

Company name: Created by: Phone:

22/08/2019

Qty. | Description

1

## TPED 32-200/2 A-F-A-BQQE



Note! Product picture may differ from actual product

Product No.: 98512481

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.

## **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.



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	<ul><li>B) Cathodic electrocoating (epoxy).</li><li>B) Curing of paint film at 200-250 °C.</li></ul>			
2 3 4	: Pump housing 2: Impeller 3: Stub shaft 4: Pump head/motor stool			
Т	5: Wear rings The pump housing is provided with a replaceable bras butlet side of the impeller to the inlet side. The impelle	s neck ring to r is secured to	reduce the amount of liquid running from the shaft with a nut.	m the
t	The pump is fitted with an unbalanced rubber bellows he bellows. Due to the bellows, the seal does not wea leposits on the shaft.	seal with torqu ar the shaft, an	ue transmission across the spring and a nd the axial movement is not prevented l	round by
T	<ul> <li>Primary seal:</li> <li>Rotating seal ring material: silicon carbide (SiC</li> <li>Stationary seat material: silicon carbide (SiC)</li> <li>This material pairing is used where higher corrosion results</li> </ul>	esistance is rec	quired. The high hardness of this materi	ial
S	pairing offers good resistance against abrasive particle Secondary seal material: EPDM (ethylene-propylene r EPDM has excellent resistance to hot water. EPDM is	ubber)	or mineral oils.	
	A circulation of liquid through the duct of the air vent s The flanges have tappings for mounting of pressure g		lubrication and cooling of the shaft seal.	
v	The motor stool forms connection between the pump l rent screw for venting of the pump housing and the sh pump housing is an O-ring.	nousing and th naft seal cham!	ne motor, and is equipped with a manual ber. The sealing between motor stool ar	l air nd
T s	The central part of the motor stool is provided with gua shaft is fastened directly on the motor shaft with key a	ards for protect nd set screws.	tion against the shaft and coupling. The	pump
т	<b>Motor</b> The motor is a totally enclosed, fan-cooled motor with olerances comply with IEC 60034.	principal dime	ensions to IEC and DIN standards. Elect	rical
Ν	The motor is flange-mounted with free-hole flange (FF Aotor-mounting designation in accordance with IEC 6 I).		5, IM V 1 (Code I) / IM 3001, IM 3011 (C	ode
T	The motor efficiency is classified as IE5 in accordance The motor requires no external motor protection. The puick-rising temperatures, e.g. constant overload and	motor control ι	unit incorporates protection against slow	/- and
T	PED 32-200/2 A-F-A-BQQEThe terminal box holds to	erminals for the	ese connections:	

- one dedicated digital input
  two analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 3.5 V



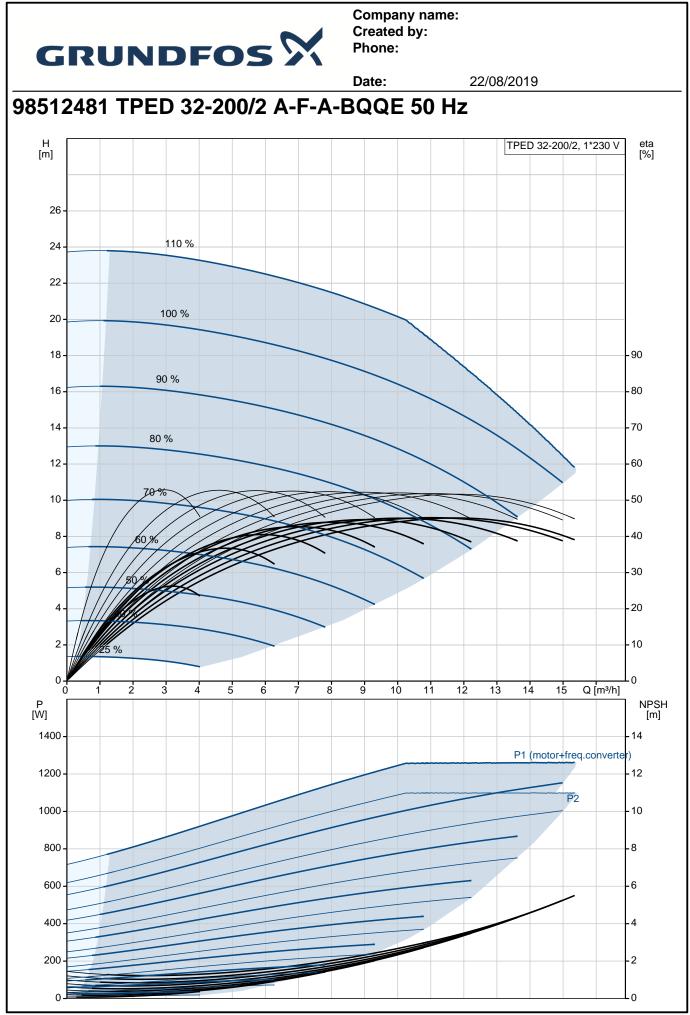
Company name: Created by:

Date:     22/08/2019       Description     • 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       • interface for Grundfos CIM fieldbus module.       TPED 32-200/2 A-F-A-BQOEThe terminal box holds terminals for these connections:       • one decidated digital input       • two signal-relia volutis (potential-free contacts)       • Genklose connection       • interface for Grundfos CIM fieldbus module.       TPED 32-200/2 A-F-A-BQOEThe terminal box holds terminals for these connections:       • one decidated digital input       • two signal-relia volutis (potential-free contacts)       • 5 V voltage supply for sensors       • two signal relia volutis (potential-free contacts)       • the two power heads communicate via wireless GENair or wired GENI connection       • interface for Grundfos CIM fieldbus module.       Technical data       Controls:       Frequency converter:     Built-in       Liquid temperature:     20 °C       Density at selected liquid temperature:     92.2 kg/m <sup>3</sup> Technical:     Pumped input data are based:       Pumped inquid:     11 m <sup>3</sup> h       Rated flow:     11 m <sup>3</sup> h       Rated head:     15 m       Actual impeller diameter:     12090 °C	GRUNDFO	Nsc	Created by: Phone:	
S 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     instrate for Grundfos CIM fieldbus module.     TPED 32-200/2 A-F-A-BQQEThe terminal box holds terminals for these connections:         one configurable digital input         two signal relay outputs (potential-free contacts)         one configurable 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             carundfos Digital Sensor input and output             carundfos Digital Sensor input			Date:	22/08/2019
	Description			
<ul> <li>one dedicated digital input</li> <li>two analog inputs, 0(4):20 mA, 0.5 V, 0.10 V, 0.5 - 3.5 V</li> <li>5 V voltage supply to potentiometer and sensor</li> <li>one configurable digital input or open-collector output</li> <li>Grundfos Digital Sensor input and output</li> <li>24 V voltage supply for sensors</li> <li>two signal relay outputs (potential-free contacts)</li> <li>the two power heads communicate via wireless GENlair or wired GENI connection</li> <li>interface for Grundfos CIM fieldbus module.</li> </ul> <b>Technical data Controls:</b> Frequency converter: Built-in <b>Liquid:</b> Pumped liquid temperature: 20 °C Selected liquid temperature: 20 °C Density at selected liquid temperature: 998.2 kg/m <sup>3</sup> <b>Technical:</b> Pump speed on which pump data are based: 2900 rpm Rated flow: <ul> <li>11 m<sup>3</sup>/h</li> <li>Rated flow:</li> <li>15 m</li> <li>Actual impeller diameter:</li> <li>129 mm</li> <li>Primary shaft seal:</li> <li>BQQE</li> <li>Curve tolerance:</li> <li>ISO9906:2012 3B</li> </ul> <b>Materials:</b> Pump flow of a modern and a set on the set of th	<ul> <li>one configurable digital i</li> <li>Grundfos Digital Sensor</li> <li>24 V voltage supply for s</li> <li>two signal-relay outputs</li> <li>GENIbus connection</li> </ul>	nput or open-collect input and output ensors (potential-free conta	or output	
Controls:       Frequency converter:       Built-in         Liquid:       Pumped liquid:       Water         Liquid temperature range:       -25120 °C         Selected liquid temperature:       20 °C         Density at selected liquid temperature:       998.2 kg/m³         Technical:       Pump speed on which pump data are based:       2900 rpm         Pated head:       11 m³/h         Rated head:       15 m         Actual impeller diameter:       129 mm         Primary shaft seal:       BQQE         Curve tolerance:       ISO9906:2012 3B         Materials:       Pump housing:         Pump housing:       Cast iron         EN-JL1040       ASTM A48-40 B         Impeller:       Cast iron         EN-JL1030       ASTM A48-30 B         Installation:       Range of ambient temperature: -2050 °C         Maximum operating pressure:       16 bar         Flange standard:       DIN         Pipe connection:       DN 32         Pressure rating:       PN 16         Port-to-port length:       340 mm         Flange size for motor:       FF165         Electrical data:       Electrical data:	<ul> <li>one dedicated digital inp</li> <li>two analog inputs, 0(4)-2</li> <li>5 V voltage supply to pot</li> <li>one configurable digital i</li> <li>Grundfos Digital Sensor</li> <li>24 V voltage supply for s</li> <li>two signal relay outputs</li> <li>the two power heads cor</li> </ul>	ut 20 mA, 0-5 V, 0-10 V centiometer and sena nput or open-collect input and output censors (potential-free conta nmunicate via wirele	′, 0.5 - 3.5 V sor or output cts)	
