

## TP 100-480/2-A-F-A-BQQE 400D 50HZ

Grundfos pump 96109196



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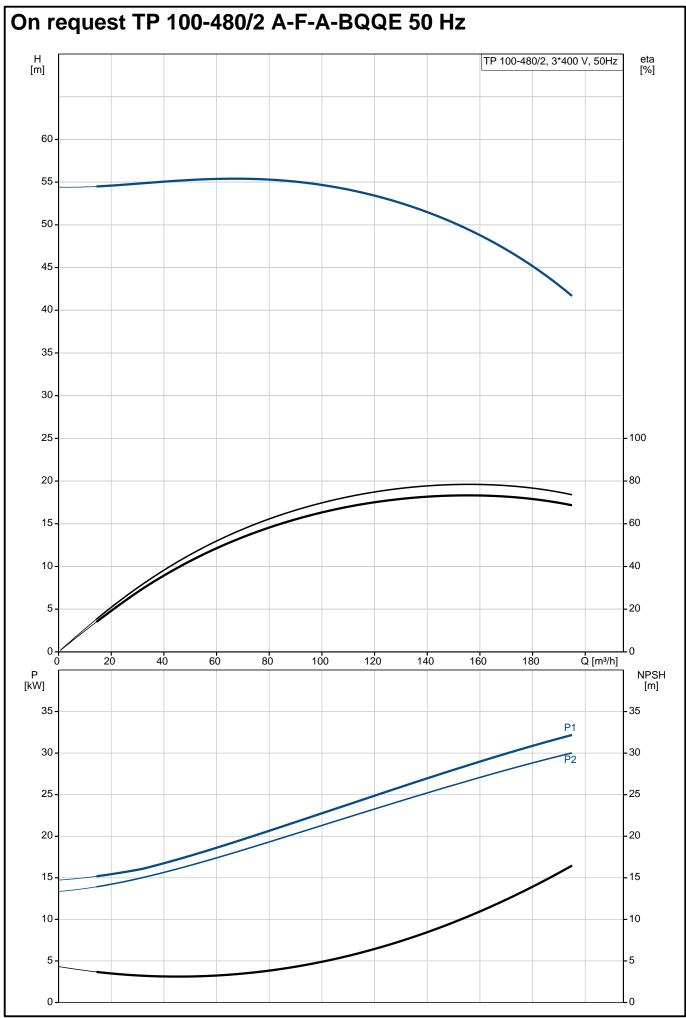
https://www.lenntech.com/grundfos/TP000/96109196/TP-100-480-2-A-F-A-BQQE.html

info@lenntech.com tel. +31 152 610 900 fax. +31 152 616 289

Position	Qty.	Description
	1	TP 100-480/2 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 Pump
		Pump housing and pump head are electrocoated to improve the corrosion resistance. Electrocoating includes: 1) Alkaline-based cleaning.
		<ol> <li>Pretreatment with zinc phosphate coating.</li> <li>Cathodic electrocoating (epoxy).</li> <li>Curing of paint film at 200-250 °C.</li> </ol>
		A Dumo having
		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:
		<ul> <li>Rotating seal ring material: silicon carbide (SiC)</li> <li>Stationary seat material: silicon carbide (SiC)</li> <li>This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.</li> <li>Secondary seal material: EPDM (ethylene-propylene rubber)</li> </ul>
		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 hanges have tappings for mounting of pressure gauges.

Position	Qty.	Description	Description				
		The motor stool forms connection manual air vent screw for vention between motor stool and pump I	n between the pump housing and the motor, and is equipped with a g of the pump housing and the shaft seal chamber. The sealing housing is an O-ring.				
		The central part of the motor sto The pump shaft is fastened direc	ol is provided with guards for protection against the shaft and coupling. ctly 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 standa 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 c point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grund Product Center.					
		Technical data					
		<b>Liquid:</b> Pumped liquid: Liquid temperature range: Liquid temperature during opera	Water -25 120 °C				
		Density:	998.2 kg/m <sup>3</sup>				
		Technical: Rated flow:	156 m³/h				
		Rated head:	49.4 m				
		Actual impeller diameter:	200 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:	-20 55 °C				
		Maximum operating pressure:	16 bar				
		Flange standard:	DIN				
		Pipe connection: Pump inlet:	DN 100 DN 100				
		Pump outlet:	DN 100				
		Pressure rating:	PN 16				
		(@): Flange size for motor:	550 mm FF350				
		Electrical data:					
		Motor type:	SIEMENS				
		IE Efficiency class:	IE3				
		Rated power - P2:	30 kW				
		Power (P2) required by pump:	30 kW				
	1	1					

