Company name:
Created by:
Phone:

Date: 29/08/2019

Qty.	Description
1	**TPED 32-230/2-S A-F-A-BQQE**

Product No.: 99133613

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 32-230/2-S A-F-A-BQQEThe pump is fitted with an unbalanced rubber bellows seal. TPED 32-230/2-S A-F-A-BQQETPED 32-230/2-S A-F-A-BQQETPED 32-230/2-S 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.

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).

Pump

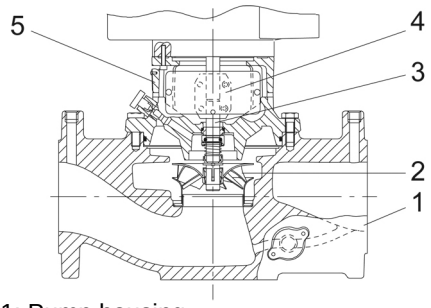
Pump housing and pump head are electrocoated to improve the corrosion resistance.

Electrocoating includes:

1) Alkaline-based cleaning.

Qty.	Description

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: 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-S A-F-A-BQQEThe terminal box holds terminals for these connections:

- one dedicated digital input
-

Qty.	Description

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 32-230/2-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)
- the two power heads communicate via wireless GENIair or wired GENI connection
- interface for Grundfos CIM fieldbus module.

Technical data

Controls:

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:	2855 rpm
Rated flow:	7.1 m³/h
Rated head:	15 m
Actual impeller diameter:	136 mm
Primary shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B

Materials:

Pump housing:	Cast iron EN-JL1040 ASTM A48-40 B
Impeller:	Stainless steel DIN W.-Nr. 1.4301 AISI 304

Installation:

Range of ambient temperature:	-20 .. 50 °C
Maximum operating pressure:	10 bar
Max pressure at stated temp:	10 bar / 120 °C
Flange standard:	DIN
Pipe connection:	DN 32
Pressure rating:	PN 6/10
Port-to-port length:	280 mm
Flange size for motor:	FT100

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Date: 29/08/2019

Qty.	Description	
	Electrical data:	
	Motor type:	80A
	IE Efficiency class:	IE5
	Rated power - P2:	0.75 kW
	Mains frequency:	50 Hz
	Rated voltage:	1 x 200-240 V
	Rated current:	4.70-3.90 A
	Cos phi - power factor:	0.99
	Rated speed:	360-4000 rpm
	Efficiency:	85.2%
	Motor efficiency at full load:	85.2 %
	Enclosure class (IEC 34-5):	IP55
	Insulation class (IEC 85):	F
	Motor No:	98362272
	Others:	
	Minimum efficiency index, MEI ≥:	0.64
	ErP status:	EuP Standalone/Prod.
	Net weight:	59.4 kg
	Gross weight:	68.9 kg
	Shipping volume:	0.067 m³

