

29/08/2019

Qty. | Description

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TPE 32-200/2-S A-F-A-BQQE



Note! Product picture may differ from actual product

Product No.: 99133562

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.

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 motor includes a frequency converter and PI controller in the motor terminal box. This enables continuously variable control of the motor speed, which again enables adaptation of the performance to a given requirement.

The pump is fitted with a differential-pressure sensor.

Further product details

The pump is suitable for applications requiring pressure control. The pump is fitted with a differential-pressure transmitter registering the differential pressure across the pump and enabling constant pressure or proportional-pressure control of the pump.

A control panel enables setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop". The control panel has indicator lights for "Operation" and "Fault".

Communication with the pump is possible by means of the 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".

The operating panel on the motor terminal box features a four-inch TFT display, push-buttons and the Grundfos Eye indicator.

The display gives an intuitive and user-friendly interface to all functions. The push-buttons are used to navigate through the menu structure to access pump and performance data on site and enable setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop".

Communication with the pump is also 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".

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).



29/08/2019

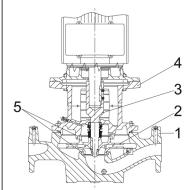
Qty. | Description

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.

Pump

Pump housing and pump head are electrocoated to improve the corrosion resistance.

- Electrocoating includes:
- 1) Alkaline-based cleaning.
- 2) Pretreatment with zinc phosphate coating.
- 3) Cathodic electrocoating (epoxy).
- 4) Curing of paint film at 200-250 °C.



- 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 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.

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.

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.

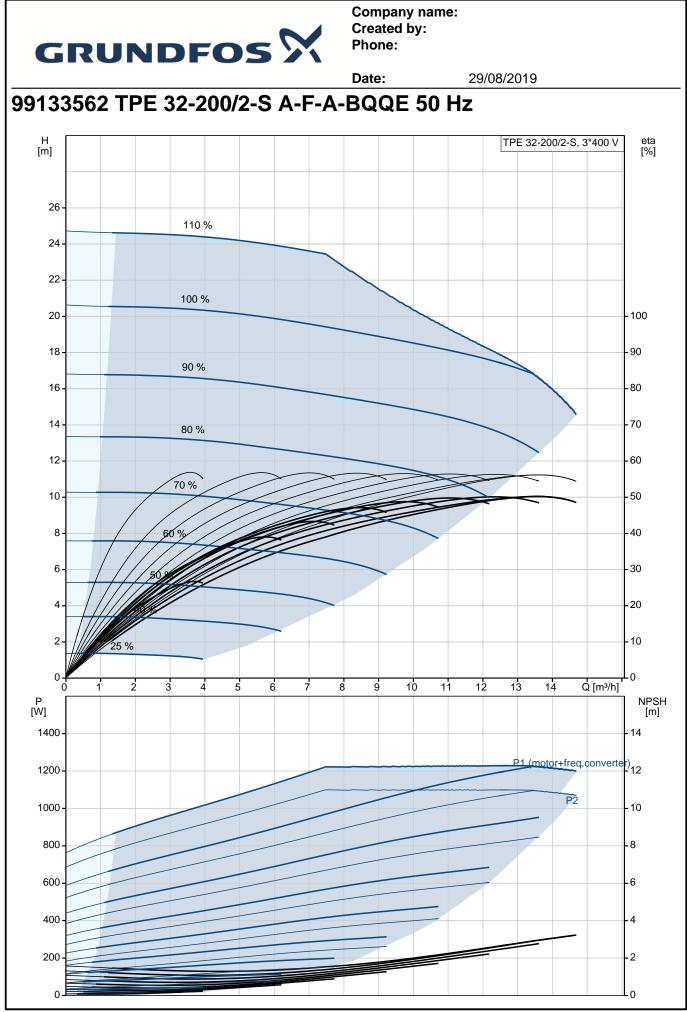
The motor is flange-mounted with free-hole flange (FF). Motor-mounting designation in accordance with IEC 60034-7: IM B 5, IM V 1 (Code I) / IM 3001, IM 3011 (Code II).