Position	Qty.	Description	Description		
		Mains frequency: Rated voltage: Rated current: Starting current: Cos phi - power factor: Rated speed: Efficiency: Motor efficiency at full load: Motor efficiency at 3/4 load: Motor efficiency at 1/2 load: Number of poles: Enclosure class (IEC 34-5): Insulation class (IEC 85):	50 Hz 3 x 380-420D/660-725Y V 56,0-51,0/32,0-29,5 A 660-660 % 0.86 2955 rpm IE3 93,3% 93.3-93.3 % 93.6-93.6 % 93.4-93.4 % 2 55 Dust/Jetting F		
		Others: Minimum efficiency index, MEI ErP status: Net weight: Gross weight: Shipping volume: Danish VVS No.:	: 0.65 EuP Standalone/Prod. 350 kg 394 kg 1.12 m <sup>3</sup> 381706480		
		for Product Contro (2018 06 002)	3/10		



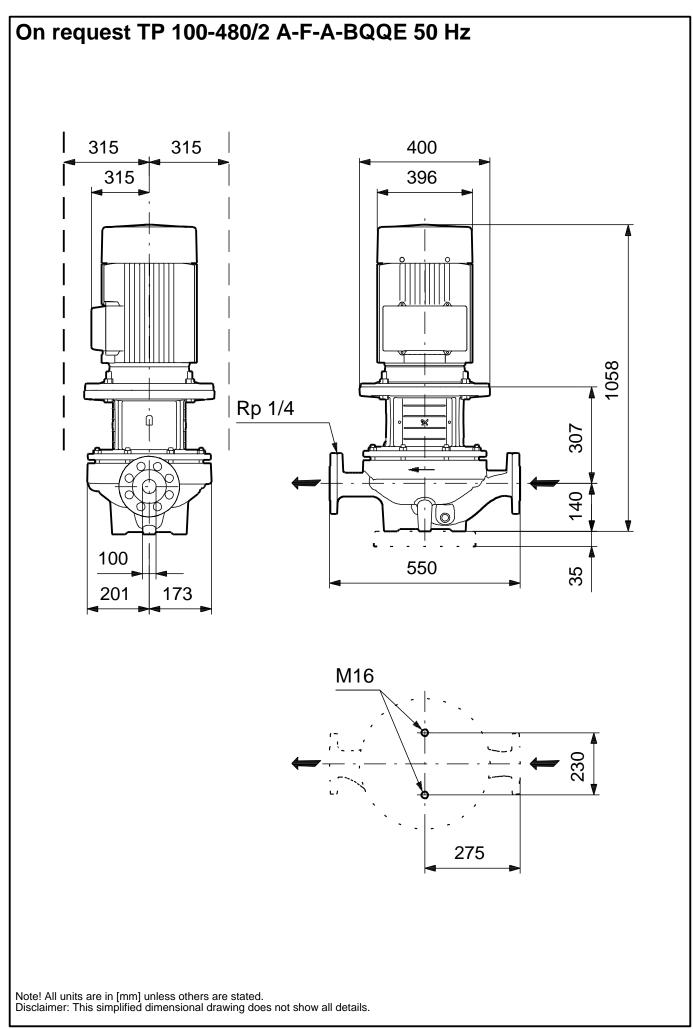
Description	Value	H [m]	TP 100-480/2, 3*400 V, 50Hz
General information:			
Product name:	TP 100-480/2 A-F-A-BQQE	60 -	
		00-	
Product No:	On request	55 -	
EAN number:	On request		
Technical:		50 -	
Rated flow:	156 m³/h	45 -	
Rated head:	49.4 m	45 -	
Head max:	480 dm	40 -	•••••
Actual impeller diameter:	200 mm	35 -	
Primary shaft seal:	BQQE	30 -	
Curve tolerance:	ISO9906:2012 3B	30-	
Pump version:	A	25 -	
Model:	A		
Materials:		20 -	
		15 -	
Pump housing:	Cast iron	15-	
	EN-JL1040	10 -	
	ASTM A48-40 B		
Impeller:	Cast iron	5-	
•	EN-JL1030		
	ASTM A48-30 B	0	50 100 150 Q [m³/h]
Material anda		- P	
Material code:	A	[kW]	
Installation:			P1
Range of ambient temperature:	-20 55 °C	30 -	P2
Maximum operating pressure:	16 bar	25 -	
Flange standard:	DIN		
Pipe connection:	DN 100	20 -	
	DN 100	15 -	
Pump inlet:		_	
Pump outlet:	DN 100	10 -	
Pressure rating:	PN 16	5 -	
(@)	550 mm		
Flange size for motor:	FF350	0	
Connect code:	F	_	
Liquid:	•	_ <b>å</b> 1	
•	\M/atar	315 315	400
Pumped liquid:	Water	╴╎┠╤╸╎	
Liquid temperature range:	-25 120 °C		
Liquid temperature during operation:	20 °C		
Density:	998.2 kg/m³		
Electrical data:			8p 1/4
Motor type:	SIEMENS		
IE Efficiency class:	IE3		
Rated power - P2:	30 kW	100	<u>550</u> K
Power (P2) required by pump:	30 kW	201 173	·
Mains frequency:	50 Hz		М16
Rated voltage:	3 x 380-420D/660-725Y V		internet in the second
Rated current:	56,0-51,0/32,0-29,5 A		
Starting current:	660-660 %		
-			275
Cos phi - power factor:	0.86		
Rated speed:	2955 rpm		
Efficiency:	IE3 93,3%	[	
Motor efficiency at full load:	93.3-93.3 %	-	$\gamma$
Motor efficiency at 3/4 load:	93.6-93.6 %	-	
Motor efficiency at 1/2 load:	93.4-93.4 %	-    .	
-		_  β⁺™	
Number of poles:	2	_	
Enclosure class (IEC 34-5):	55 Dust/Jetting	_   #	
Insulation class (IEC 85):	F		
Motor protec:	PTC	TO AMPLIFIER RELAY	
Motor No:	99032179	-	
Others:		- [	
	0.65	-   [	
Minimum efficiency index, MEI :	0.65	-   N+T	
ErP status:	EuP Standalone/Prod.		
Net weight:	350 kg		
Gross weight:	394 kg	-         <del> </del>	
Shipping volume:	1.12 m <sup>3</sup>	TO AMPLIFIER	
Danish VVS No.:	381706480	TO AMPLIFIER RELAY	
	301700400	1	