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Company name:
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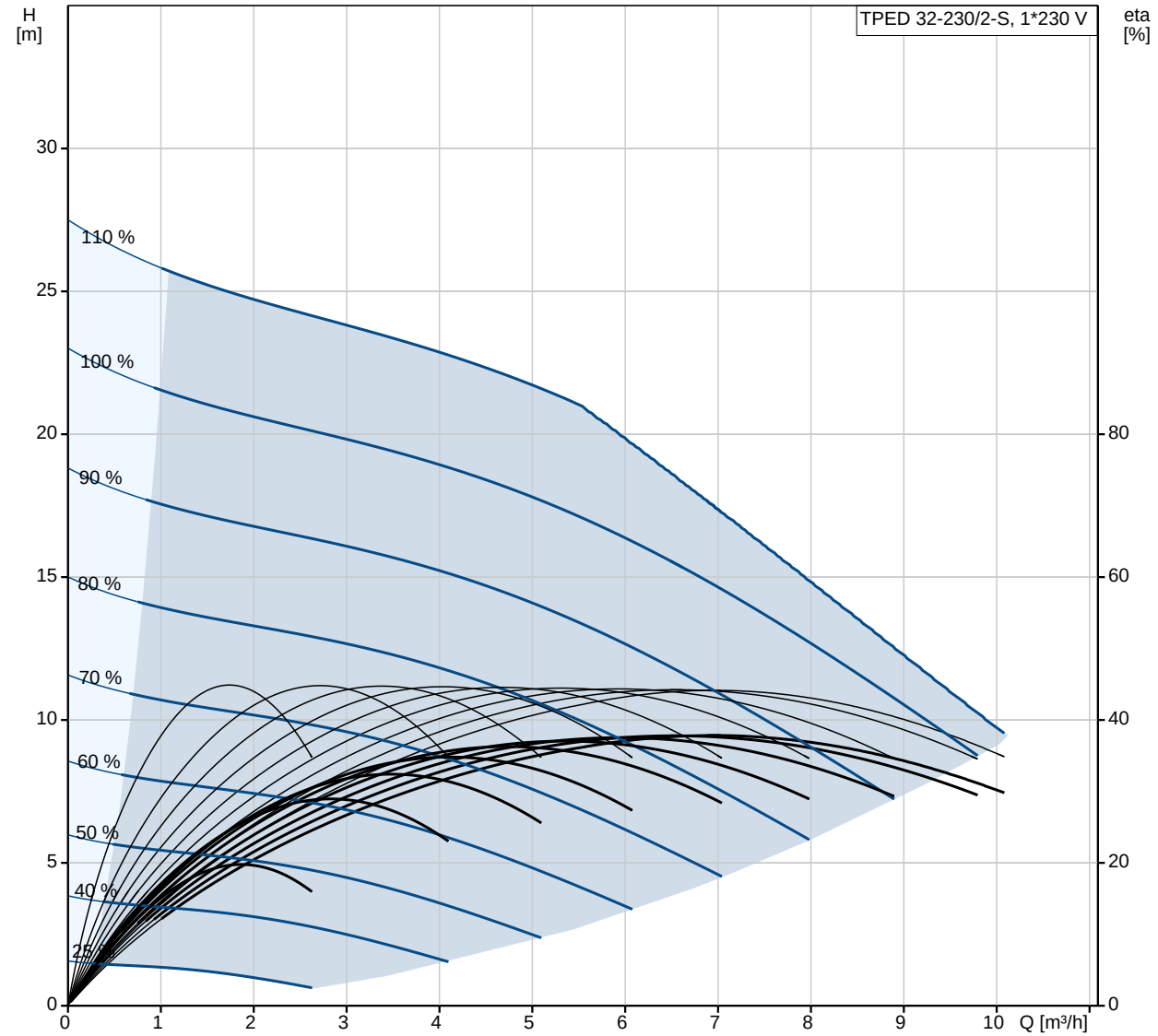
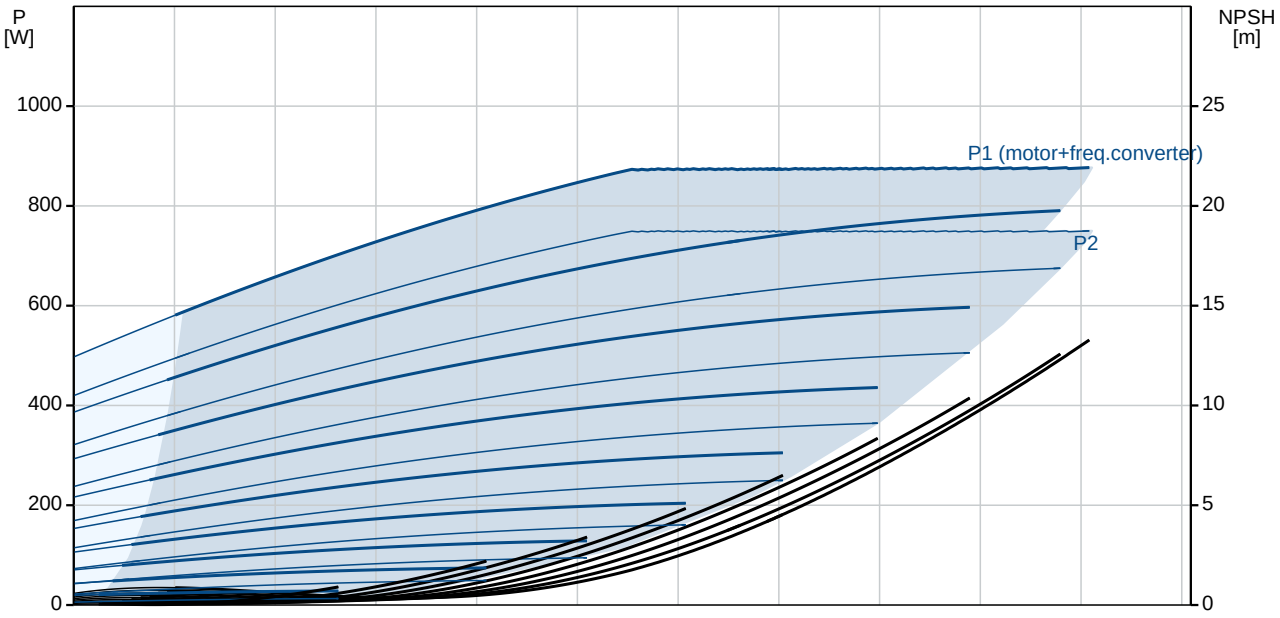
Date: 29/08/2019

