

TP 50-120/4-A-F-A-BAQE 1X230 50HZ

Grundfos pump 98760134



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https://www.lenntech.com/grundfos/TP000/98760134/TP-50-120-4-A-F-A-BAQE.html

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Position | Qty. | Description

1 TP 50-

TP 50-120/4 A-F-A-BAQE



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

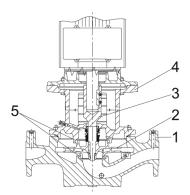
The product's minimum efficiency index (MEI) is greater or equal to 0.70. This is by the Commission Regulation (EU) considered as an indicative benchmark for best-performing water pump available on the market as from 1 January 2013.

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: carbon graphite, metal-impregnated
- Stationary seat material: silicon carbide (SiC)

This material pairing has a very good corrosion resistance and is especially suitable for water up to 120 °C. However, seal life will be reduced at temperatures above 90 °C. The material pairing is not recommended for liquids containing particles as this will result in heavy wear on the SiC face.

Secondary seal material: EPDM (ethylene-propylene rubber)

Position | Qty. | Description

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.

Moto

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 has built-in thermal protection (PTO current and temperature sensors) in accordance with IEC 60034-11 and requires no further motor protection. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

As the thermal protection incorporates automatic reset, the motor must be connected in a way which ensures that the automatic reset cannot cause accidents.

Technical data

Liquid:

Pumped liquid: Water
Liquid temperature range: 0 .. 120 °C
Liquid temperature during operation: 20 °C
Density: 998.2 kg/m³

Technical:

Rated flow: 22.9 m³/h
Rated head: 9.77 m
Actual impeller diameter: 198 mm
Primary shaft seal: BAQE

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

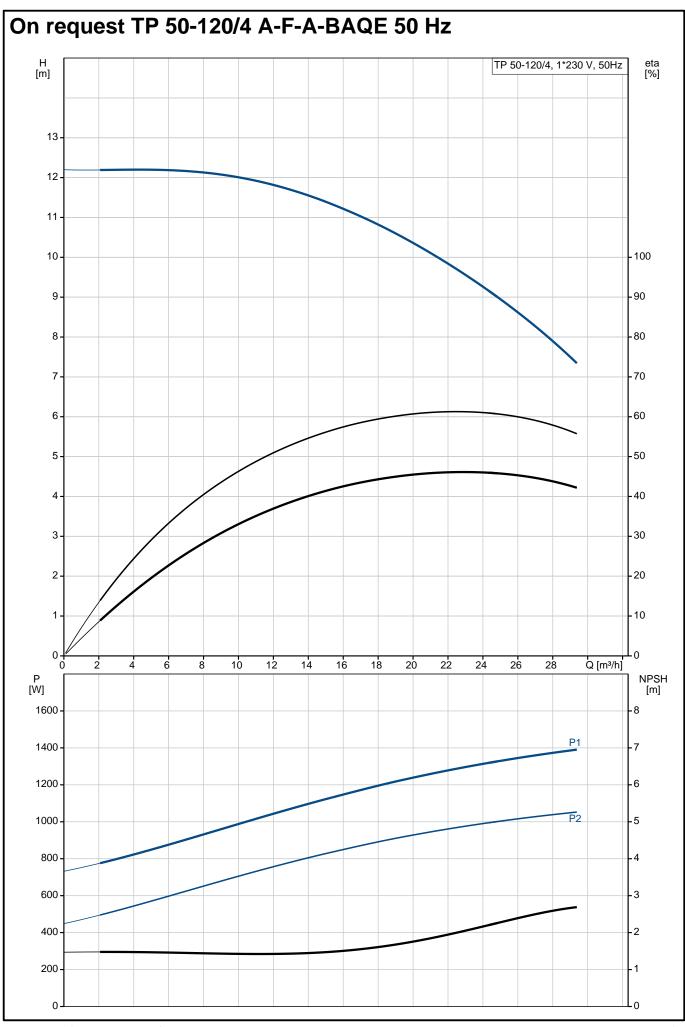
Installation:

Range of ambient temperature: -30 .. 40 °C Maximum operating pressure: 16 bar Flange standard: DIN Pipe connection: DN 50 Pump inlet: **DN 50** Pump outlet: **DN 50** Pressure rating: **PN 16** 440 mm (@):Flange size for motor: FF165

