

TP 200-280/4 A-F-A-DBUE 3x400D/690Y 50Hz Grundfos pump 96162109




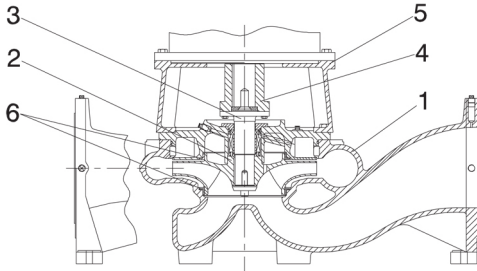
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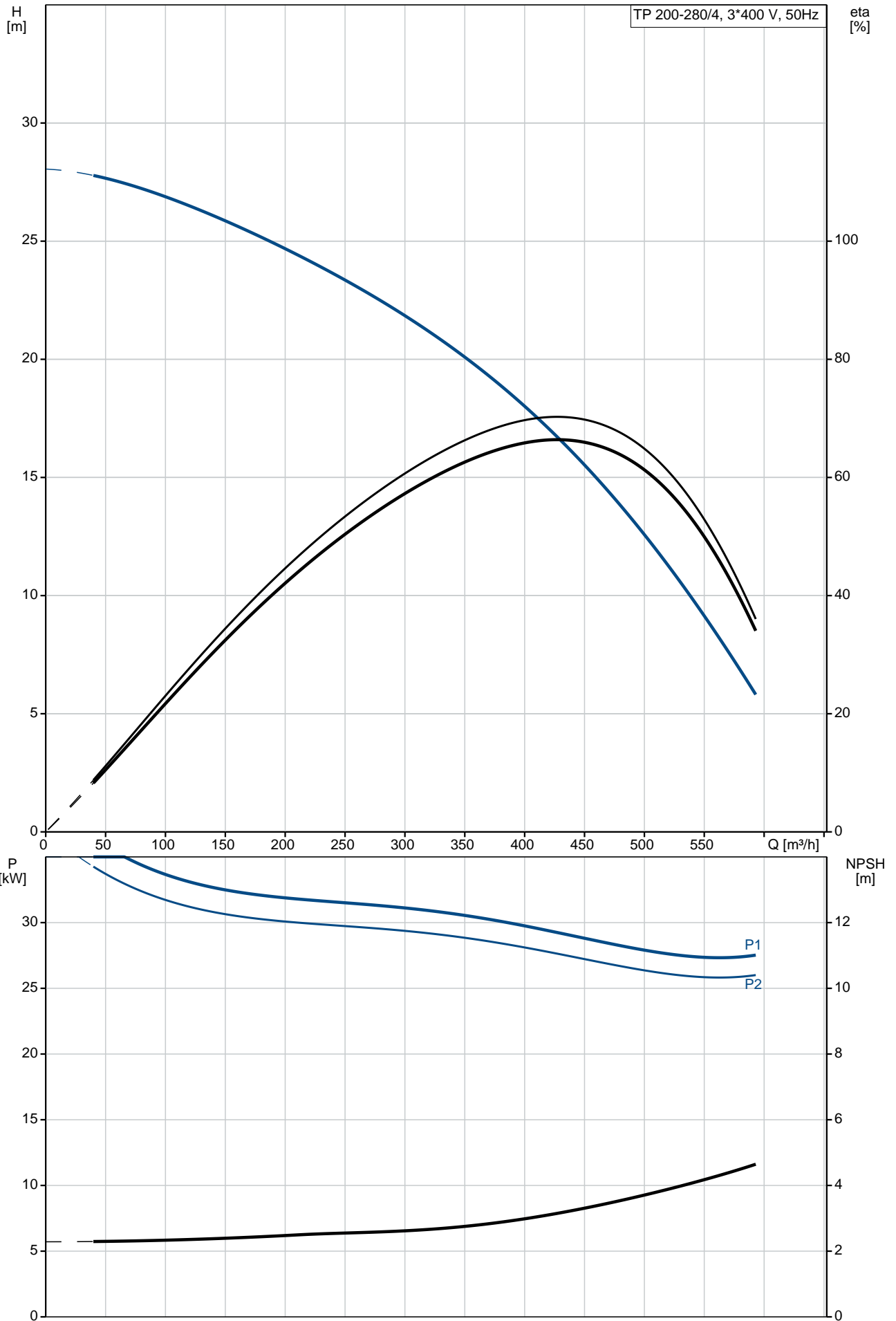
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Position	Qty.	Description
	1	<p data-bbox="320 163 624 194">TP 200-280/4 A-F-A-DBUE</p>  <p data-bbox="320 483 600 515">Product No.: On request</p> <p data-bbox="320 542 1430 622">Single-stage, close-coupled, volute pump with in-line suction and discharge ports. 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.</p> <p data-bbox="320 627 1398 680">The pump is fitted with a balanced O-ring seal. The shaft seal is according to EN 12756. Pipework connection is via PN 25 DIN flanges (EN 1092-2 and ISO 7005-2).</p> <p data-bbox="320 685 951 716">The pump is fitted with a fan-cooled asynchronous motor.</p> <p data-bbox="320 743 639 775">Further product details</p> <p data-bbox="320 779 400 810">Pump</p> <p data-bbox="320 815 1254 846">Pump housing and pump head are electrocoated to improve the corrosion resistance.</p> <p data-bbox="320 851 584 882">Electrocoating includes:</p> <ol data-bbox="320 887 807 994" style="list-style-type: none"> 1) Alkaline-based cleaning. 2) Pretreatment with zinc phosphate coating. 3) Cathodic electrocoating (epoxy). 4) Curing of paint film at 200-250 °C.  <ol data-bbox="320 1326 504 1505" style="list-style-type: none"> 1: Pump housing 2: Impeller 3: Pump shaft 4: Coupling 5: Motor stool 6: Wear rings <p data-bbox="320 1532 1461 1585">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.</p> <p data-bbox="320 1648 1461 1756">The pump is fitted with a balanced O-ring seal. Due to the balancing, this seal type is suitable for high-pressure applications. This seal type is excellent for high-viscosity, dirt- and fibre-containing liquids due to the spring location on the atmospheric side. The seal features a rigid torque-transmission design.</p> <p data-bbox="320 1738 464 1769">Primary seal:</p> <ul data-bbox="360 1774 1078 1827" style="list-style-type: none"> • Rotating seal ring material: carbon graphite, resin-impregnated • Stationary seat material: tungsten carbide (WC) <p data-bbox="320 1832 1430 1926">This is a widely used material pairing. If the pumped liquid contains particles, wear on the seal faces must be expected. Due to the favourable lubricating properties of carbon graphite, the seal is suitable for use even under poor lubricating conditions, such as hot water. However, under such conditions, wear on the carbon graphite face reduces seal life.</p> <p data-bbox="320 1935 983 1966">Secondary seal material: EPDM (ethylene-propylene rubber)</p> <p data-bbox="320 1971 1222 2002">EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.</p> <p data-bbox="320 2024 1445 2078">A circulation of liquid through the duct of the air vent screw ensures lubrication and cooling of the shaft seal.</p>