Frequency converter:       Built-in         Liquid:       Pumped liquid:       Water         Liquid temperature range:       -25 120 °C         Selected liquid temperature:       20 °C         Density at selected liquid temperature:       998.2 kg/m³         Technical:       Pump speed on which pump data are based:       2900 rpm         Pated flow:       11 m³/h         Rated flow:       15 m         Actual impeller diameter:       129 mm         Primary shaft seal:       BQQE         Curve tolerance:       ISO9906:2012 3B         Materials:       Pump housing:         Pump housing:       Cast iron         EN-JL1040       ASTM A48-40 B         Impeller:       Cast iron         EN-JL1030       ASTM A48-30 B         Installation:       Range of ambient temperature:         Range of ambient temperature:       -20 50 °C         Maximum operating pressure:       16 bar         Flange standard:       DIN         Pipe connection:       DN 32         Pressure rating:       PN 16         Port-to-port length:       340 mm         Flange size for motor:       FF165         Electrical data:       Electrical data:	Technical data			
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Pumped liquid:       Water         Liquid temperature range:       -25 120 °C         Selected liquid temperature:       20 °C         Density at selected liquid temperature:       998.2 kg/m³         Technical:         Pump speed on which pump data are based:       2900 rpm         Rated flow:       11 m³/h         Rated flow:       11 m³/h         Rated flow:       129 mm         Primary shaft seal:       BQQE         Curve tolerance:       ISO9906:2012 3B         Materials:       Pump housing:         Pump housing:       Cast iron         EN-JL1040       ASTM A48-40 B         Impeller:       Cast iron         EN-JL1030       ASTM A48-30 B         Installation:       Range of ambient temperature:       -20 50 °C         Maximum operating pressure:       16 bar         Flange standard:       DIN       Pipe connection:         Pipe connection:       DN 32         Pressure rating:       PN 16         Port-to-port length:       340 mm         Flange size for motor:       FF165         Electrical data:       Electrical data:		Duiten		
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Curve tolerance:ISO9906:2012 3BMaterials:Cast iron EN-JL1040 ASTM A48-40 BImpeller:Cast iron EN-JL1030 ASTM A48-30 BInstallation:Cast iron EN-JL1030 ASTM A48-30 BInstallation:-2050 °CMaximum operating pressure:16 bar DIN Pipe connection:Pipe connection:DN 32 Pressure rating:Protection:DN 32 FIange size for motor:Electrical data:FI65	Actual impeller diameter:	129 mm		
Materials:Pump housing:Cast iron EN-JL1040 ASTM A48-40 BImpeller:Cast iron EN-JL1030 ASTM A48-30 BInstallation:EN-JL 1030 ASTM A48-30 BInstallation:-20 50 °CMaximum operating pressure:16 barFlange standard:DINPipe connection:DN 32Pressure rating:PN 16Port-to-port length:340 mmFlange size for motor:FF165Electrical data:	,	BQQE		
Pump housing:Cast iron EN-JL1040 ASTM A48-40 BImpeller:Cast iron EN-JL1030 ASTM A48-30 BInstallation:-2050 °CRange of ambient temperature:-2050 °CMaximum operating pressure:16 barFlange standard:DINPipe connection:DN 32Pressure rating:PN 16Port-to-port length:340 mmFlange size for motor:FF165	Curve tolerance:	ISO9906:2012 3B		
Pump housing:Cast iron EN-JL1040 ASTM A48-40 BImpeller:Cast iron EN-JL1030 ASTM A48-30 BInstallation:-2050 °CRange of ambient temperature:-2050 °CMaximum operating pressure:16 barFlange standard:DINPipe connection:DN 32Pressure rating:PN 16Port-to-port length:340 mmFlange size for motor:FF165	Materials			
EN-JL1040 ASTM A48-40 BImpeller:Cast iron EN-JL1030 ASTM A48-30 BInstallation: Range of ambient temperature: Parating pressure:-20 50 °C C Maximum operating pressure: 16 bar Flange standard: DIN Pipe connection: PN 32 Pressure rating: PN 16 Port-to-port length: 340 mm Flange size for motor:Electrical data:		Cast iron		
Impeller:Cast iron EN-JL1030 ASTM A48-30 BInstallation:		EN-JL1040		
EN-JL1030 ASTM A48-30 BInstallation: Range of ambient temperature: -20 50 °C Maximum operating pressure: 16 bar Flange standard: DIN Pipe connection: DN 32 Pressure rating: PN 16 				
ASTM A48-30 B Installation: Range of ambient temperature: -20 50 °C Maximum operating pressure: 16 bar Flange standard: DIN Pipe connection: DN 32 Pressure rating: PN 16 Port-to-port length: 340 mm Flange size for motor: FF165 Electrical data:	Impeller:			
Installation:Range of ambient temperature:-20 50 °CMaximum operating pressure:16 barFlange standard:DINPipe connection:DN 32Pressure rating:PN 16Port-to-port length:340 mmFlange size for motor:FF165				
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Pressure rating:       PN 16         Port-to-port length:       340 mm         Flange size for motor:       FF165         Electrical data:       FF165				
Port-to-port length:       340 mm         Flange size for motor:       FF165         Electrical data:       FF165				
Electrical data:	Port-to-port length:	340 mm		
	Flange size for motor:	FF165		
	Motor type:	80B		
IE Efficiency class:     IE5       Rated power - P2:     1.1 kW				