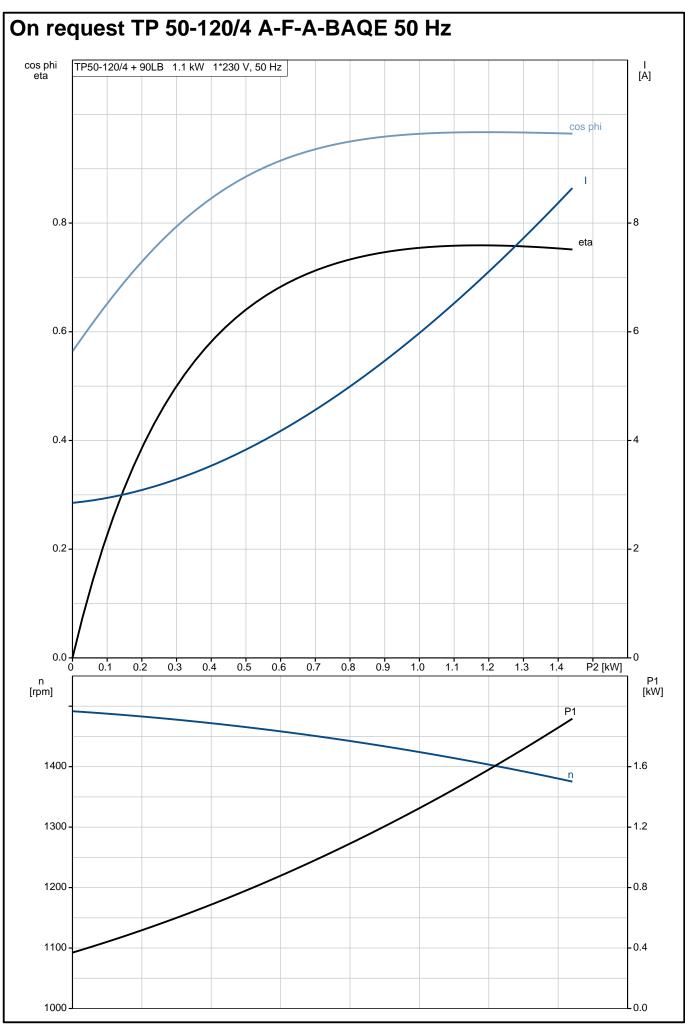
Electrical data:

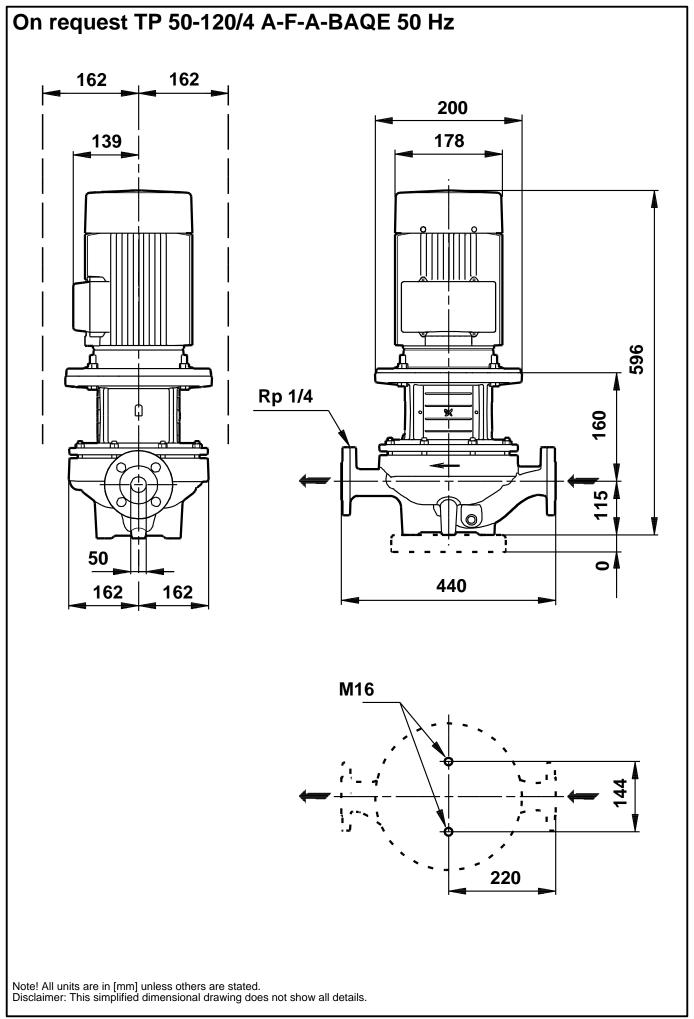
Motor type: 90LB
Rated power - P2: 1.1 kW
Power (P2) required by pump: 1.1 kW
Mains frequency: 50 Hz