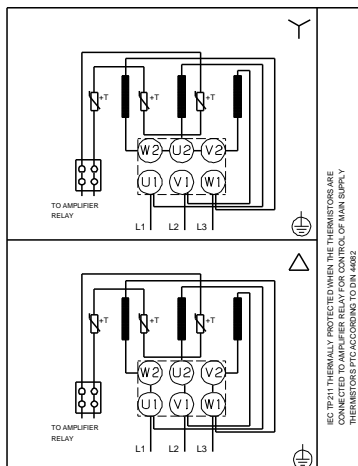
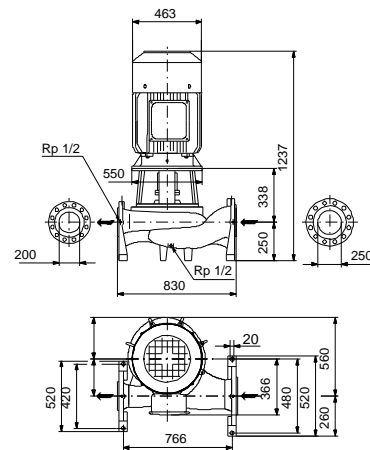
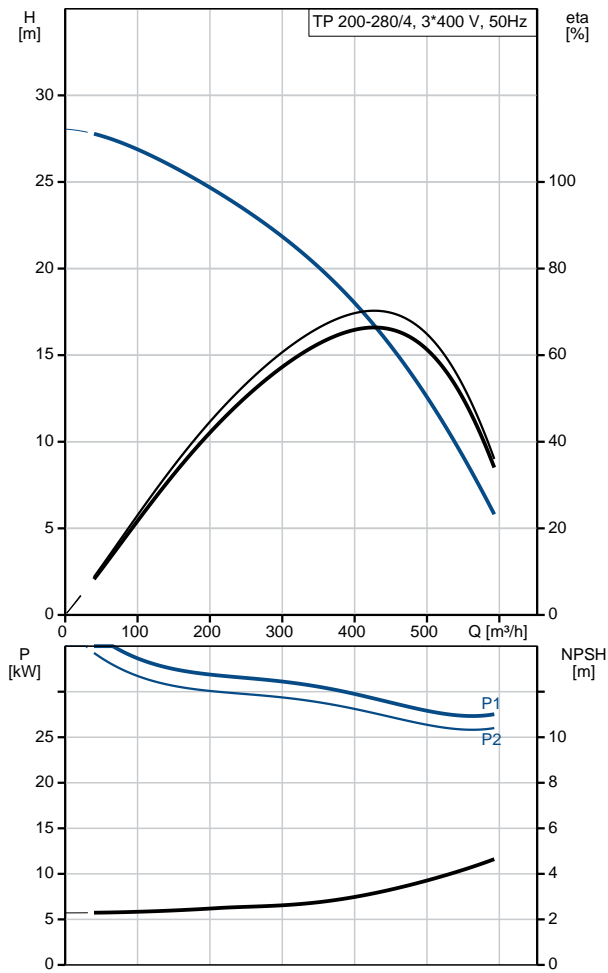
Position	Qty.	Description
		<p>The flanges have tapings for mounting of pressure gauges.</p> <p>The motor stool forms connection between the pump housing and the motor, and is equipped with a manual air vent screw for venting of the pump housing and the shaft seal chamber. The sealing between motor stool and pump housing is an O-ring.</p> <p>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.</p> <p>Motor</p> <p>The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.</p> <p>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).</p> <p>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.</p> <p>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.</p> <p>A variable speed drive makes adjustment of pump performance to any duty point possible. If the motor is to be connected to a variable speed drive, the pump must be ordered with an electrically insulated motor bearing.</p> <p>Technical data</p> <p>Liquid: Pumped liquid: Water Liquid temperature range: 0 .. 150 °C Liquid temperature during operation: 20 °C Density: 998.2 kg/m³</p> <p>Technical: Rated flow: 450 m³/h Rated head: 16 m Actual impeller diameter: 285 mm Primary shaft seal: DBUE Curve tolerance: ISO9906:2012 3B</p> <p>Materials: Pump housing: Ductile cast iron EN-JS1020 ASTM A 395 Impeller: Ductile cast iron EN-JS1030 ASTM A 536 60-40-18</p> <p>Installation: Range of ambient temperature: -20 .. 55 °C Maximum operating pressure: 25 bar Flange standard: DIN Pipe connection: DN 250 / DN 200 Pump inlet: DN 250 Pump outlet: DN 200 Pressure rating: PN 25 (@): 830 mm Flange size for motor: FF400</p> <p>Electrical data: Motor type: SIEMENS IE Efficiency class: IE3</p>