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Qty. Description		
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The motor requires no external me quick-rising temperatures, e.g. con TPE 32-200/2-S A-F-A-BQQEThe - one dedicated digital input - two analog inputs, 0(4)-20 one of these inputs - 5 V voltage supply to poter - one configurable digital inp - Grundfos Digital Sensor ing - 24 V voltage supply for ser - two signal relay outputs (po - GENIbus connection - interface for Grundfos CIM TPE 32-200/2-S A-F-A-BQQEThe	nstant overload and stalled condition e terminal box holds terminals for the mA, 0-5 V, 0-10 V, 0.5 - 3.5 V; the ntiometer and sensor out or open-collector output pout and output nsors	unit incorporates protection against slow- a ons.
The motor requires no external me quick-rising temperatures, e.g. con TPE 32-200/2-S A-F-A-BQQEThe - one dedicated digital input - two analog inputs, 0(4)-20 one of these inputs - 5 V voltage supply to poter - one configurable digital inp - Grundfos Digital Sensor ing - 24 V voltage supply for ser - two signal relay outputs (po - GENIbus connection - interface for Grundfos CIM TPE 32-200/2-S A-F-A-BQQEThe	otor protection. The motor control unstant overload and stalled condition e terminal box holds terminals for the mA, 0-5 V, 0-10 V, 0.5 - 3.5 V; the ntiometer and sensor out or open-collector output pout and output nsors	unit incorporates protection against slow- ons. nese connections:
The motor requires no external me quick-rising temperatures, e.g. con TPE 32-200/2-S A-F-A-BQQEThe - one dedicated digital input - two analog inputs, 0(4)-20 one of these inputs - 5 V voltage supply to poter - one configurable digital inp - Grundfos Digital Sensor ing - 24 V voltage supply for ser - two signal relay outputs (po - GENIbus connection - interface for Grundfos CIM TPE 32-200/2-S A-F-A-BQQEThe	otor protection. The motor control unstant overload and stalled condition e terminal box holds terminals for the mA, 0-5 V, 0-10 V, 0.5 - 3.5 V; the ntiometer and sensor out or open-collector output pout and output nsors	unit incorporates protection against slow- ons. nese connections:
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one of these inputs 5 V voltage supply to poter one configurable digital inp Grundfos Digital Sensor ing 24 V voltage supply for ser two signal relay outputs (po GENIbus connection interface for Grundfos CIM TPE 32-200/2-S A-F-A-BQQEThe	ntiometer and sensor out or open-collector output out and output nsors	factory-fitted pressure sensor is connecte
 5 V voltage supply to poter one configurable digital inp Grundfos Digital Sensor inp 24 V voltage supply for ser two signal relay outputs (potential section) GENIbus connection interface for Grundfos CIM TPE 32-200/2-S A-F-A-BQQEThe	ut or open-collector output out and output isors	
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 GENIbus connection interface for Grundfos CIM TPE 32-200/2-S A-F-A-BQQEThe 	otential-free contacts)	
- interface for Grundfos CIM TPE 32-200/2-S A-F-A-BQQEThe		
TPE 32-200/2-S A-F-A-BQQEThe		
	fieldbus module.	
	e terminal box holds terminals for th	ese connections:
- one dedicated digital input		
- two analog inputs, 0(4)-20	mA, 0-5 V, 0-10 V, 0.5 - 3.5 V; the	factory-fitted pressure sensor is connected
one of these inputs		
 5 V voltage supply to poter 		
 one configurable digital inp 		
 Grundfos Digital Sensor inp 	put and output	
 24 V voltage supply for ser 	nsors	
- two signal relay outputs (po		
	nunicate via wireless GENIair or wi	rod GENI connection
 interface for Grundfos CIM 		
- Interface for Grundios Clivi	neiabus module.	
Technical data		
Controlo		
Controls:		
Frequency converter:	Built-in	
Liquid		
Liquid:		
	Nater	
Liquid temperature range: -	25 120 °C	
Selected liquid temperature: 2	20 °C	
Density at selected liquid tempera		
Technical:		
Pump speed on which pump data	are based: 2900 rpm	
	13.6 m³/h	
	16 m	
	•	
	129 mm	
	BQQE	
Curve tolerance:	SO9906:2012 3B	
Materials:		
1 1 1	Cast iron	
ſ	EN-JL1040	
	ASTM A48-40 B	
1	Cast iron	
Impeller:	EN-JL1030	
Impeller: 0		
Impeller: 0	ASTM A48-30 B	
Impeller:		
Impeller: 0	ASTM A48-30 B	
Impeller: G Installation: Range of ambient temperature: -	ASTM A48-30 B -20 50 °C	
Impeller: 4 Installation: Range of ambient temperature: 4 Maximum operating pressure: 4	ASTM A48-30 B	