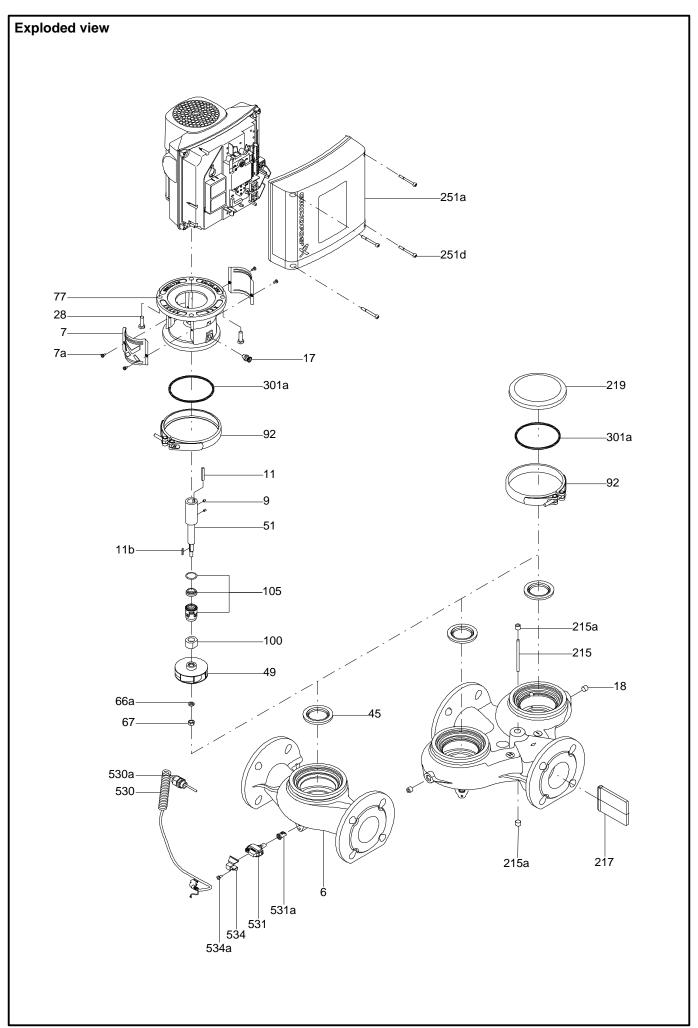
Position	Qty.	Description	
Position	Qty.	Rated voltage: Rated current: Starting current: Cos phi - power factor: Rated speed: Motor efficiency at full load: Number of poles: Enclosure class (IEC 34-5): Insulation class (IEC 85): Others: Minimum efficiency index, MEI ErP status: Net weight: Gross weight: Shipping volume:	1 x 220-230 V 7 A 390 % 0.96 1420-1430 rpm 75-76 % 4 55 Dust/Jetting F : 0.7 EuP Standalone/Prod. 67 kg 86 kg 0.39 m³