Position	Qty.	Description
		<p>Rated power - P2: 37 kW</p> <p>Power (P2) required by pump: 37 kW</p> <p>Mains frequency: 50 Hz</p> <p>Rated voltage: 3 x 380-420D/660-725Y V</p> <p>Rated current: 69,0-64,0/39,5-37,0 A</p> <p>Starting current: 640-640 %</p> <p>Cos phi - power factor: 0.86</p> <p>Rated speed: 1480 rpm</p> <p>Efficiency: IE3 93,9%</p> <p>Motor efficiency at full load: 93.9-93.9 %</p> <p>Motor efficiency at 3/4 load: 94.5-94.5 %</p> <p>Motor efficiency at 1/2 load: 94.4-94.4 %</p> <p>Number of poles: 4</p> <p>Enclosure class (IEC 34-5): 55 (Protect. water jets/dust)</p> <p>Insulation class (IEC 85): F</p> <p>Others:</p> <p>Net weight: 630 kg</p> <p>Gross weight: 785 kg</p> <p>Shipping volume: 2.29 m³</p>

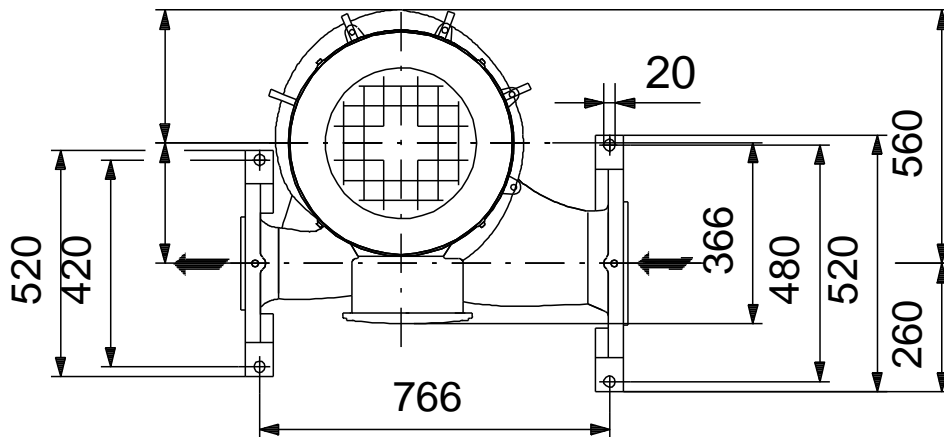
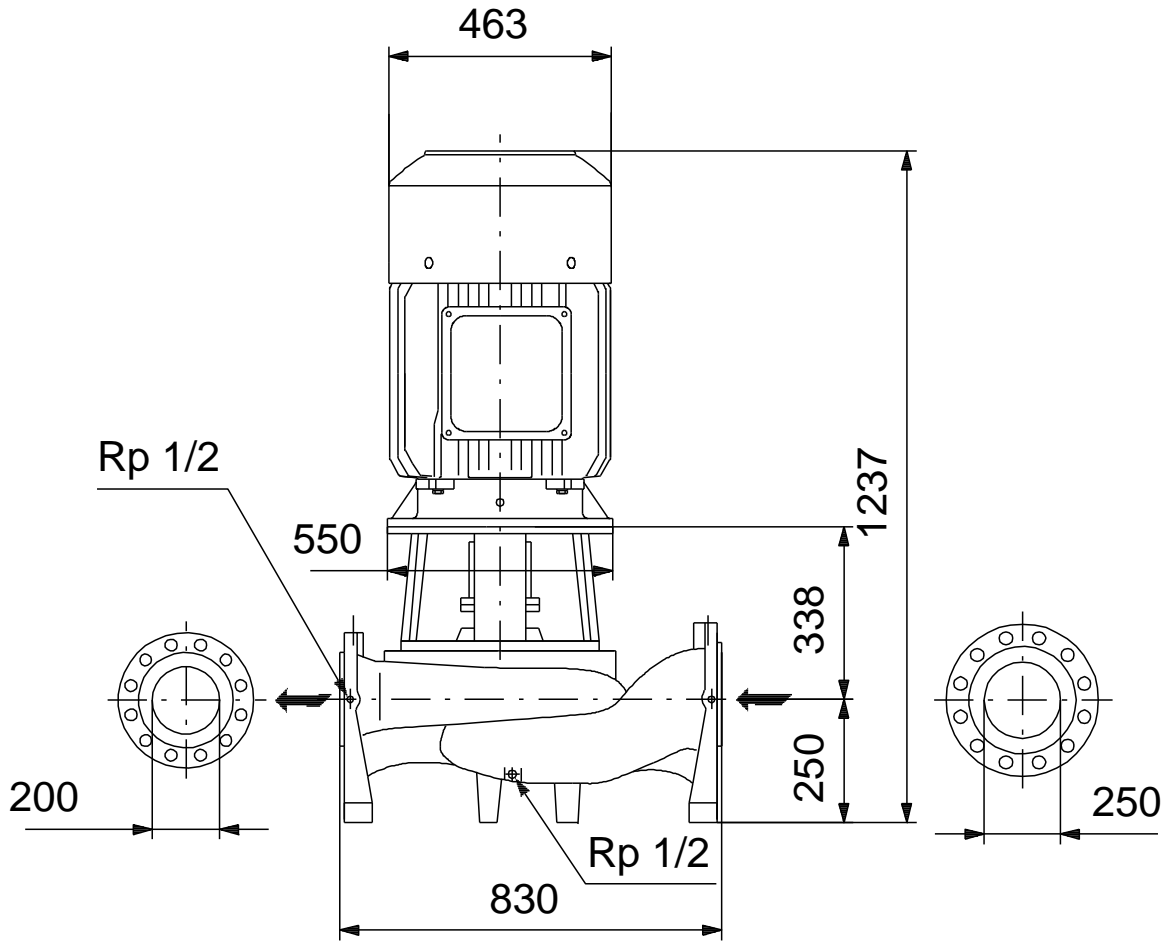
On request TP 200-280/4 A-F-A-DBUE 50 Hz