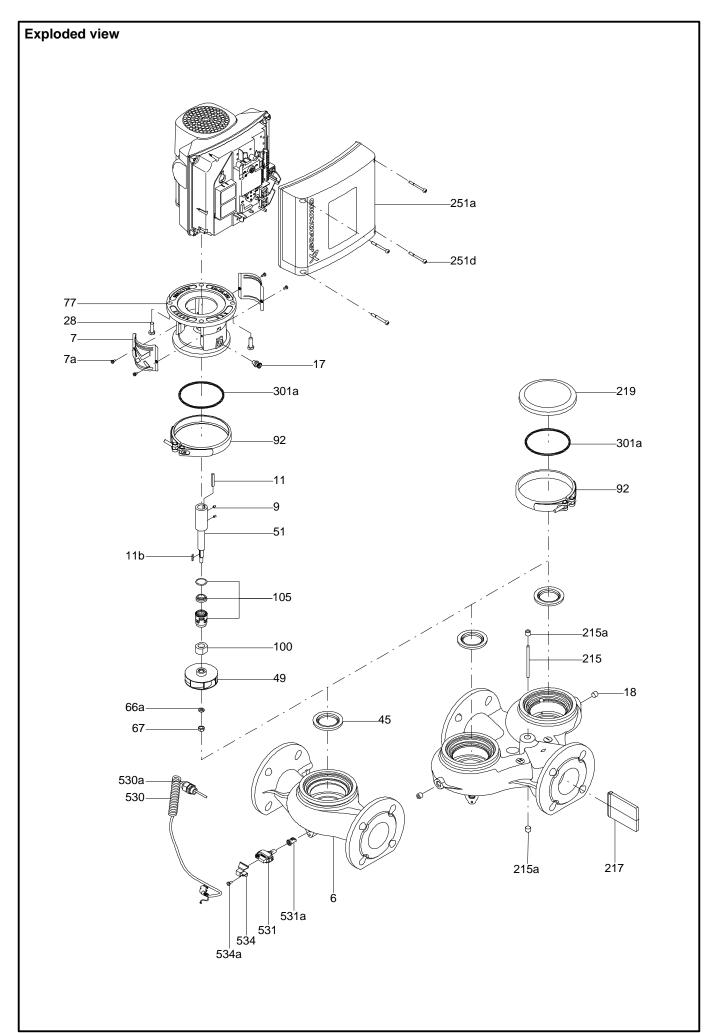
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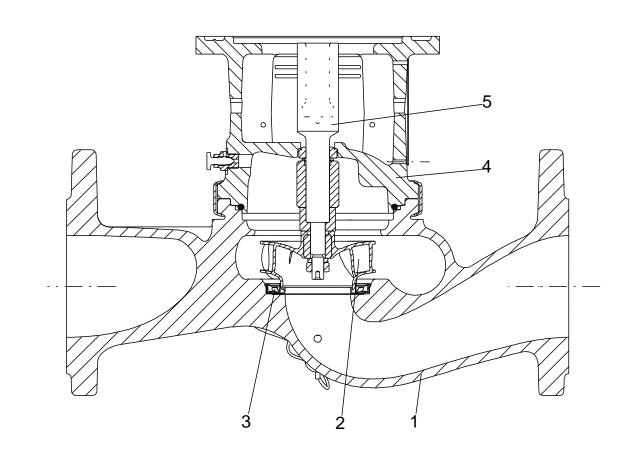
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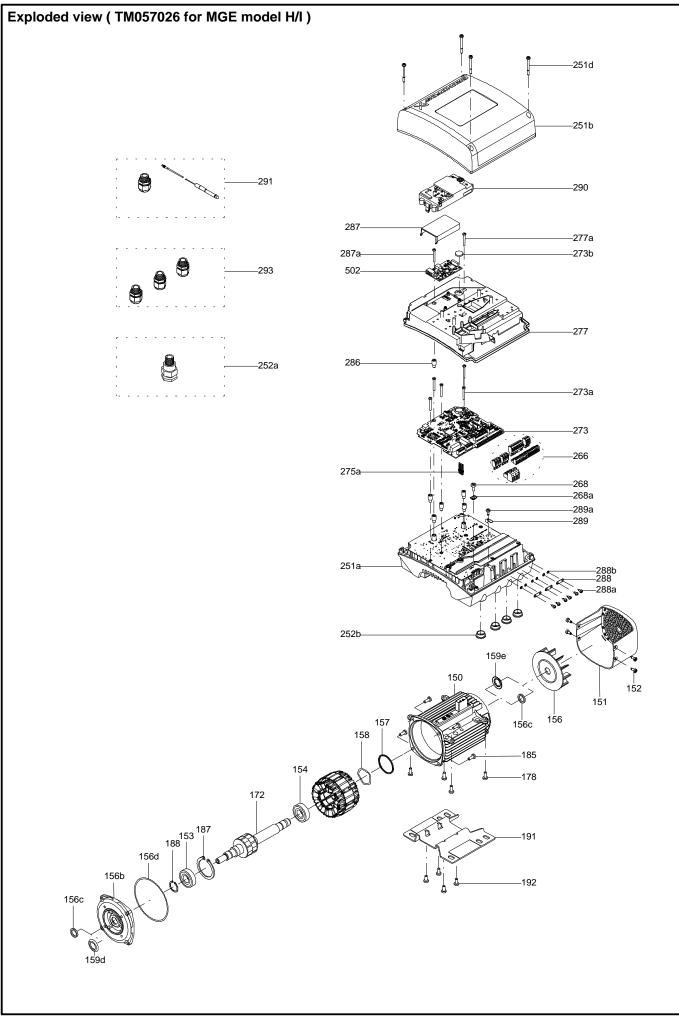
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## TM058200