99133613 TPED 32-230/2-S A-F-A-BQQE 50 Hz

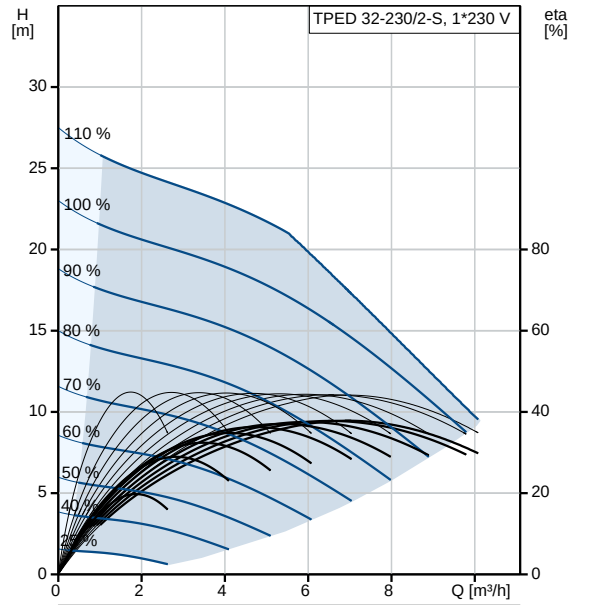


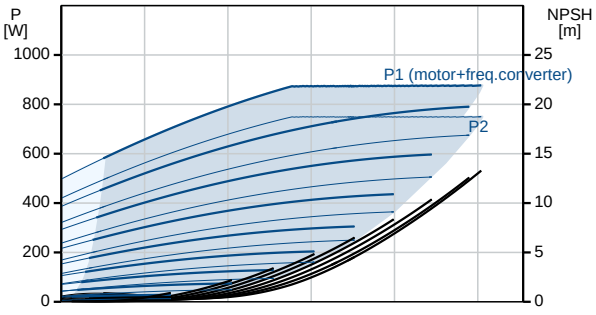


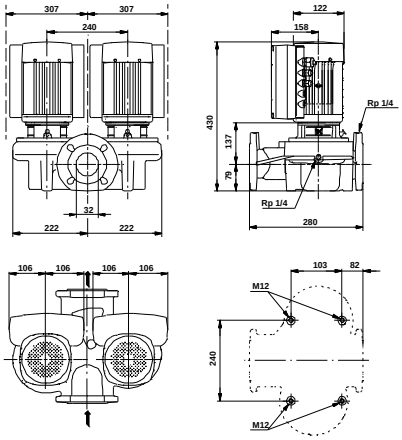
Company name:
Created by:
Phone:

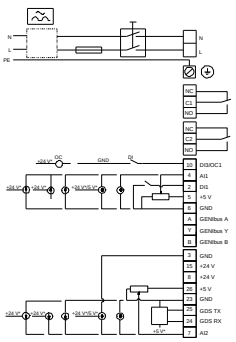
Date: 29/08/2019

Description	Value
General information:	
Product name:	TPED 32-230/2-S A-F-A-BQQE
Product No:	99133613
EAN number:	5712607367138
	5712607367138
Price:	4.840,00 GBP
Technical:	
Pump speed on which pump data are based:	2855 rpm
Rated flow:	7.1 m³/h
Rated head:	15 m
Head max:	230 dm
Actual impeller diameter:	136 mm
Primary shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Materials:	
Pump housing:	Cast iron
	EN-JL1040
	ASTM A48-40 B
Impeller:	Stainless steel
	DIN W.-Nr. 1.4301
	AISI 304
Material code:	A
Installation:	
Range of ambient temperature:	-20 .. 50 °C
Maximum operating pressure:	10 bar
Max pressure at stated temp:	10 bar / 120 °C
Flange standard:	DIN
Pipe connection:	DN 32
Pressure rating:	PN 6/10
Port-to-port length:	280 mm
Flange size for motor:	FT100
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Selected liquid temperature:	20 °C
Density at selected liquid temperature:	998.2 kg/m³
Electrical data:	
Motor type:	80A
IE Efficiency class:	IE5
Rated power - P2:	0.75 kW
Mains frequency:	50 Hz
Rated voltage:	1 x 200-240 V
Rated current:	4.70-3.90 A
Cos phi - power factor:	0.99
Rated speed:	360-4000 rpm
Efficiency:	85.2%
Motor efficiency at full load:	85.2 %
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor protec:	YES
Motor No:	98362272
Controls:	
Control panel:	HMI300 - Graphical
Function Module:	FM300 - Advanced









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Company name:
Created by:
Phone:

Date: 29/08/2019

Description	Value
Frequency converter:	Built-in
Others:	
Minimum efficiency index, MEI ≥:	0.64
ErP status:	EuP Standalone/Prod.
Net weight:	59.4 kg
Gross weight:	68.9 kg
Shipping volume:	0.067 m³
Config. file no:	99145773

Company name:
Created by:
Phone:

Date: 29/08/2019

99133613 TPED 32-230/2-S A-F-A-BQQE 50 Hz