

TP 150-110/4-A-F-A-BQQE 400D 50HZ

Grundfos pump 98908287



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https://www.lenntech.com/grundfos/TP000/98908287/TP-150-110-4-A-F-A-BQQE.html

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Position | Qty. | Description

1

TP 150-110/4 A-F-A-BQQE



Product No.: On request

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.

The pump 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).

The pump is fitted with a fan-cooled asynchronous motor.

Further product details

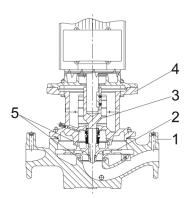
The product's minimum efficiency index (MEI) is greater or equal to 0.70. This is by the Commission Regulation (EU) considered as an indicative benchmark for best-performing water pump available on the market as from 1 January 2013.

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.
- 3) Cathodic electrocoating (epoxy).
- 4) Curing of paint film at 200-250 °C.



- 1: Pump housing
- 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.

Position | Qty. | Description

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 IE3 in accordance with IEC 60034-30-1.

The motor has thermistors (PTC sensors) in the windings in accordance with DIN 44081/DIN 44082. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

Thermal switches must be connected to an external control circuit in a way which ensures that the automatic reset cannot cause accidents. The motors must be connected to a motor-protective circuit breaker according to local regulations.

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.

Technical data

Liquid:

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

Technical:

Rated flow: 224 m³/h
Rated head: 9.52 m
Actual impeller diameter: 196-178 mm

Primary shaft seal: BQQE

Curve tolerance: ISO9906:2012 3B

Materials:

Pump housing: Cast iron

EN-JL1040

ASTM A48-40 B

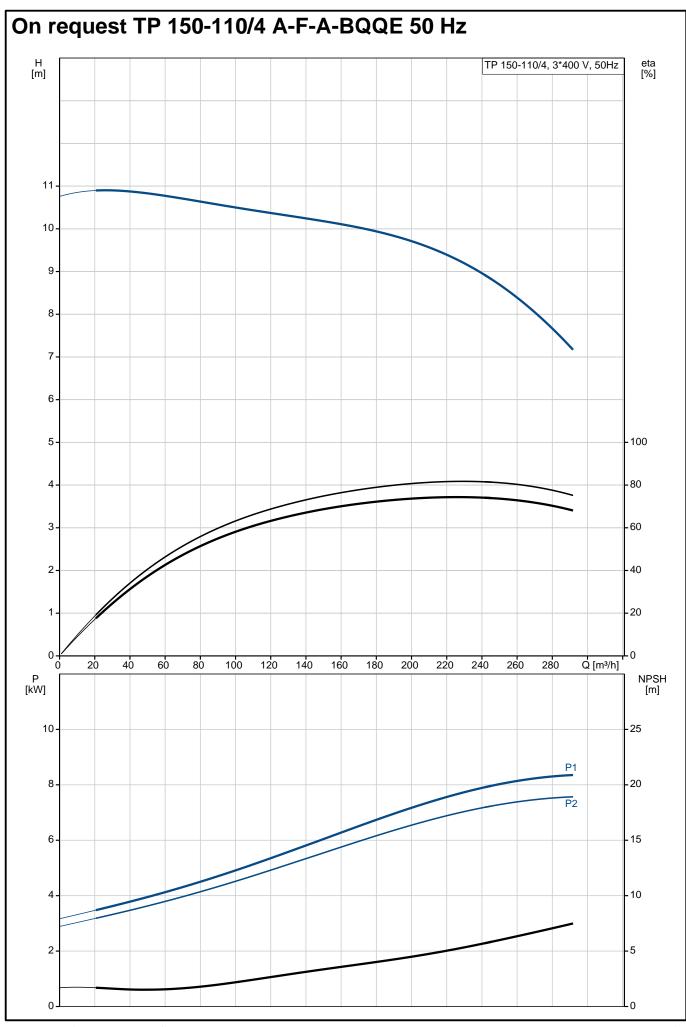
Impeller: Cast iron

EN-JL1030 ASTM A48-30 B

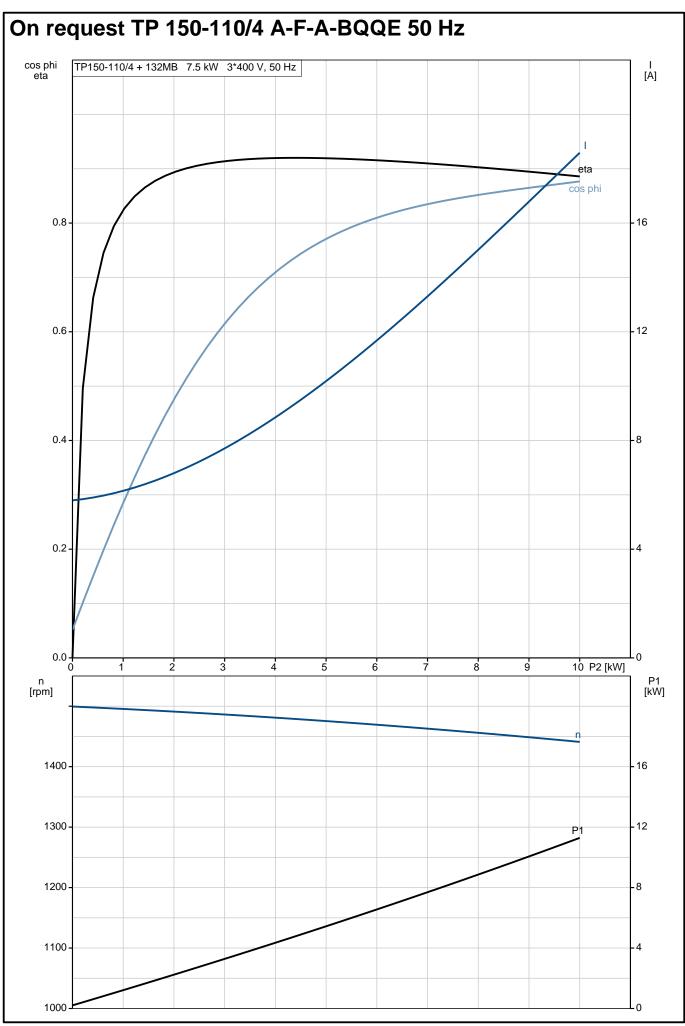
Installation:

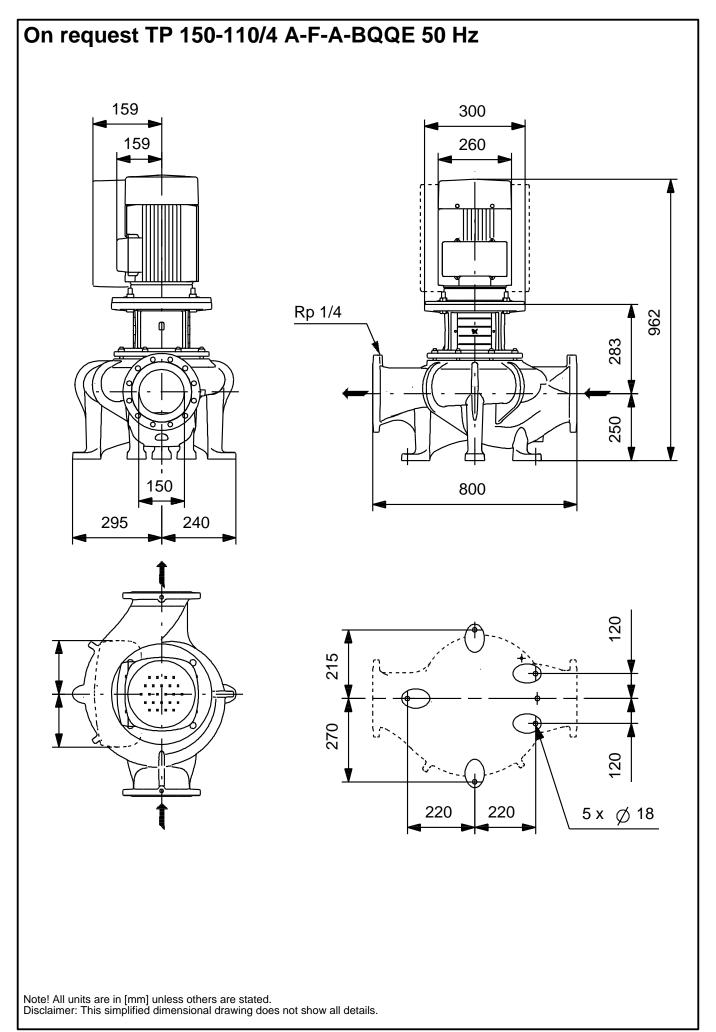
Range of ambient temperature: -30 .. 60 °C Maximum operating pressure: 16 bar Flange standard: DIN Pipe connection: **DN 150** Pump inlet: **DN 150** Pump outlet: **DN 150** PN 16 Pressure rating: (@):800 mm Flange size for motor: FF265