Description	Value
General information:	
Product name:	TP 200-280/4 A-F-A-DBUE
Product No:	On request
EAN number:	On request
Technical:	
Rated flow:	450 m ³ /h
Rated head:	16 m
Head max:	280 dm
Actual impeller diameter:	285 mm
Primary shaft seal:	DBUE
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Materials:	
Pump housing:	Ductile cast iron EN-JS1020 ASTM A 395
Impeller:	Ductile cast iron EN-JS1030 ASTM A 536 60-40-18
Material code:	A
Installation:	
Range of ambient temperature:	-20 .. 55 °C
Maximum operating pressure:	25 bar
Flange standard:	DIN
Pipe connection:	DN 250 / DN 200
Pump inlet:	DN 250
Pump outlet:	DN 200
Pressure rating:	PN 25
(@)	830 mm
Flange size for motor:	FF400
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	0 .. 150 °C
Liquid temperature during operation:	20 °C
Density:	998.2 kg/m ³
Electrical data:	
Motor type:	SIEMENS
IE Efficiency class:	IE3
Rated power - P2:	37 kW
Power (P2) required by pump:	37 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V
Rated current:	69,0-64,0/39,5-37,0 A
Starting current:	640-640 %
Cos phi - power factor:	0.86
Rated speed:	1480 rpm
Efficiency:	IE3 93,9%
Motor efficiency at full load:	93.9-93.9 %
Motor efficiency at 3/4 load:	94.5-94.5 %
Motor efficiency at 1/2 load:	94.4-94.4 %
Number of poles:	4
Enclosure class (IEC 34-5):	55 (Protect. water jets/dust)
Insulation class (IEC 85):	F
Motor protec:	PTC
Motor No:	83V15234
Others:	
Net weight:	630 kg
Gross weight:	785 kg
Shipping volume:	2.29 m ³