Description		Date:	29/08/2019
Description			
Pipe connection:	DN 32		
Pressure rating:	PN 16		
Port-to-port length:	340 mm		
Flange size for motor:	FF165		
Electrical data:			
Motor type:	80B		
IE Efficiency class:	IE5		
Rated power - P2:	1.1 kW		
Mains frequency:	50 Hz		
Rated voltage:	3 x 380-500 V		
Rated current:	2.20-1.90 A		
Cos phi - power factor:	0.89-0.79		
Rated speed:	360-4000 rpm		
Efficiency:	89.1%		
Motor efficiency at full load:	89.1 %		
Enclosure class (IEC 34-5):	IP55		
Insulation class (IEC 85):	F		
Motor No:	99306728		
Others:			
Minimum efficiency index, MEI	: 0.70		
ErP status:	EuP Standalone/Prod		
Net weight:	43 kg		
Gross weight:	53 kg		
Shipping volume:	0.051 m ³		



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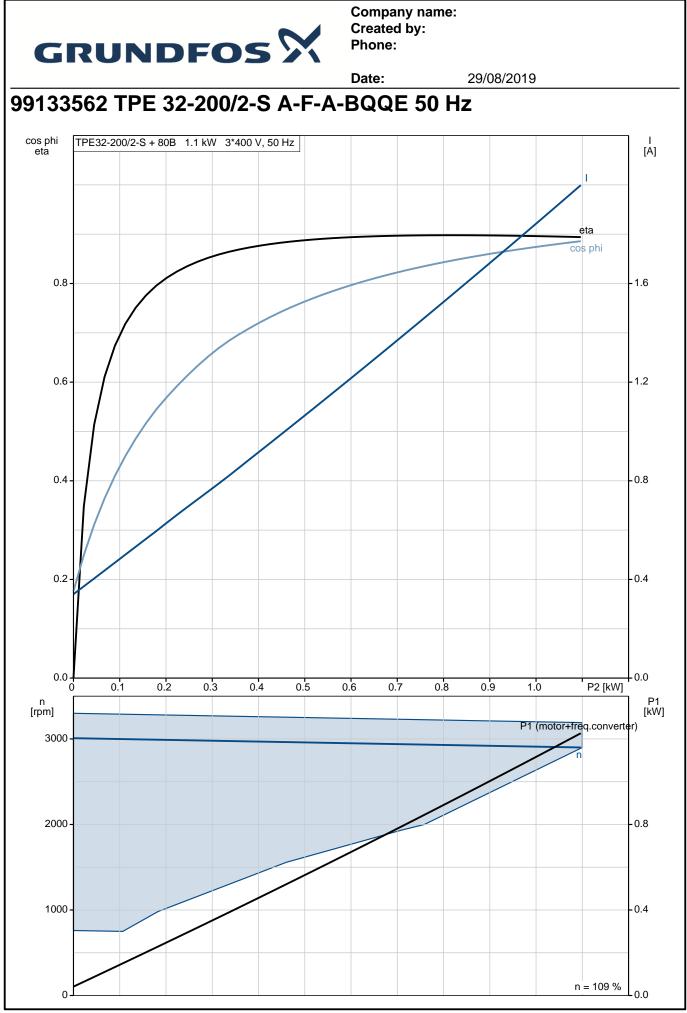


