

22/08/2019

Qty. | Description

1

## TPED 32-250/2 A-F-A-BQQE



Product No.: 99134547

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.

TPED 32-250/2 A-F-A-BQQEThe pump is fitted with an unbalanced rubber bellows seal. TPED 32-250/2 A-F-A-BQQETPED 32-250/2 A-F-A-BQQETPED 32-250/2 A-F-A-BQQEThe shaft seal is according to EN 12756. Pipework connection is via PN 16 DIN flanges (EN 1092-2 and ISO 7005-2).

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.

## Further product details

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".

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".

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

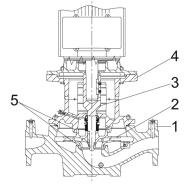
Pump housing and pump head are electrocoated to improve the corrosion resistance. Electrocoating includes:

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



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- 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 I).

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.

TPED 32-250/2 A-F-A-BQQEThe terminal box holds terminals for these connections:

- one dedicated digital input
- two analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 3.5 V
- 5 V voltage supply to potentiometer and sensor
- one configurable digital input or open-collector output
- Grundfos Digital Sensor input and output



Company name:

	GRUNDFO	os X	Company na Created by: Phone:		
			Date:	22/08/2019	
Qty.	Description     24 V voltage supply for set     two signal-relay outputs (     GENIbus connection     interface for Grundfos CI	potential-free contact	s)		
	<ul> <li>TPED 32-250/2 A-F-A-BQQETh</li> <li>one dedicated digital input</li> <li>two analog inputs, 0(4)-2</li> <li>5 V voltage supply to pott</li> <li>one configurable digital in</li> <li>Grundfos Digital Sensor in</li> <li>24 V voltage supply for singular two signal relay outputs (</li> <li>the two power heads con</li> <li>interface for Grundfos CI</li> </ul>	ut 0 mA, 0-5 V, 0-10 V, 0 entiometer and senso opput or open-collector input and output ensors potential-free contacts nmunicate via wireless	0.5 - 3.5 V r output s)		
	Technical data				
	Controls: Frequency converter:	Built-in			
	Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density at selected liquid tempe	Water -25 120 °C 20 °C rature: 998.2 kg/m <sup>3</sup>			
	<b>Technical:</b> Pump speed on which pump dat Rated flow: Rated head: Actual impeller diameter: Primary shaft seal: Curve tolerance:	ta are based: 2900 r 12.7 m³/h 19.3 m 140 mm BQQE ISO9906:2012 3B	pm		
	Materials:				
	Pump housing: Impeller:	Cast iron EN-JL1040 ASTM A48-40 B Cast iron EN-JL1030 ASTM A48-30 B			
	Installation: Range of ambient temperature: Maximum operating pressure: Flange standard: Pipe connection: Pressure rating: Port-to-port length: Flange size for motor:	-20 50 °C 16 bar DIN DN 32 PN 16 340 mm FF165			
	Electrical data: Motor type: IE Efficiency class: Rated power - P2:	90SC IE5 1.5 kW			

1.5 kW

1 x 200-240 V

9.10-7.60 A

50 Hz

Rated power - P2:

Mains frequency:

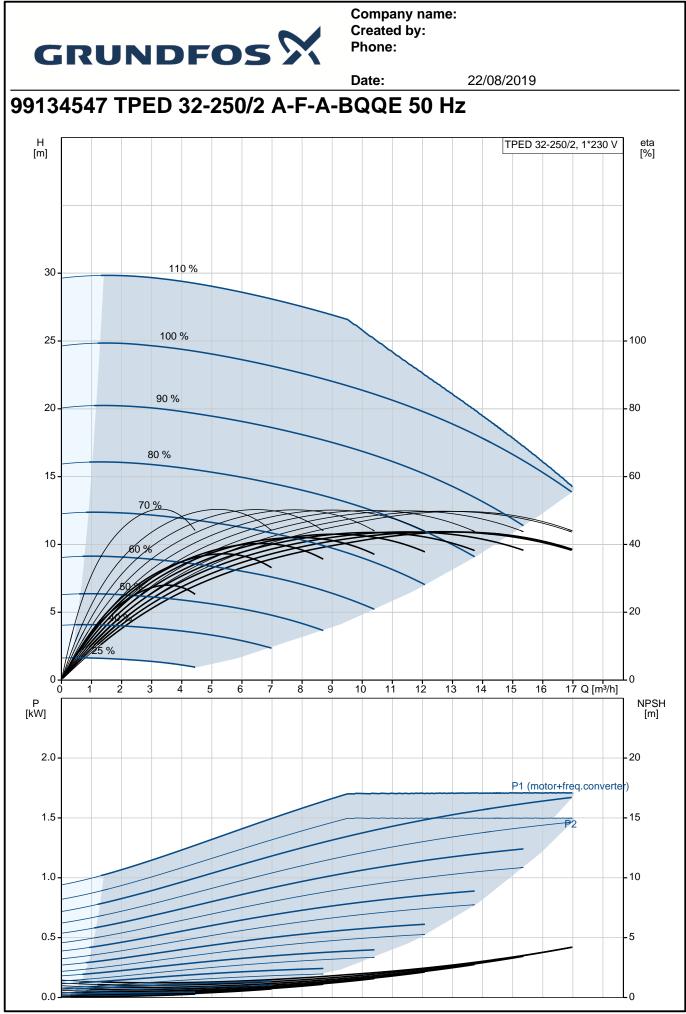
Rated voltage:

Rated current:



Company name: Created by:

		osX	Datas	00/00/0040		
			Date:	22/08/2019		
•	Description					
	Cos phi - power factor: Rated speed: Efficiency: Motor efficiency at full load: Enclosure class (IEC 34-5):	0.99 360-4000 rpm 87.4% 87.4 % IP55				
	Insulation class (IEC 85): Motor No:	F 99116400				
	Others:					
	Minimum efficiency index, MEI ErP status:	a‰¥: 0.70 EuP Standalone/F	Prod			
	Net weight:	85 kg	100.			
	Gross weight:	99 kg				
	Shipping volume:	0.089 m <sup>3</sup>				



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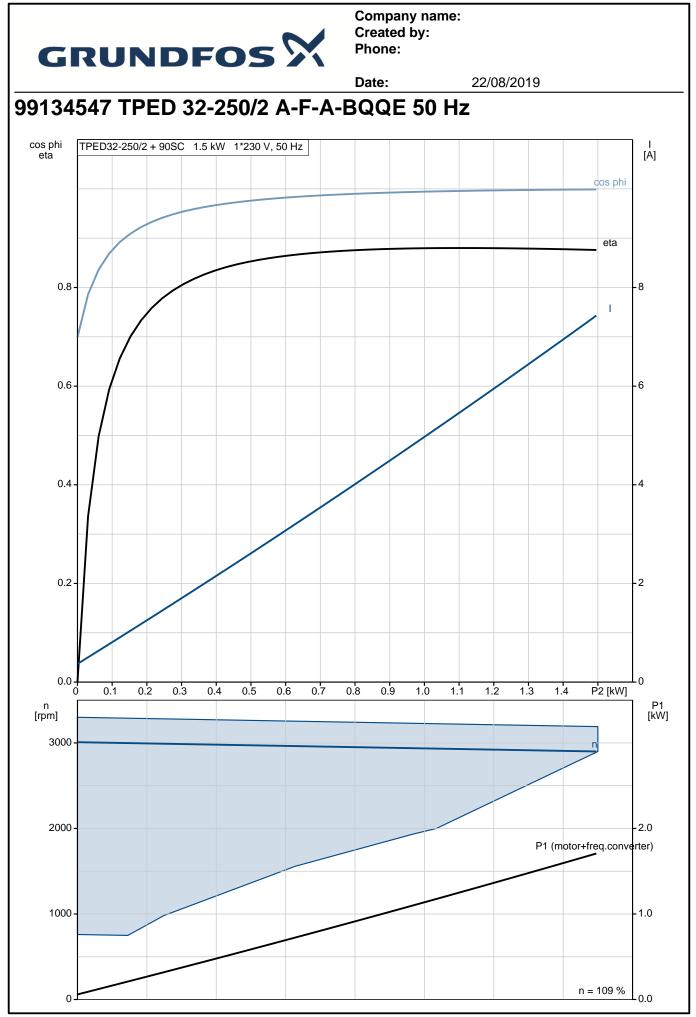