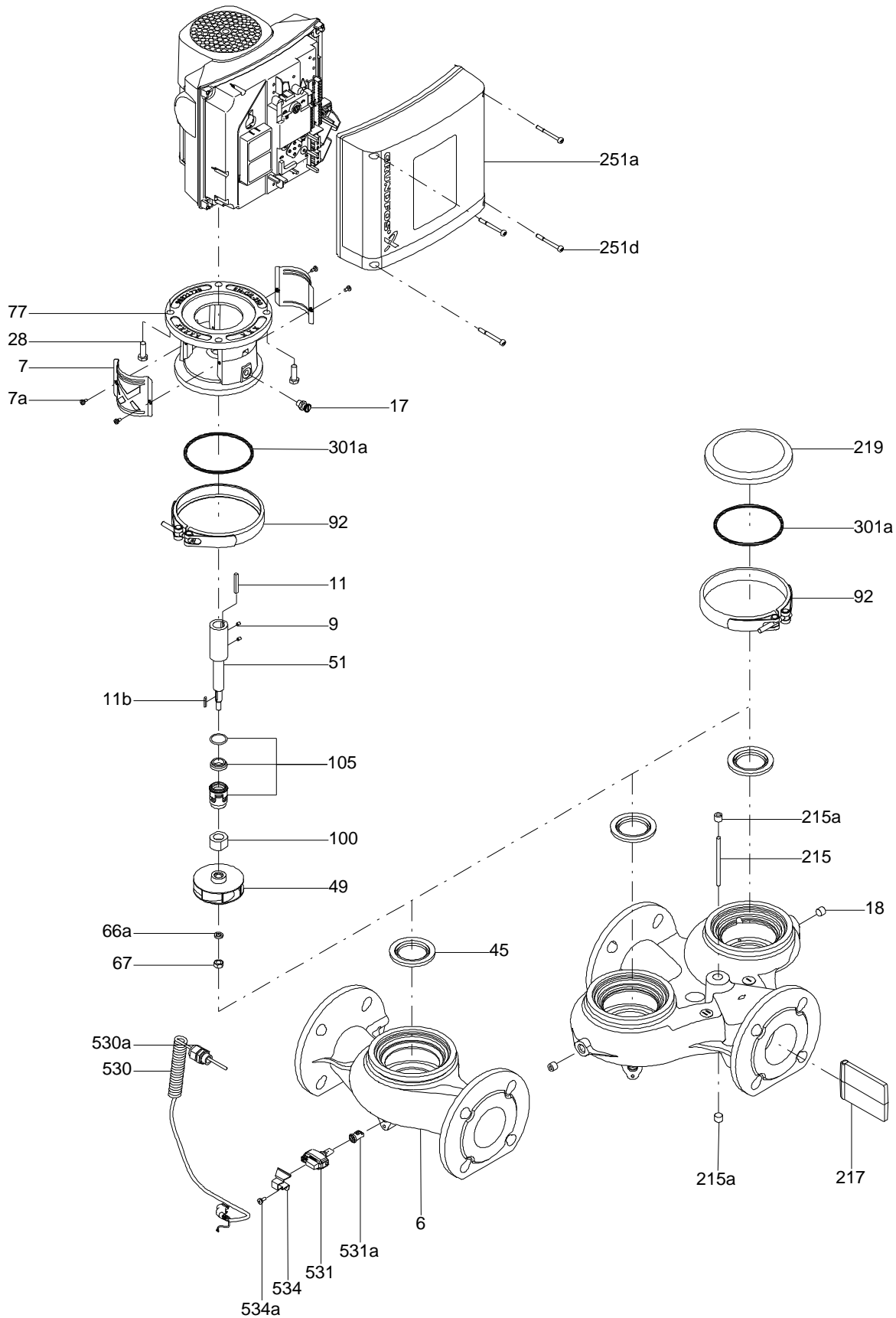


On request TP 200-280/4 A-F-A-DBUE 50 Hz

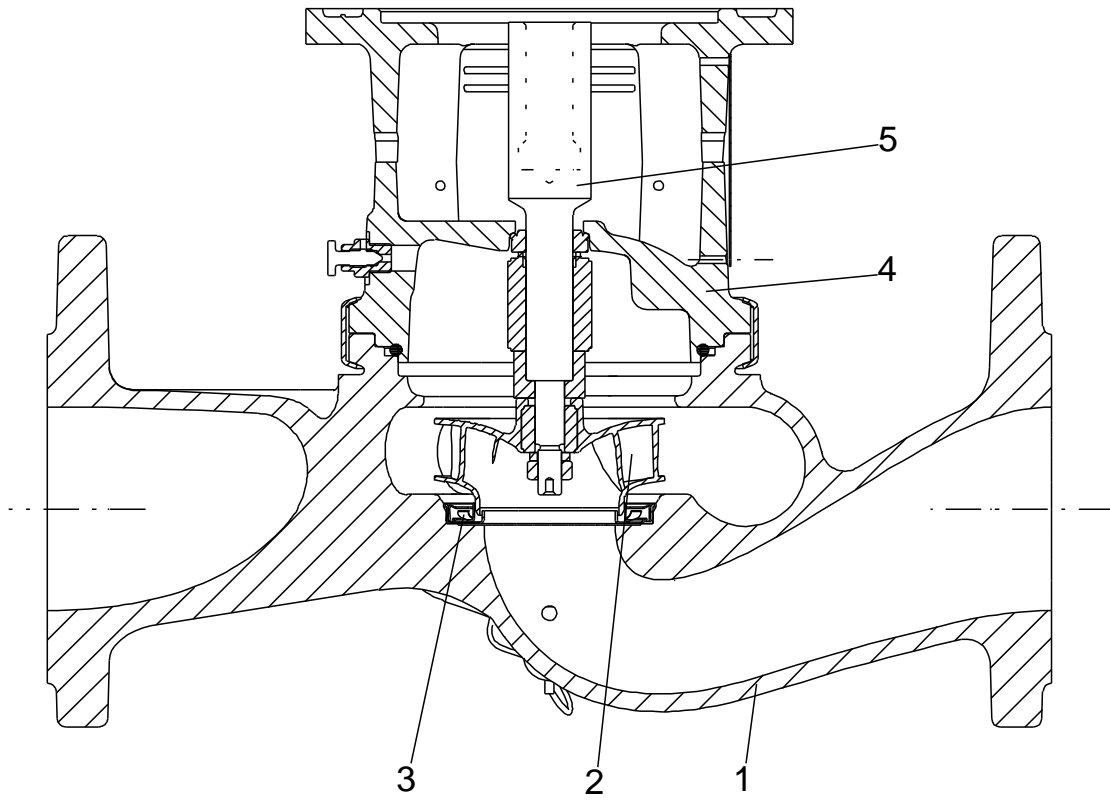


Note! All units are in [mm] unless others are stated.
 Disclaimer: This simplified dimensional drawing does not show all details.