		Date:	29/0	08/2019	
Description	Value	H [m]		TPE 32-200/2-	S, 3*400 V eta [%]
General information:					
Product name:	TPE 32-200/2-S A-F-A-BQQE	26 -	110 %		
Due du et Ne		24 -			
Product No:	99133562	22 -	100.9/		
EAN number:	5712607366193	20 -	100 %		- 100
	5712607366193	18 -			- 90
Price:	3.305,00 GBP		90 %		
Technical:		16 -			- 80
Pump speed on which pump data are based:	2900 rpm	14 -	80 %		70
Rated flow:	13.6 m³/h	12 -	70%	~~~~	- 60
Rated head:	16 m	10 -	10%		- 50
Head max:	200 dm	8 -	60%		- 40
Actual impeller diameter:	129 mm				
Primary shaft seal:	BQQE	6-	11/3		- 30
Curve tolerance:	ISO9906:2012 3B	4 - //			- 20
Pump version:	A	2 -	25 %		- 10
Model:	A				
Materials:			2 4 6	8 10 12	Q [m³/h]
Pump housing:	Cast iron	P [W]			NP
i amp nousing.	EN-JL1040		_		[m
	ASTM A48-40 B	1200 -		P1 (mc	tor+freq.corverter)
Impollor	Cast iron	1000 -			P2 10
Impeller:	EN-JL1030				-
		800 -			-8
Material and a	ASTM A48-30 B	600 -			- 6
Material code:	A	400-			- 4
Installation:	00 50 50				
Range of ambient temperature:	-20 50 °C	200 -			-2
Maximum operating pressure:	16 bar	0			Lo
Flange standard:	DIN				
Pipe connection:	DN 32	158 158 158	134	134	
Pressure rating:	PN 16	122			
Port-to-port length:	340 mm				
Flange size for motor:	FF165			16	
Connect code:	F				
Liquid:					
Pumped liquid:	Water	TANK			
Liquid temperature range:	-25 120 °C			H-U	
Selected liquid temperature:	20 °C	32 125 117	-	340	
Density at selected liquid temperature:	998.2 kg/m ³			des.	
Electrical data:					
Motor type:	80B			<u>, = : , ; ; ; ; </u>	
E Efficiency class:	IE5		<u>M16</u>	170	
Rated power - P2:	1.1 kW				
Mains frequency:	50 Hz				
Rated voltage:	3 x 380-500 V				
Rated current:	2.20-1.90 A				
Cos phi - power factor:	0.89-0.79				
Rated speed:	360-4000 rpm				
Efficiency:	89.1%				
Motor efficiency at full load:	89.1 %	2017			
Enclosure class (IEC 34-5):	IP55	Ū	P110011000 P11001100 P11001100 P11001100 P110011000 P11001100 P110011000 P110011000 P110011000 P1100		
	F	<u>~~~~~</u> @			
Insulation class (IEC 85):			131 Lidfec 132 GAD 232 Lidfec		
Motor protec:	YES				
Motor No:	99306728				
Controls:			V GENERA V R GENERA R 3 Cont		
Control panel:	HMI300 - Graphical				
Function Module:	FM300 - Advanced		**************************************		
Frequency converter:	Built-in				

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		Dat	e:
Description	Value		
Others:		_	
Minimum efficiency index, MEI :	0.70		
ErP status:	EuP Standalone/Prod.		
Net weight:	43 kg		
Gross weight:	53 kg		
Shipping volume:	0.051 m³		
Config. file no:	99140388		



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