## Parts list TP 100-480/2, Product No. On request Valid from 15.7.2011 (1128)

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
	Motor				1	pcs
	Nut				1	pcs
66	Washer		Designation: DIN 125 A2		1	
			Internal diameter: 19			
			Outer diameter: 34			
			Thickness: 3			
66a	Spring lock washer				1	
67	Nut		Thread: M18		1	
	Motor stool cpl.				1	pcs
1a	Motor stool				1	
7	Coupling guard				2	
77a	Pan head screw				4	
	Pump housing cpl.				1	pcs
6	Pump housing				1	
19	Plug				1	
20	Plug				1	
36	Nut		Thread: M10		8	
	Shaft seal cpl.				1	pcs
72.a	O-ring		Diameter: 221,84		1	
			Material type: EPDM			
			Thickness: 3,53			
105	Shaft seal				1	
	Stub shaft				1	pcs
9	Socket set screw		Length (mm): 10		2	
			Thread: M8			
11	Parallel key				1	
51	Pump shaft		Diameter: 55/38		1	
	Base plate cpl.				1	pcs
28g	Hex head cap screw		Length (mm): 30 MM		2	
			Thread: M16			
56	Base plate				1	
19	Plug				2	pcs
49	Impeller				1	pcs
105b	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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info@lenntech.com https://www.lenntech.com tel. +31 152 610 900 fax. +31 152 616 289