29/08/2019

Date:

Qty. | Description

1

TPED 80-210/2-S A-F-A-BQQE



Product No.: 99132838

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 80-210/2-S A-F-A-BQQEThe pump is fitted with an unbalanced rubber bellows seal. TPED 80-210/2-S A-F-A-BQQETPED 80-2005-2).

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.

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.

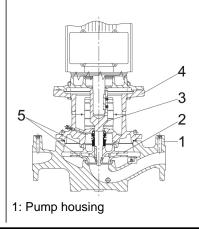
A control panel enables setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop". The control panel has indicator lights for "Operation" and "Fault".

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".

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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Qty. | Description

- 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).

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 80-210/2-S 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; the factory-fitted pressure sensor is connected to one of these inputs
- 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)
- GENIbus connection
- interface for Grundfos CIM fieldbus module.

TPED 80-210/2-S 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; the factory-fitted pressure sensor is connected to one of these inputs
- 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



Company name: Created by:

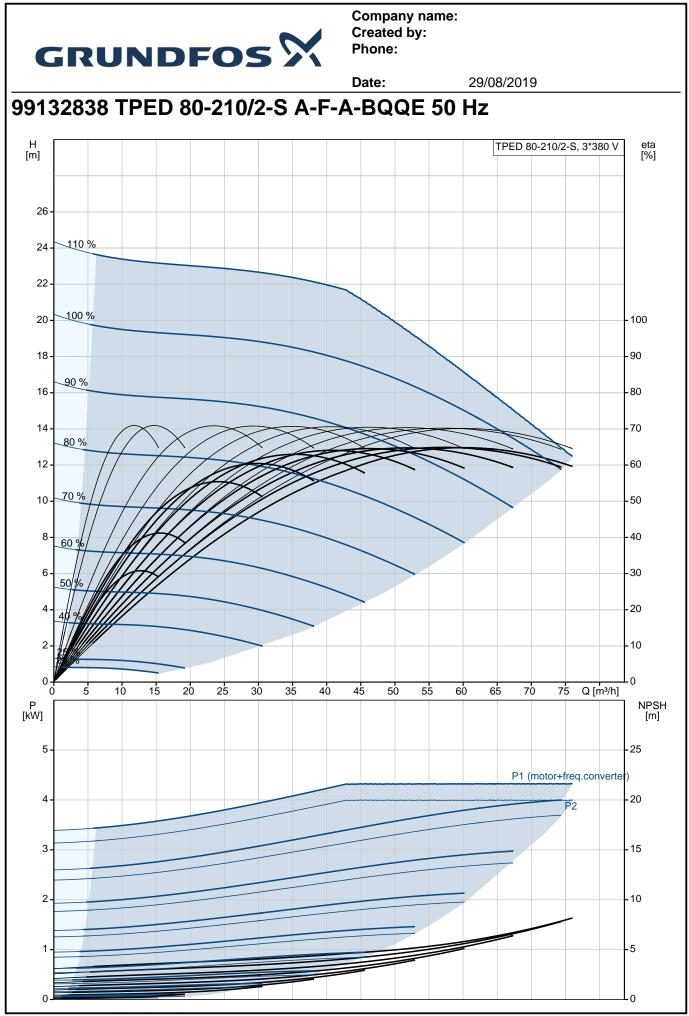
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	acarintian		Date:	29/08/2019
De	escription		,	
	- two signal relay outputs (
	- the two power heads com		GENIAIR OR V	wired GEINI connection
	 interface for Grundfos CII 	n heiddus module.		
Т	echnical data			
Co	ontrols:			
	equency converter:	Built-in		
Li	quid:			
	Imped liquid:	Water		
	quid temperature range:	-25 120 °C		
	elected liquid temperature:	20 °C		
De	ensity at selected liquid temper	ature: 998.2 kg/m ³		
_				
	echnical:	a ara basadi 2020	2 00	
	ump speed on which pump dat ated flow:	a are based: 2920 rp 53.5 m ³ /h	וות	
	ated head:	16.6 m		
	ctual impeller diameter:	125 mm		
	imary shaft seal:	BQQE		
	urve tolerance:	ISO9906:2012 3B		
Ma	aterials:			
Ρι	Imp housing:	Cast iron		
		EN-JL1040		
		ASTM A48-40 B		
Im	peller:	Cast iron		
		EN-JL1030		
		ASTM A48-30 B		
In	stallation:			
	ange of ambient temperature:	-20 50 °C		
	aximum operating pressure:	16 bar		
	ax pressure at stated temp:	16 bar / 120 °C		
	ange standard:	DIN		
	pe connection:	DN 80		
	essure rating:	PN 16		
	ort-to-port length:	360 mm		
Fla	ange size for motor:	FF215		
	ectrical data:			
	otor type:	112MC		
	Efficiency class:	IE5		
	ated power - P2:	4 kW		
	ains frequency:	50 Hz		
	ated voltage: ated current:	3 x 380-500 V		
		7.60-6.20 A		
	os phi - power factor: ated speed:	0.92-0.87 360-4000 rpm		
	ficiency:	92.2%		
	otor efficiency at full load:	92.2 %		
	nclosure class (IEC 34-5):	IP55		
	sulation class (IEC 85):	F		
	otor No:	98971270		
Ot	thers:			
Mi	nimum efficiency index, MEI	: 0.69		
Er	P status:	FuP Standalone/Pro	Ч	