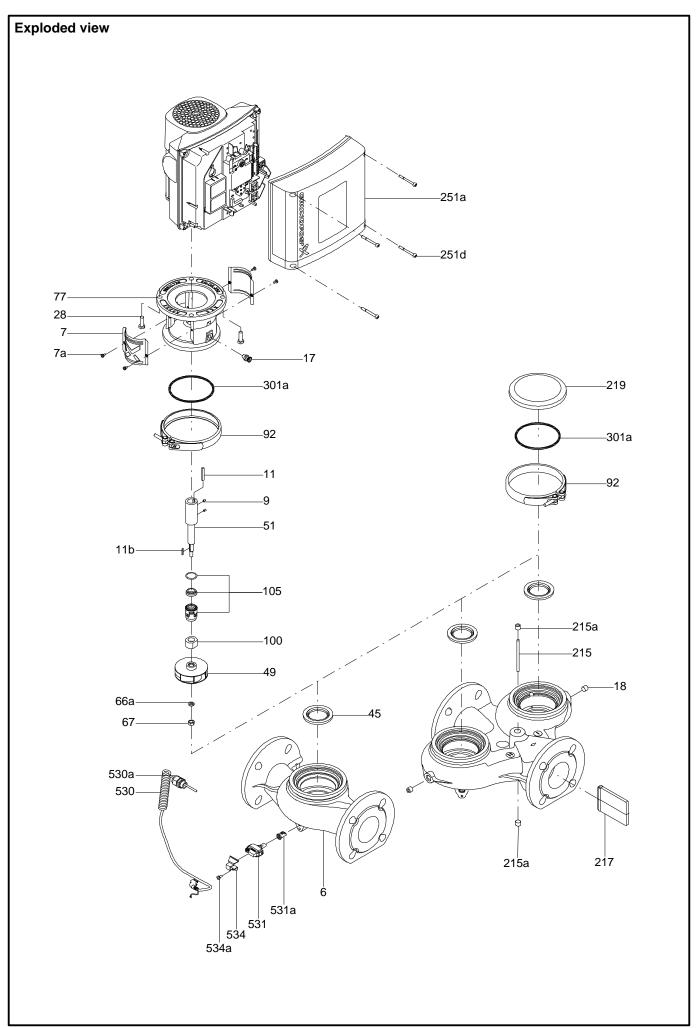
Electrical data:

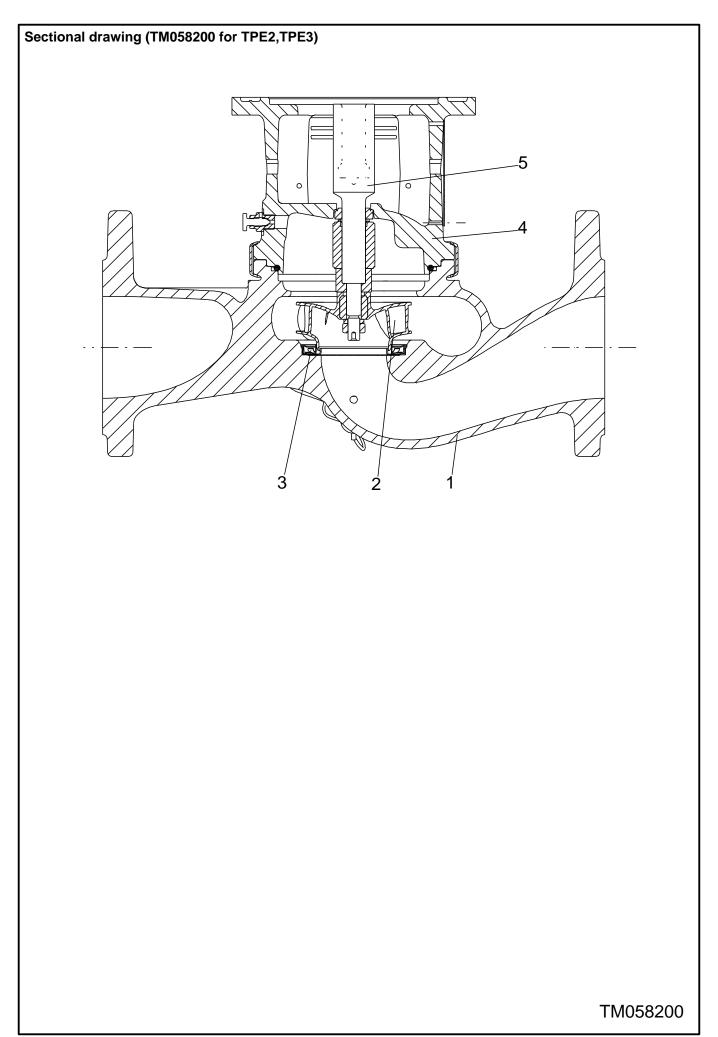


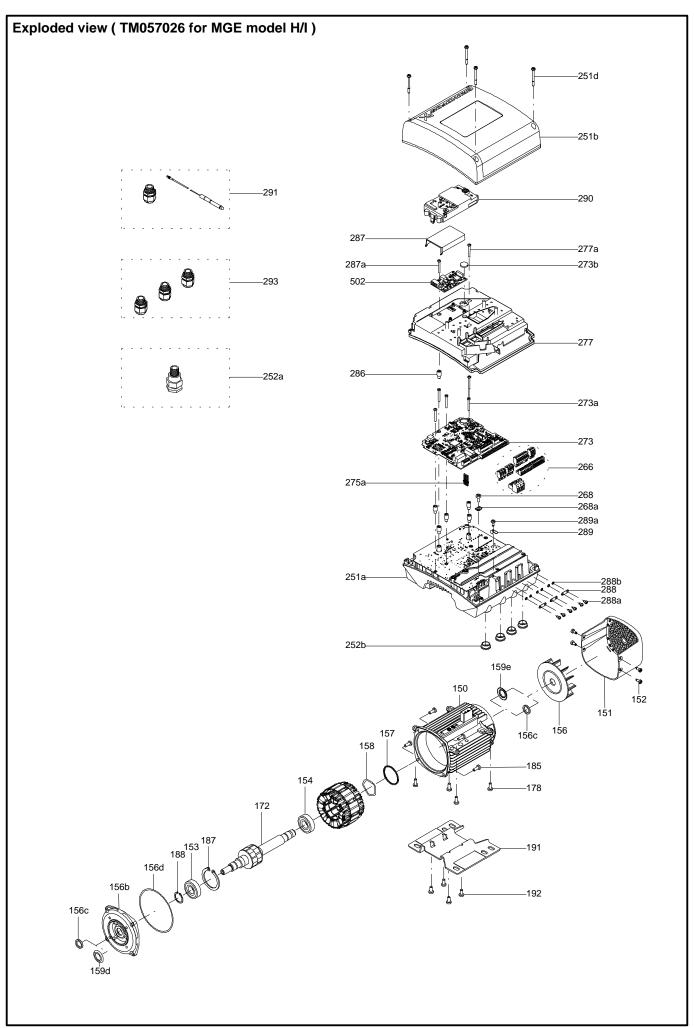
Description	Value	H [m] TP 150-110/4, 3*400 V, 50Hz eta [%]
General information:		
Product name:	TP 150-110/4 A-F-A-BQQE	
Product No:	On request	11-
EAN number:	On request	
Technical:		10
Rated flow:	224 m³/h	9
Rated head:	9.52 m	
Head max:	110 dm	8-
Actual impeller diameter:	196-178 mm	7-
Primary shaft seal:	BQQE	
Curve tolerance:	ISO9906:2012 3B	6-
Pump version:	A	5-
Model:	A	4
Materials:		4-80
Pump housing:	Cast iron	3 60
<u> </u>	EN-JL1040	2 40
	ASTM A48-40 B	2
Impeller:	Cast iron	1 - 20
	EN-JL1030	
	ASTM A48-30 B	0 50 100 150 200 250 Q [m³/h]
Material code:	A	P [kW] NPSH [m]
Installation:		10 - 25
Range of ambient temperature:	-30 60 °C	- P1
Maximum operating pressure:	16 bar	8-
Flange standard:	DIN	P2
Pipe connection:	DN 150	6 15
Pump inlet:	DN 150	4
Pump outlet:	DN 150	4 10
Pressure rating:	PN 16	2 - 5
(@)	800 mm	
Flange size for motor:	FF265	0
Connect code:	_	
Liquid:	•	159 300
Pumped liquid:	Water	159
Liquid temperature range:	-25 120 °C	
Liquid temperature during operation:	20 °C	
Density:	998.2 kg/m³	Rp 1/4
Electrical data:	cocia ngim	
Motor type:	132MB	
IE Efficiency class:	IE3	
Rated power - P2:	7.5 kW	150 800
Power (P2) required by pump:	7.5 kW	295 240
Mains frequency:	50 Hz	
Rated voltage:	3 x 380-415D/660-690Y V	
Rated current:	14,9-14,2/8,60-8,40 A	
Starting current:	680-780 %	
Cos phi - power factor:	0.86-0.82	
Rated speed:	1460 rpm	220 220 5x Ø 18
Efficiency:	IE3 90,4%	
Motor efficiency at full load:	90.4 %	<u> </u>
Motor efficiency at 3/4 load:	91.6 %	'
-		
Motor efficiency at 1/2 load:	92.4 %	-
Number of poles:	4 FF Dust/ lotting	
Enclosure class (IEC 34-5):	55 Dust/Jetting F	
Insulation class (IEC 85):		TO AMPLIFIER TO AMPLIFIER
Motor protec:	PTC	- L1 L2 L3 🔠 🐯
Motor No:	87370262	A The Th
Oth area		
Others:	0.7	
Minimum efficiency index, MEI :	0.7	A STATE CONTROL OF THE STATE OF
Minimum efficiency index, MEI : ErP status:	EuP Standalone/Prod.	The Profile Control of the Control o
Minimum efficiency index, MEI : ErP status: Net weight:	EuP Standalone/Prod. 247 kg	THE SHALLY PROTECTOR OF THE SHALLY SHALL S
Minimum efficiency index, MEI : ErP status: Net weight: Gross weight:	EuP Standalone/Prod. 247 kg 285 kg	THE SHARTORS PIT ACCORDING TO
Minimum efficiency index, MEI : ErP status: Net weight:	EuP Standalone/Prod. 247 kg	TO AMPURER RELAY L1 L2 L3 TO AMPURER LA











