
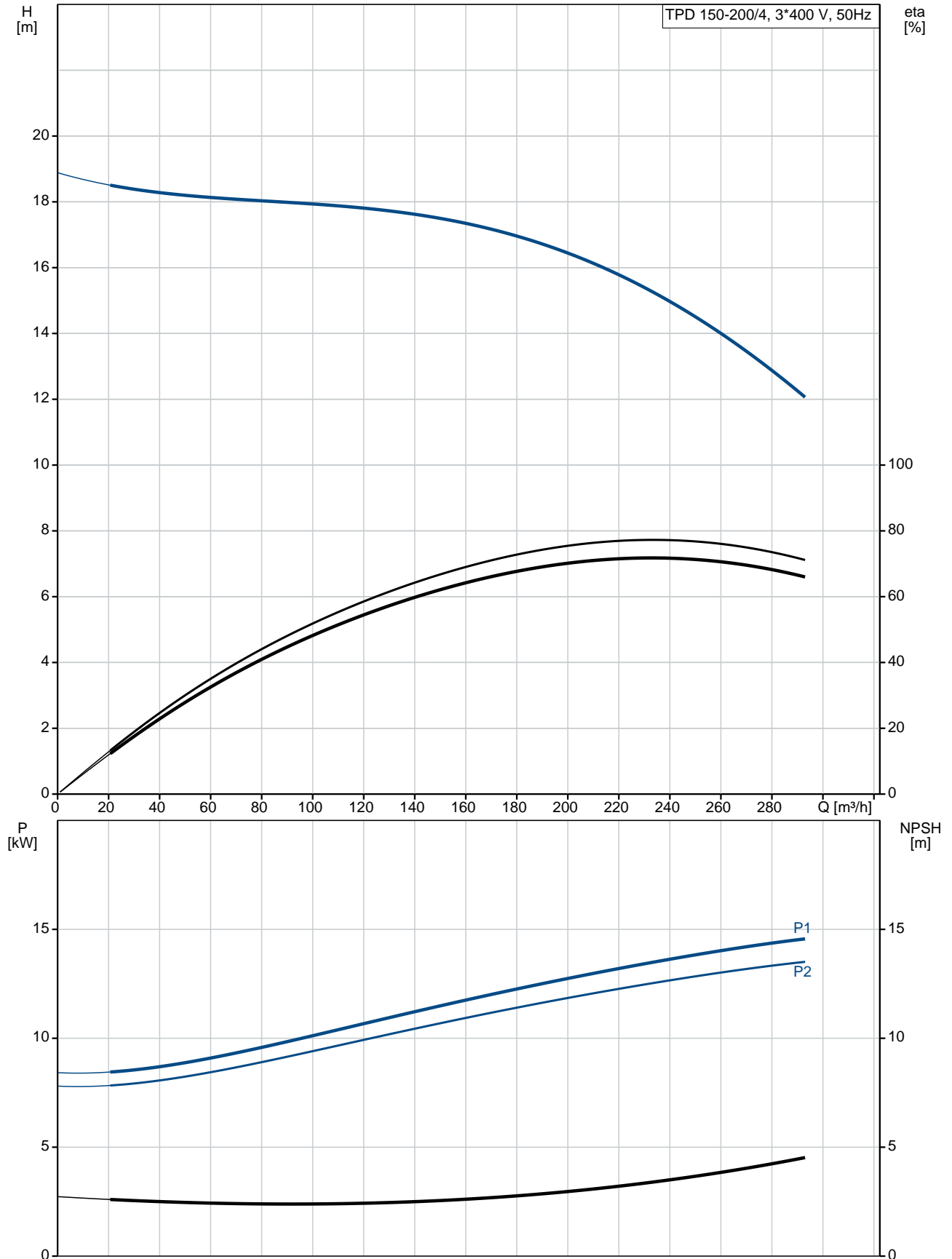


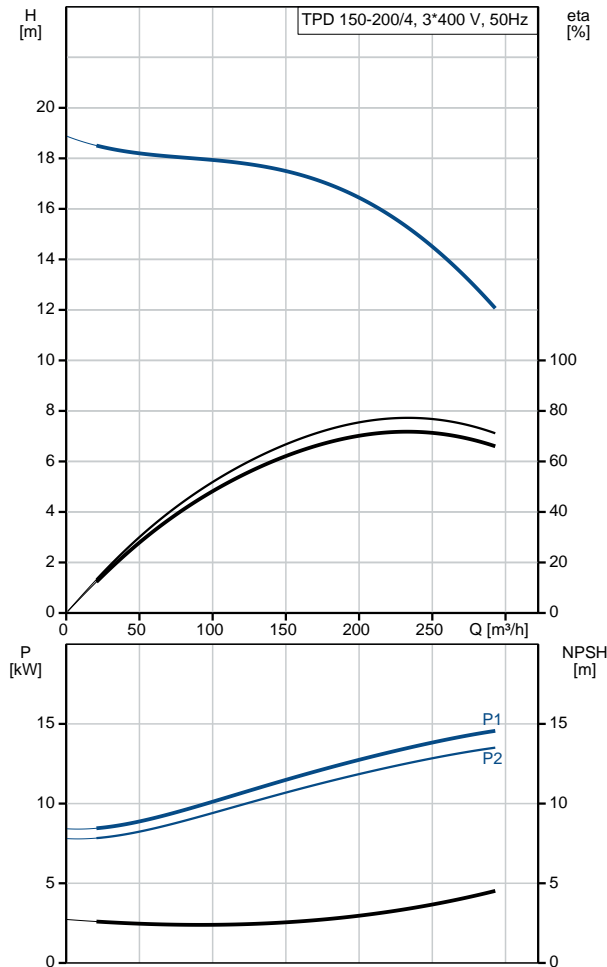
Position	Qty.	Description
	1	<p><b>TPD 150-200/4 A-F-A-BQQE</b></p>  <p>Product No.: <a href="#">96109906</a></p> <p>Single-stage, close-coupled, volute twin-head pump with in-line suction and discharge ports of identical diameter. The twin-head pump is designed with two parallel power-heads. The pump 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.</p> <p>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).</p> <p>Each power head is fitted with a fan-cooled asynchronous motor of identical size.</p> <p><b>Liquid:</b></p> <p>Pumped liquid: Water            Liquid temperature range: -25 .. 120 °C            Liquid temperature during operation: 20 °C            Density: 998.2 kg/m<sup>3</sup></p> <p><b>Technical:</b></p> <p>Rated flow: 233 m<sup>3</sup>/h            Rated head: 15.7 m            Actual impeller diameter: 243 mm            Primary shaft seal: BQQE            Curve tolerance: ISO9906:2012 3B</p> <p><b>Materials:</b></p> <p>Pump housing: Cast iron            EN-JL1040            ASTM A48-40 B</p> <p>Impeller: Cast iron            EN-JL1030            ASTM A48-30 B</p> <p><b>Installation:</b></p> <p>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            Pressure rating: PN 16            (@): 800 mm            Flange size for motor: FF300</p> <p><b>Electrical data:</b></p> <p>Motor type: 160LB            IE Efficiency class: IE3            Rated power - P2: 2 x 15 kW            Power (P2) required by pump: 15 kW            Mains frequency: 50 Hz</p>

Position	Qty.	Description
		<p>Rated voltage: 3 x 380-415D/660-690Y V            Rated current: 29,0-28,0/16,8-16,4 A            Starting current: 760-870 %            Cos phi - power factor: 0.86-0.82            Rated speed: 1460-1470 rpm            Efficiency: IE3 92,1%            Motor efficiency at full load: 92.1 %            Motor efficiency at 3/4 load: 92.3 %            Motor efficiency at 1/2 load: 92.1 %            Number of poles: 4            Enclosure class (IEC 34-5): 55 Dust/Jetting            Insulation class (IEC 85): F</p> <p><b>Others:</b>            Minimum efficiency index, MEI : 0.65            ErP status: EuP Standalone/Prod.            Net weight: 744 kg            Gross weight: 852 kg            Shipping volume: 1.52 m<sup>3</sup></p>

