Config. file no: 99100550 Danish VVS No.: 382064250 Finnish LVI No.: 4616470 Country of origin: HU Custom tariff no .: 84137051







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# Order Data:

Product name:TPE 65-250/2Amount:1Product No:On request

Total: Price on request