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<b>.</b>	Description				
	Mains frequency:	50 Hz			
	Rated voltage:	1 x 200-240 V			
	Rated current:	6.70-5.60 A			
	Cos phi - power factor:	0.99			
	Rated speed:	360-4000 rpm			
	Efficiency:	86.9%			
	Motor efficiency at full load:	86.9 %			
	Enclosure class (IEC 34-5):	IP55			
	Insulation class (IEC 85):	F			
	Motor No:	99390781			
	Others:				
	Minimum efficiency index, MEI		1		
	ErP status:	EuP Standalone/Pro	50.		
	Net weight:	82 kg			
	Gross weight:	96 kg 0.383 m³			
	Shipping volume:	0.303 118			



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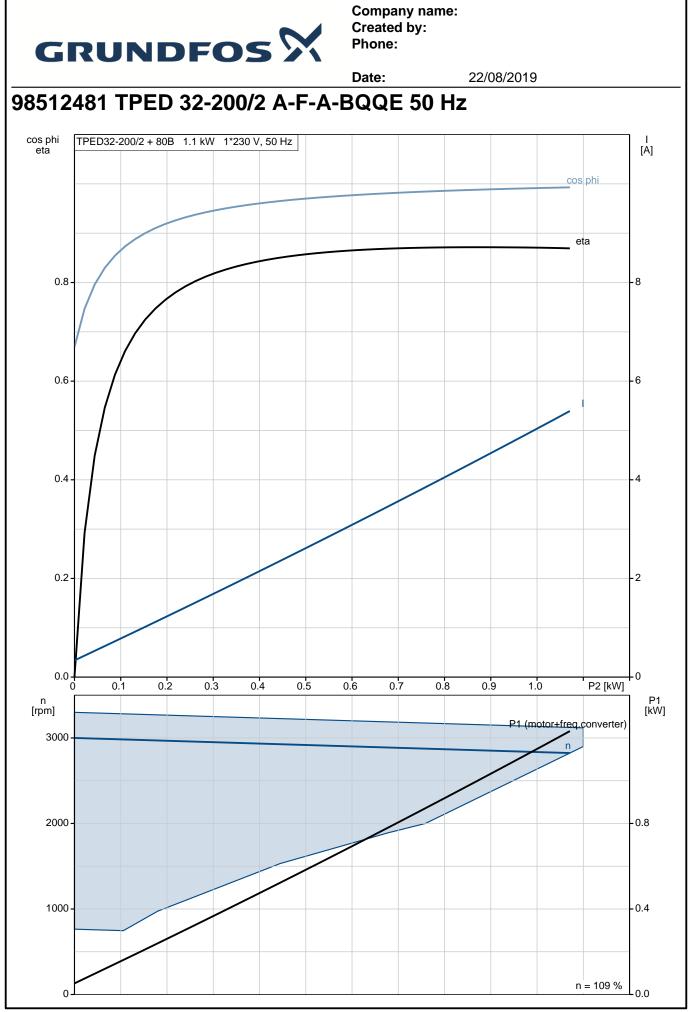
		Date:	22/08/2019		
Description	Value	H [m]		TPED 32-200/2, 1*230 V	eta [%]
General information:		- `` -			
Product name:	TPED 32-200/2 A-F-A-BQQE	26 -	110 %		-
Product No:	98512481	24 -			
EAN number:	5711496373596	22 -			
EAN NUMBER.	5711496373596	20 -	100 %		
Price:		18 -			- 90
	4.544,00 GBP		90 %		
Technical:		16 -			- 80
Pump speed on which pump data are based:	2900 rpm	14 -	80 %		- 70
Rated flow:	11 m³/h	12 -			- 60
Rated head:	15 m	10 -	70%	Antes	- 50
Head max:	200 dm	8 -	60%		40
Actual impeller diameter:	129 mm				-
Primary shaft seal:	BQQE	6-	1/58		- 30
Curve tolerance:	ISO9906:2012 3B	4-			- 20
Pump version:	A	2-	25 %		10
Model:	A	<b>/</b>	2.5 /0		
Materials:	~	0	2 4 6	8 10 12 Q [m³/h]	⊥0 I
	Cast iron	P [W]	-		NPS
Pump housing:	EN-JL1040	[VV]		P1 (motor+freq.co	[m]
		1200 -		P1 (motor+freq.co	- 12
Impollor	ASTM A48-40 B			P2	
Impeller:	Cast iron	1000 -			10
	EN-JL1030	800 -			- 8
	ASTM A48-30 B	600 -			- 6
