

Product No.: 99114820

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.

22/08/2019

TPED 32-230/2 A-F-A-BQQEThe pump is fitted with an unbalanced rubber bellows seal. TPED 32-230/2 A-F-A-BQQETPED 32-230/2 A-F-A-BQQETPED 32-230/2 A-F-A-BQQEThe shaft seal is according to EN 12756. Pipework connection is via PN 6/10 DIN flanges (EN 1092-2 and ISO 7005-2).

Pipework connection is via PN 6/10 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".

## Pump

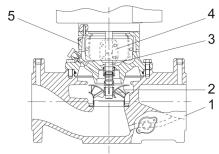
Pump housing and pump head are electrocoated to improve the corrosion resistance. Electrocoating includes:

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



Date:

22/08/2019



### 1: Pump housing

- 2: Impeller
- 3: Shaft
- 4: Coupling
- 5: Pump head

The pump housing is provided with a replaceable stainles steel/PTFE neck ring to reduce the amount of liquid running from the discharge side of the impeller to the suction side. The impeller is secured with a split cone with 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. Motor and pump shaft are connected via a shell coupling.

#### 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 tapped-hole flange (FT). Motor-mounting designation in accordance with IEC 60034-7: IM B 14, IM V 18 (Code I) / IM 3601, IM 3611 (Code II).

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 32-230/2 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
- 24 V voltage supply for sensors
- two signal-relay outputs (potential-free contacts)

GRUND		Date:	22/08/2019
Description		Dator	22,00,2010
GENIbus connect	tion		
	ndfos CIM fieldbus r	nodule.	
		box holds terminals for the	ese connections:
<ul> <li>one dedicated dig</li> </ul>			
		/, 0-10 V, 0.5 - 3.5 V	
	y to potentiometer		
	digital input or oper		
	Sensor input and ou	utput	
- 24 V voltage sup	outputs (potential-fre	e contacte)	
		via wireless GENIair or wi	red GENI connection
	dfos CIM fieldbus r		
Technical data			
Controls:			
Frequency converter:	Built-in		
Liquid:			
Pumped liquid:	Water		
Liquid temperature rang	e <sup>.</sup> -25 120	ംറ	
Selected liquid temperat	ure: 20 °C	•	
Density at selected liqui	d temperature: 998	8.2 kg/m³	
Technical:			
Pump speed on which p	ump data are base	d: 2855 rpm	
Rated flow:	7.1 m³/h		
Rated head:	15 m		
Actual impeller diameter			
Primary shaft seal:	BQQE		
Curve tolerance:	ISO9906:2	2012 3B	
Materials:			
Pump housing:	Cast iron		
	EN-JL104	0	
	ASTM A48		
Impeller:	Stainless		
	DIN WNi	r. 1.4301	
	AISI 304		
Installation:		0	
Range of ambient tempe		C	
Maximum operating pres			
Flange standard: Pipe connection:	DIN DN 32		
Pipe connection: Pressure rating:	DN 32 PN 6/10		
Port-to-port length:	280 mm		
Flange size for motor:	FT100		
Electrical data:			
Motor type:	80A		
IE Efficiency class:	IE5		
Rated power - P2:	0.75 kW		
Mains frequency:	50 Hz		
Rated voltage:	1 x 200-24	40 V	
Rated current:	4.70-3.90		
Cos phi - power factor:	0.99		

360-4000 rpm

0.99

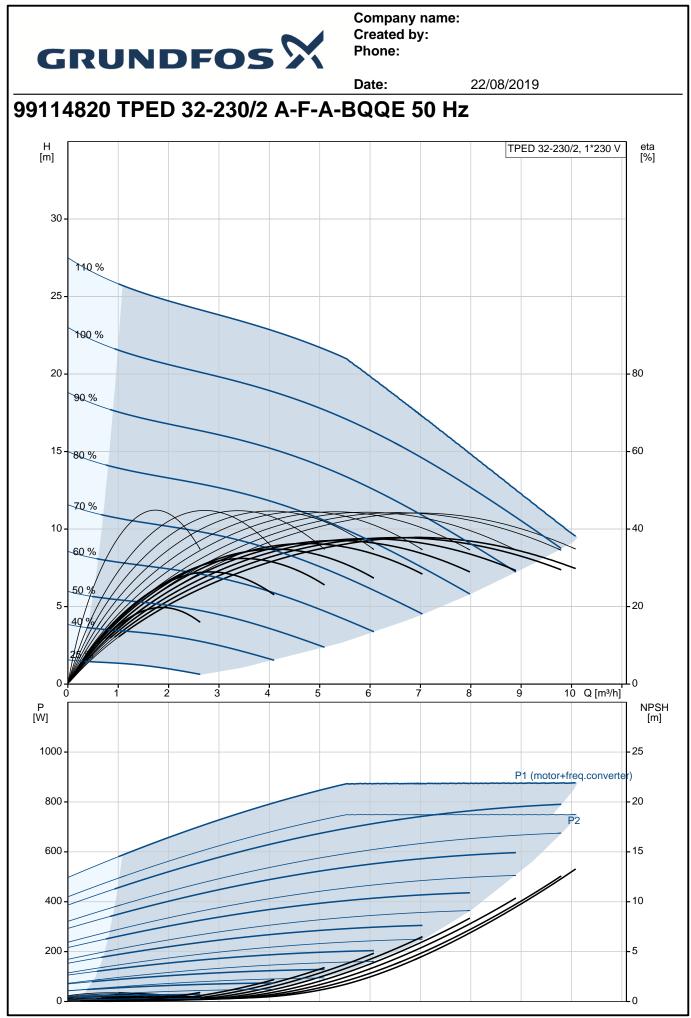
Cos phi - power factor:

Rated speed:



Company name: Created by:

	GRUNDF		Data	22/08/2010	
0100			Date:	22/08/2019	
Qty.	Description	05.00/			
	Efficiency: Motor efficiency at full load:	85.2% 85.2 %			
	Enclosure class (IEC 34-5):	IP55			
	Insulation class (IEC 85):	F			
	Motor No:	98248266			
	Others:				
	Minimum efficiency index, ME	l ≥: 0.64			
	ErP status:	EuP Standalone/Pro	d.		
	Net weight:	57.7 kg			
	Gross weight: Shipping volume:	67.2 kg 0.067 m³			
	Chipping volume.	0.007 111			



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		Date:	22/08/2019	
Description	Value	H [m]	TPED 32-230/2	, 1*230 V eta [%]
General information:		- ''		
Product name:	TPED 32-230/2 A-F-A-BQQE	30 -		
Product No:	99114820	110 %		
EAN number:	5712607036546	25 -		
	5712607036546	100 %		
Price:	4.156,00 GBP			
Technical:	11100,00 001	20 -		- 80
Pump speed on which pump data are based:	2855 rpm			
Rated flow:	7.1 m³/h	15 - 80 %		- 60
Rated head:	15 m	70 %		
Head max:	230 dm	10	1 and the second	40
Actual impeller diameter:	136 mm	60 %		
Primary shaft seal:	BQQE	50.0		
Curve tolerance:	ISO9906:2012 3B	5-		- 20
		4	· / /	
Pump version: Model:	A	200/10		
	A	0	2 4 6 8	Q [m³/h]
Materials:	Cootirat	P [W]		NPSH
Pump housing:	Cast iron	[W] 1000 -		[m] - 25
	EN-JL1040	1000 -	P1 (moto	or+freq.converter)
	ASTM A48-40 B	800 -		- 20
Impeller:	Stainless steel			P2
	DIN WNr. 1.4301	600 -		- 15
	AISI 304	400 -		10
Material code:	A	400-		
Installation:		200 -		- 5
Range of ambient temperature:	-20 50 °C			
Maximum operating pressure:	10 bar	0		L 0
Flange standard:	DIN	307		
Pipe connection:	DN 32			
Pressure rating:	PN 6/10			
Port-to-port length:	280 mm		Rp 1/4	
Flange size for motor:	FT100			
Connect code:	F		╡╵╎ <u></u> ╪┼╤╪╤╪┼	
Liquid:				
Pumped liquid:	Water	222 222	280	
Liquid temperature range:	-25 120 °C		103 e2	
Selected liquid temperature:	20 °C		<u>M12</u>	
Density at selected liquid temperature:	998.2 kg/m <sup>3</sup>			
Electrical data:			H I M	
Motor type:	80A			
IE Efficiency class:	IE5			
Rated power - P2:	0.75 kW		M12	
Mains frequency:	50 Hz			
Rated voltage:	1 x 200-240 V			
Rated current:	4.70-3.90 A			
Cos phi - power factor:	0.99	ee	; Ø⊕	
Rated speed:	360-4000 rpm			
Efficiency:	85.2%			
Motor efficiency at full load:	85.2 %	-31.V. O		
Enclosure class (IEC 34-5):	IP55	347-\$P-247-\$		
Insulation class (IEC 85):	F	<u>6</u>		
Motor protec:	YES			
Motor No:	98248266	1111 <b>(</b> 1111)		
Controls:				
Control panel:	HMI200 - Standard			
Function Module:	FM300 - Advanced			
Frequency converter:	Built-in			

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		Date:	22/08/2019
Description	Value		
Others:		_	
Minimum efficiency index, MEI ≥:	0.64		
ErP status:	EuP Standalone/Prod.		
Net weight:	57.7 kg		
Gross weight:	67.2 kg		
Shipping volume:	0.067 m <sup>3</sup>		
Config. file no:	98478785		