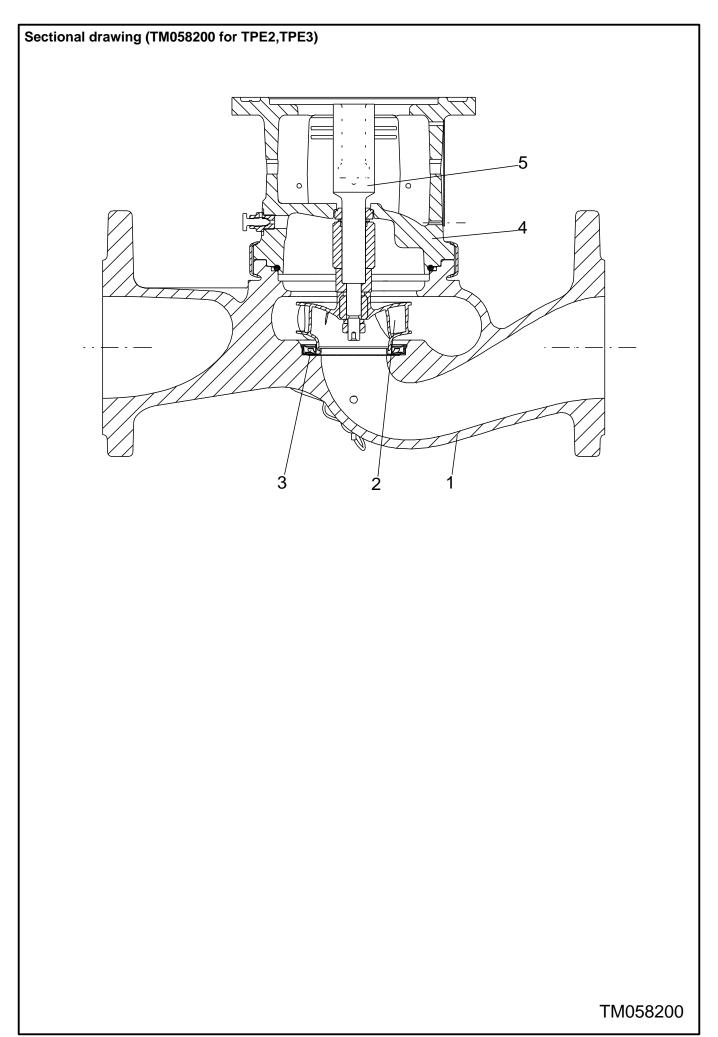


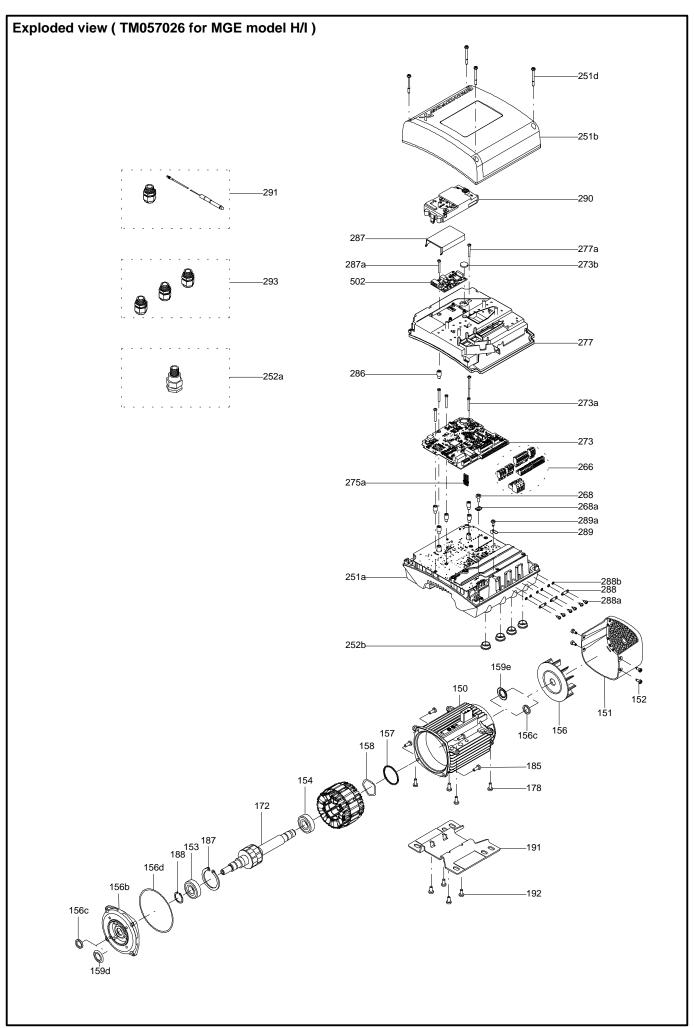
Description	Value	– Н [m]	TP 50-120/4, 1*230 V, 50Hz eta [%]
General information:			
Product name:	TP 50-120/4 A-F-A-BAQE	13	3 -
Product No:	On request	_ 12 ·	2
EAN number:	On request		
Technical:	J 1044001	11 ·	1
Rated flow:	22.9 m³/h	10	0 - 100
Rated head:	9.77 m		
	-	9 -	9 90
Head max:	120 dm	8	8 - 80
Actual impeller diameter:	198 mm	_	7
Primary shaft seal:	BAQE	7 -	7-
Curve tolerance:	ISO9906:2012 3B	6	6-
Pump version:	A	5.	5 50
Model:	A		
Materials:		4 ·	4- 40
Pump housing:	Cast iron	3.	3 30
1 0	EN-JL1040		
	ASTM A48-40 B	_ 2	2
Impeller:	Cast iron	1.	1-10
ппрепет.	EN-JL1030	_	
		0	0
Motorial ando:	ASTM A48-30 B	P [W]	NPSH
Material code:	A	[W]	[m]
Installation:		1400	0 P1 7
Range of ambient temperature:	-30 40 °C		
Maximum operating pressure:	16 bar	1200	0-
Flange standard:	DIN	1000	0 P2 5
Pipe connection:	DN 50	800	0 - 4
Pump inlet:	DN 50	600	0
Pump outlet:	DN 50		
Pressure rating:	PN 16	400	0-
(@)	440 mm	â 200 ·	0 - 1
Flange size for motor:	FF165	0.	0
	F		400
Connect code:	Г	162	162
Liquid:		139_	178 -
Pumped liquid:	Water	_	
Liquid temperature range:	0 120 °C		
Liquid temperature during operation:	20 °C		
Density:	998.2 kg/m³		<u> </u>
Electrical data:			Rp 1/4
Motor type:	90LB		
Rated power - P2:	1.1 kW		
Power (P2) required by pump:	1.1 kW	- L	
Mains frequency:	50 Hz	162	162 440
Rated voltage:	1 x 220-230 V		
Rated current:	7 A		M16
Starting current:	390 %		
<u> </u>			<u> </u>