EuP Standalone/Prod.

ErP status:



	GRUND	FOS 2			
			Date:	29/08/2019	
Qty.	Description				
	Net weight: Gross weight:	145 kg 176 kg			
	Shipping volume:	1.14 m ³			



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		Date:	
Description	Value	H [m]	TPED 80-210/2-S, 3*380 V [%
General information:			
Product name:	TPED 80-210/2-S A-F-A-BQQE	26 - 24 - 110 %	
Product No:	99132838		
EAN number:	5712607354930	22 -	
	5712607354930	20 - 100 %	100
Price:	9.377,00 GBP	18 -	90
Technical:	5.577,00 ODI	16 - 90 %	- 80
Pump speed on which pump data are		16-	
based:	2920 rpm	14 - 80 %	
Rated flow:	53.5 m³/h		
Rated head:	16.6 m	10 - 70 %	50
Head max:	210 dm	8-60%	40
Actual impeller diameter:	125 mm		-30
Primary shaft seal:	BQQE	6-50 4	
Curve tolerance:	ISO9906:2012 3B	4 - 40	-20
Pump version:	A	2-0	10
Model:	A	0	
Materials:		0 10	20 30 40 50 60 Q [m³/h]
Pump housing:	Cast iron	P [kW]	NP
	EN-JL1040	[KVV] 5 -	
	ASTM A48-40 B		P1 (motor+freq.converter)
Impeller:	Cast iron	4 -	P2 -20
וחופווכו.	EN-JL1030		
		3-	- 15
	ASTM A48-30 B	2-	10
Material code:	A	2	
Installation:		1-	-5
Range of ambient temperature:	-20 50 °C		
Maximum operating pressure:	16 bar	0	0
Max pressure at stated temp:	16 bar / 120 °C		
Flange standard:	DIN	416	416
Pipe connection:	DN 80	340	- · · · · · · · · · · · · · · · · · · ·
Pressure rating:	PN 16		
Port-to-port length:	360 mm		
Flange size for motor:	FF215		┿╋┙┙┙┙┙┙┙╝╴╸╸
Connect code:	F		
Liquid:		THE SECTION	
Pumped liquid:	Water		290
Liquid temperature range:	-25 120 °C	1 9	M16
Selected liquid temperature:	20 °C	145,6	× * *
Density at selected liquid temperature:		145.5	
Electrical data:	550.2 Ng/11		
	112MC		201
Motor type:		t	M15 78
IE Efficiency class:	IE5		
Rated power - P2:	4 kW		
Mains frequency:	50 Hz		rta -
Rated voltage:	3 x 380-500 V	L1	
Rated current:	7.60-6.20 A	L3	
Cos phi - power factor:	0.92-0.87		Ø.€
Rated speed:	360-4000 rpm		
Efficiency:	92.2%		
Motor efficiency at full load:	92.2 %	+24 V*	
Enclosure class (IEC 34-5):	IP55	-24 V" 0 -24 V"	
Insulation class (IEC 85):	F		6 CND A CENtas A V Orbu
Motor protec:	YES		i GeNba B
Motor No:	98971270		15 +24 V 8 +24 V
Controls:		[
Control panel:	HMI300 - Advanced		
-			—
Function Module:	FM300 - Advanced		

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		Date:	29/08/2019
Description	Value		
Frequency converter:	Built-in		
Others:			
Minimum efficiency index, MEI :	0.69		
ErP status:	EuP Standalone/Prod.		
Net weight:	145 kg		
Gross weight:	176 kg		
Shipping volume:	1.14 m³		
Config. file no:	99137774		