Exploded view

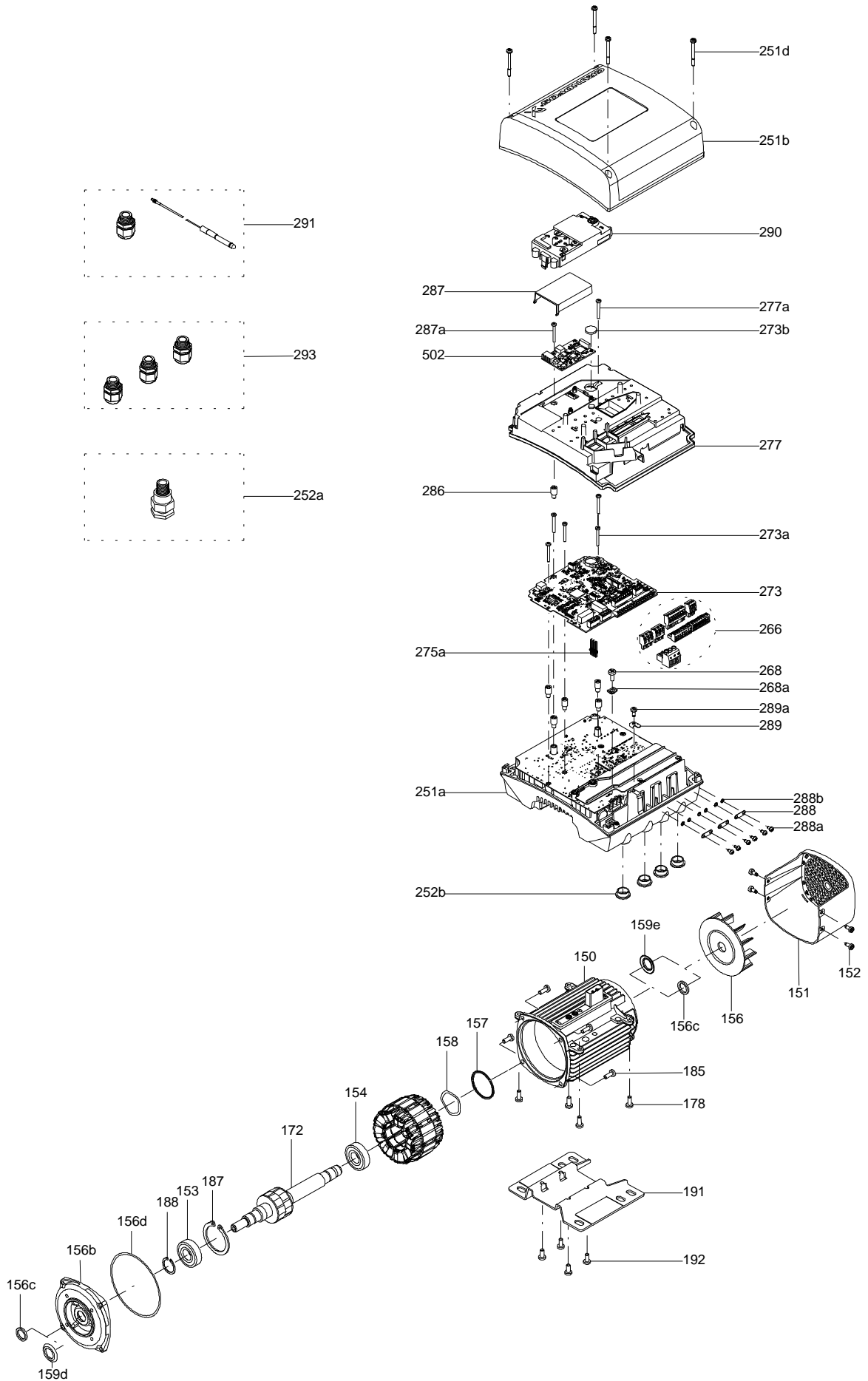


Sectional drawing (TM058200 for TPE2,TPE3)



TM058200

Exploded view (TM057026 for MGE model H/I)



Parts list TP 200-280/4, Product No. On request
Valid from 1.1.2006 (0652)

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
+	Motor				1	pcs
-	Coupling cpl.				1	pcs
8a	Coupling half				1	
9	Socket set screw		Length (mm): 12		2	
			Thread: M8			
13	Hex socket countersunk screw		Length (mm): 30		1	
			Thread: M12			
14	Washer		Internal diameter: 13		1	
			Outer diameter: 79			
			Thickness: 10			
23	Hex head screw		Length (mm): 35MM		6	
			Thread: M10			
-	Cover cpl.				1	pcs
25	Hex head cap screw				4	
72a	O-ring		Diameter: 339.5		1	
			Thickness: 5.7			
77	Upper part				1	
-	Shaft seal cpl.				1	pcs
	Pin				1	
17	Air vent screw				1	
58	Cover for shaft seal				1	
61	Bush				1	
62	O-ring		Diameter: 60		1	
			Thickness: 2.52			
105	Shaft seal		Material type: DBUE		1	
109	O-ring		Diameter: 129.5		1	
			Thickness: 3			
-	Shaft cpl.				1	pcs
11	Key				1	
51	Pump shaft				1	
68	Hex socket head cap screw				1	
-	2a Motor stool cpl.				1	pcs
2	Motor stool				1	
7a	Socket countersunk screw				4	
29	Hex head screw		Length (mm): 35		8	
			Thread: M16			
76	Nameplate				1	
7	Coupling guard				1	pcs
-	49a Impeller cpl.				1	pcs
49	Impeller				1	
66	Washer				1	
-	50 Pump housing cpl.				1	pcs
6	Pump housing				1	
20	Plug				7	
24	Cross recess countersunk screw				6	
26	Hex head bolt				8	
45	Wear ring				1	

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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