Cos phi - power factor:	0.96		10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Rated speed:	1420-1430 rpm		220
Motor efficiency at full load:	75-76 %	_	· - -
Number of poles:	4		DIRECTION OF ROTATION
Enclosure class (IEC 34-5):	55 Dust/Jetting		SINCOTION OF NOTATION
Insulation class (IEC 85):	F		ğ YELLOW H
Motor protec:	PTO		YELLOW YELLOW
Motor No:	87200343		W2)-(U2) (V2)
Others:		_	
Minimum efficiency index, MEI:	0.7		
ErP status:	EuP Standalone/Prod.	-	
Net weight:	67 kg	_	
Gross weight:	86 kg		DIRECTION OF ROTATION
Shipping volume:	0.39 m³		WELLOW WELLOW WELLOW WITH WELLOW WITH WITH WITH WITH WITH WITH WITH WIT











Parts list TP 50-120/4, Product No. On request Valid from 20.6.2010 (1024)

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
	Motor				1	pcs
	Nut				1	pcs
66	Washer				1	
66a	Spring lock washer				1	
67	Nut		Thread: M14		1	
	Motor stool cpl.				1	pcs
2	Motor stool				1	
7	Coupling guard				2	
7a	Pan head screw				4	
9	Hex socket head cap screw		Length (mm): 30		4	
			Thread: M10			
	Pump housing cpl.				1	pcs
6	Pump housing				1	
36	Nut		Thread: M10		10	
	Shaft seal cpl.				1	pcs
72a	O-ring		Diameter: 253,6		1	
			Material type: EPDM			
			Thickness: 3,53			
105	Shaft seal		Material type: BAQE		1	
	Stub shaft				1	pcs
9	Socket set screw		Length (mm): 6		2	
			Thread: M8			
11	Parallel key		Dimension: 6X6X35		1	
51	Pump shaft				1	
17	Air vent screw				1	pcs
19	Plug				2	pcs
49	Impeller				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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