		Date:		08/2019	
Description	Value	H [m]		TPED 32-250/2, 1*230 V	eta [%]
General information:					
Product name:	TPED 32-250/2 A-F-A-BQQE				
Product No:	99134547	30 -	110 %		
EAN number:	5712607385538				
	5712607385538	25 -	100 %		- 100
Price:	4.724,00 GBP	25 -			- 100
Technical:	· ·	—	90 %		
Pump speed on which pump data are based:	2900 rpm	20 -			- 80
Rated flow:	12.7 m³/h	15 -	80 %		- 60
Rated head:	19.3 m	- '3	70 %		
Head max:	250 dm		TAR	t the	
Actual impeller diameter:	140 mm	10-	89%		- 40
Primary shaft seal:	BQQE	/			
Curve tolerance:	ISO9906:2012 3B	5-1/			- 20
Pump version:	A				-
Model:	A		25 %		
Materials:	Λ	0 <u>/</u>	2 4 6 8	B 10 12 14 Q [m <sup>3</sup> /h]	- 0
	Continen	— Р Г	0 0		NPSI
Pump housing:	Cast iron	P [kW]			[m]
	EN-JL1040	2.0 -			- 20
	ASTM A48-40 B			P1 (motor+freq.com	verter)
Impeller:	Cast iron	1.5 -		P2	- 15
	EN-JL1030	_		F2	
	ASTM A48-30 B	1.0 -			- 10
Material code:	Α				
Installation:		0.5			- 5
Range of ambient temperature:	-20 50 °C				
Maximum operating pressure:	16 bar				-0
Flange standard:	DIN				-
Pipe connection:	DN 32	325	325		
Pressure rating:	PN 16		76	1	
Port-to-port length:	340 mm				
Flange size for motor:	FF165				
Connect code:	F				
	1				
Liquid:	\ <b>M</b> /= (				
Pumped liquid:	Water	260	- 32 257	340	
Liquid temperature range:	-25 120 °C	- 200 p	• • • • • • • • • • • • • • • • • • •		
Selected liquid temperature:	20 °C	^ t	1	1	
Density at selected liquid temperature:	998.2 kg/m³	106	Jan A	(	
Electrical data:		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
Motor type:	90SC		158		
IE Efficiency class:	IE5	<u>2</u>	→ M <u>16</u>		
Rated power - P2:	1.5 kW		la	1/5 45 4	
Mains frequency:	50 Hz				
Rated voltage:	1 x 200-240 V				
Rated current:	9.10-7.60 A	<u> </u>			
Cos phi - power factor:	0.99		<u> </u>		
Rated speed:	360-4000 rpm		Ø⊕		
Efficiency:	87.4%				
Motor efficiency at full load:	87.4 %				
Enclosure class (IEC 34-5):	IP55	317.03	we end we		
Insulation class (IEC 85):	F				
Motor protec:	YES	-28.9			
Motor No:	99116400				
Controls:			K GND A GENbus A Y GENbus Y		
Control panel:	HMI200 - Standard		3 GND 5 +34 V		
Function Module:	FM300 - Advanced				
Frequency converter:	Built-in				

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		Date:	22/08/2019
scription	Value		
thers:		_	
Minimum efficiency index, MEI ≥:	0.70		
ErP status:	EuP Standalone/Prod.		
Net weight:	85 kg		
Gross weight:	99 kg		
Shipping volume:	0.089 m <sup>3</sup>		
Config. file no:	98478821		



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