Material code:	A	400			- 4
Installation:					
Range of ambient temperature:	-20 50 °C	200 -			-2
Maximum operating pressure:	16 bar	0			
Flange standard:	DIN	325	325		
Pipe connection:	DN 32	122 276			
Pressure rating:	PN 16	╵┍╆╌╄╌╟┍┍			
Port-to-port length:	340 mm				
Flange size for motor:	FF165			œ	
Connect code:	F				
Liquid:				₽ ₽¶←∎	
Pumped liquid:	Water	- Harter	M TA		
Liquid temperature range:	-25 120 °C	260 -	2 257 340		
Selected liquid temperature:	20 °C	10610610	6 106 M16		
Density at selected liquid temperature:	998.2 kg/m <sup>3</sup>			; • • •	
Electrical data:	<del>ت</del>				
Motor type:	80B	— HADHIH		<u>े</u>	
IE Efficiency class:	IE5		I state	<u>·</u> ] •	
Rated power - P2:	1.1 kW	t	M16		
Mains frequency:	50 Hz		<b>175</b> 4	<del>8  4  </del>	
Rated voltage:	1 x 200-240 V				
Rated current:	6.70-5.60 A	~			
Cos phi - power factor:	0.99	74			
Rated speed:	360-4000 rpm				
Efficiency:	86.9%				
Motor efficiency at full load:	86.9 %				
Enclosure class (IEC 34-5):	IP55	200-47-			
Insulation class (IEC 85):	F	•			
Motor protec:	YES	-24			
Motor No:	99390781				
Controls:					
Control panel:	HMI200 - Standard		B GENBus B		
Function Module:	FM300 - Advanced				
Frequency converter:	Built-in				

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Company name: Created by: Phone:

		Date:	22/08/2019
Description	Value		
Others:		_	
Minimum efficiency index, MEI ≥:	0.70		
ErP status:	EuP Standalone/Prod.		
Net weight:	82 kg		
Gross weight:	96 kg		
Shipping volume:	0.383 m <sup>3</sup>		
Config. file no:	98478803		



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