

Date: 08/08/2022

Qty. | Description

1 TPD 40-240/2 A-F-A-BQQE-IX1



Note! Product picture may differ from actual product

Product No.: 96086953

Single-stage, close-coupled, volute twin-head pump with in-line suction and discharge ports of identical diameter. The twin-head pump is designed with two parallel power-heads.

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.

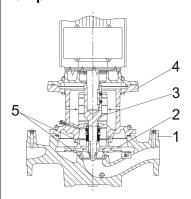
Each power head is fitted with an unbalanced rubber bellows seal.

The shaft seal is according to EN 12756. Pipework connection is via PN 16 DIN flanges (EN 1092-2 and ISO 7005-2).

Each power head is fitted with a fan-cooled asynchronous motor of indentical size.

Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

Pump



- 1: Pump housing
- 2: Impeller
- 3: Stub shaft
- 4: Pump head/motor stool
- 5: Wear rings

The twin-head pump is designed with two parallel power-heads. A non-return flap valve in the common discharge port is opened by the flow of the pumped liquid and prevents backflow of liquid into the idle pump head.

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.

Seal faces:

- 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.



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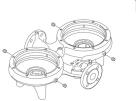
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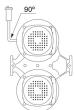
1 Secondary seal material: EPDM (ethylene-propylene rubber)

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 pump housing has four Rp 1/8 tappings for mounting of automatic air vents. Fit an air vent to the upper pump housing if the twin-head pump is to be installed in a horizontal pipeline with horizontal pump shaft.





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 IE3 in accordance with IEC 60034-30-1.

The motor does not incorporate motor protection and must be connected to a motor-protective circuit breaker which can be manually reset. The motor-protective circuit breaker must be set according to the rated current of the motor (11/1).

The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.

Further product details

Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

Technical data

Controls:

Frequency converter: NONE

Liquid:

Pumped liquid: Water
Liquid temperature range: -25 .. 120 °C
Selected liquid temperature: 20 °C
Density: 998.2 kg/m³

Technical:

Pump speed on which pump data are based: 2900 rpm

Rated flow: 21 m³/h
Rated head: 17.1 m
Actual impeller diameter: 137 mm
Code for shaft seal: BQQE

Curve tolerance: ISO9906:2012 3B2

Materials:



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Qty. Description

Pump housing: Cast iron

EN-GJL-250

ASTM class 35

Impeller: Cast iron

EN-GJL-200 ASTM class 30

Installation:

-30 .. 60 °C Range of ambient temperature: Maximum operating pressure: 16 bar

Max pressure at stated temp: 16 bar / 120 °C

Type of connection: DIN Size of connection: **DN 40** Pressure rating for connection: PN 16 Port-to-port length: 340 mm Flange size for motor: FF165

Electrical data:

Motor type: 90LE IE Efficiency class: IE3 Rated power - P2: 2.2 kW Mains frequency: 50 Hz

Rated voltage: 3 x 380-415D V

Rated current: 4.65 A Starting current: 840-920 % Rated speed: 2890-2910 rpm Efficiency: IE3 85,9% Motor efficiency at full load: 85.9 % Motor efficiency at 3/4 load: 88.2 %

Motor efficiency at 1/2 load: 88.0 % Number of poles: 2

Enclosure class (IEC 34-5):

55 Dust/Jetting

Insulation class (IEC 85): F

Motor No: 99605763

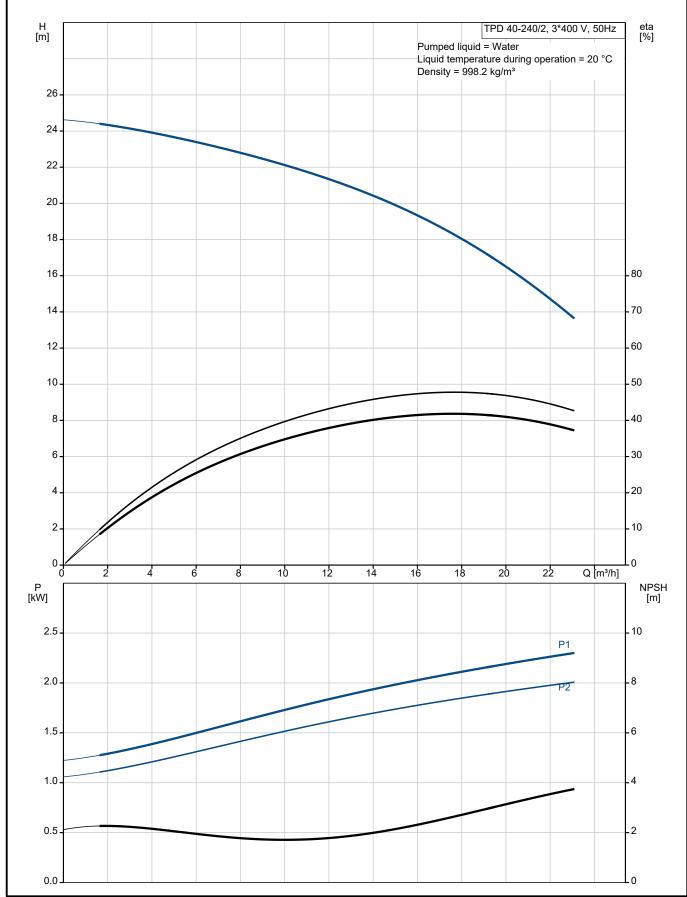
Others:

Minimum efficiency index, MEI ≥: 0.52 Net weight: 104 kg Gross weight: 123 kg Shipping volume: 0.39 m³ Country of origin: HU Custom tariff no .: 84137065



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96086953 TPD 40-240/2 A-F-A-BQQE-IX1 50 Hz

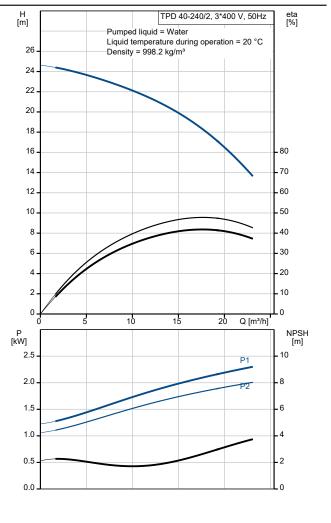




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Description	Value
eneral information:	
roduct name:	TPD 40-240/2
	A-F-A-BQQE-IX1
Product No:	96086953
AN number:	5700395309096
echnical:	
ump speed on which pump data are ased:	2900 rpm
Rated flow:	21 m³/h
Rated head:	17.1 m
laximum head:	240 dm
Actual impeller diameter:	137 mm
ode for shaft seal:	BQQE
urve tolerance:	ISO9906:2012 3B2
ump version:	Α
laterials:	
ump housing:	Cast iron
ump housing:	EN-GJL-250
ump housing:	ASTM class 35
mpeller:	Cast iron
mpeller:	EN-GJL-200
mpeller:	ASTM class 30
Material code:	A
nstallation:	
ange of ambient temperature:	-30 60 °C
laximum operating pressure:	16 bar
lax pressure at stated temp:	16 bar / 120 °C
ype of connection:	DIN
Size of connection:	DN 40
Pressure rating for connection:	PN 16
Port-to-port length:	340 mm
lange size for motor:	FF165
Connect code:	F
iquid:	
Pumped liquid:	Water
iquid temperature range:	-25 120 °C
Selected liquid temperature:	20 °C
Pensity:	998.2 kg/m³
lectrical data:	<u> </u>
lotor type:	90LE
E Efficiency class:	IE3
Rated power - P2:	2.2 kW
Nains frequency:	50 Hz
Rated voltage:	3 x 380-415D V
Rated current:	4.65 A
starting current:	840-920 %
Rated speed:	2890-2910 rpm
fficiency:	IE3 85,9%
Notor efficiency at full load:	85.9 %
Notor efficiency at 3/4 load:	88.2 %
Notor efficiency at 1/2 load:	88.0 %
-	88.0 %
Number of poles:	
Enclosure class (IEC 34-5):	55 Dust/Jetting
nsulation class (IEC 85):	F
Built-in motor protection:	NONE
Motor No:	99605763
Controls:	
requency converter:	NONE
thers:	





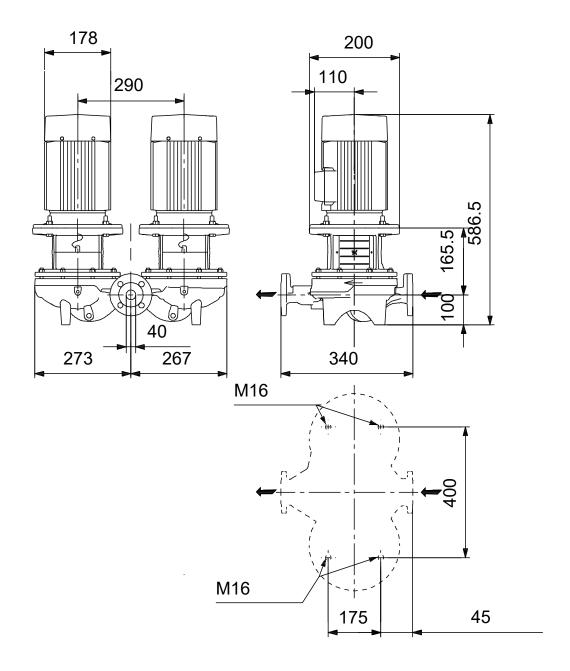
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Description	Value
Minimum efficiency index, MEI ≥:	0.52
Net weight:	104 kg
Gross weight:	123 kg
Shipping volume:	0.39 m³
Country of origin:	HU
Custom tariff no.:	84137065



08/08/2022 Date:

96086953 TPD 40-240/2 A-F-A-BQQE-IX1 50 Hz



Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.



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96086953 TPD 40-240/2 A-F-A-BQQE-IX1 50 Hz