Parts list TP 150-110/4, Product No. On request Valid from 1.1.2011 (1152)

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
F	Motor				1	pcs
•	Nut				1	pcs
66	Washer		Designation: DIN 125 A2		1	
			Internal diameter: 19			
			Outer diameter: 34			
			Thickness: 3			
66a	-1 5				1	
67	Nut		Thread: M18		1	
	Motor stool cpl.				1	pcs
1a	Motor stool				1	
7	Coupling guard				2	
77a	Pan head screw				4	
	Plug				1	pcs
19	Plug				1	
20	Plug				1	
	Cover cpl.				1	pcs
77	Cover				1	
	Pump housing cpl.				1	pcs
6	Pump housing				1	
66a	Nut		Thread: M10		8	
	Shaft seal cpl.				1	pcs
72.a	a O-ring		Diameter: 221,84		1	
			Material type: EPDM			
			Thickness: 3,53			
105					1	
•	Stub shaft				1	pcs
9	Socket set screw		Length (mm): 6		2	
			Thread: M8			
11	Parallel key				1	
51	Pump shaft				1	
17	Air vent screw				1	pcs
19	Plug				2	pcs
49	Impeller				1	pcs
105	b Spacer				1	pcs

Disclaimer: The information about the Grundfos pump in this document may be outdated. Data may be subject to alterations without further notice.

Please contact us to verify the data above is still accurate/up-to-date.

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