## 96109906 TPD 150-200/4 A-F-A-BQQE 50 Hz



Description	Value
<b>General information:</b>	
Product name:	TPD 150-200/4 A-F-A-BQQE
Product No:	96109906
EAN number:	5700396988917
<b>Technical:</b>	
Rated flow:	233 m <sup>3</sup> /h
Rated head:	15.7 m
Head max:	200 dm
Actual impeller diameter:	243 mm
Primary shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
<b>Materials:</b>	
Pump housing:	Cast iron EN-JL1040 ASTM A48-40 B
Impeller:	Cast iron EN-JL1030 ASTM A48-30 B
Material code:	A
<b>Installation:</b>	
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
Pressure rating:	PN 16
(@)	800 mm
Flange size for motor:	FF300
Connect code:	F
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Liquid temperature during operation:	20 °C
Density:	998.2 kg/m <sup>3</sup>
<b>Electrical data:</b>	
Motor type:	160LB
IE Efficiency class:	IE3
Rated power - P2:	2 x 15 kW
Power (P2) required by pump:	15 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-415D/660-690Y V
Rated current:	29,0-28,0/16,8-16,4 A
Starting current:	760-870 %
Cos phi - power factor:	0.86-0.82
Rated speed:	1460-1470 rpm
Efficiency:	IE3 92,1%
Motor efficiency at full load:	92.1 %
Motor efficiency at 3/4 load:	92.3 %
Motor efficiency at 1/2 load:	92.1 %
Number of poles:	4
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protec:	PTC
Motor No:	87420032





Company name:

Created by:

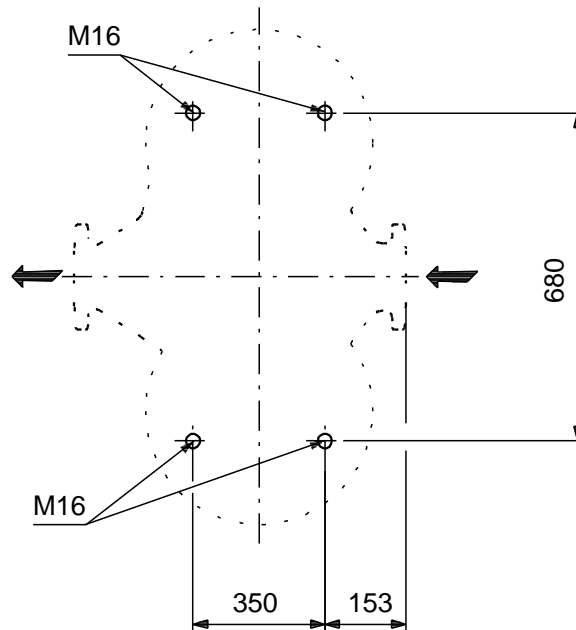
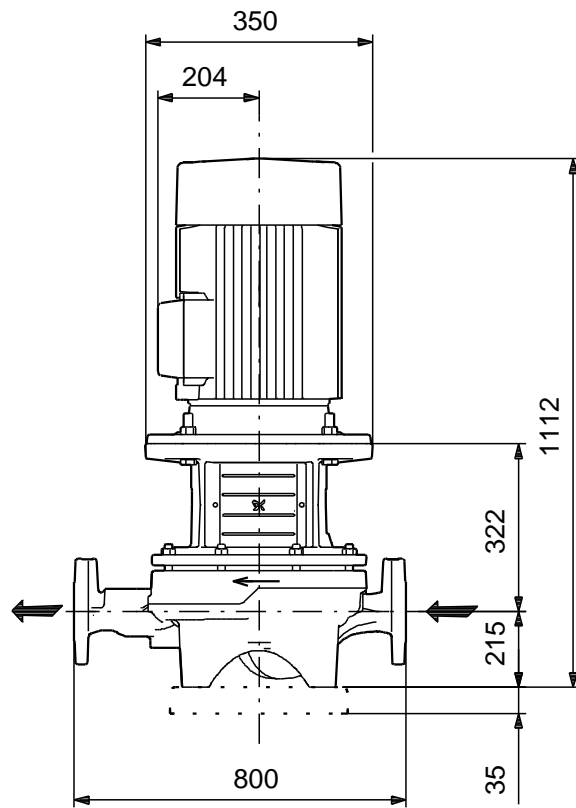
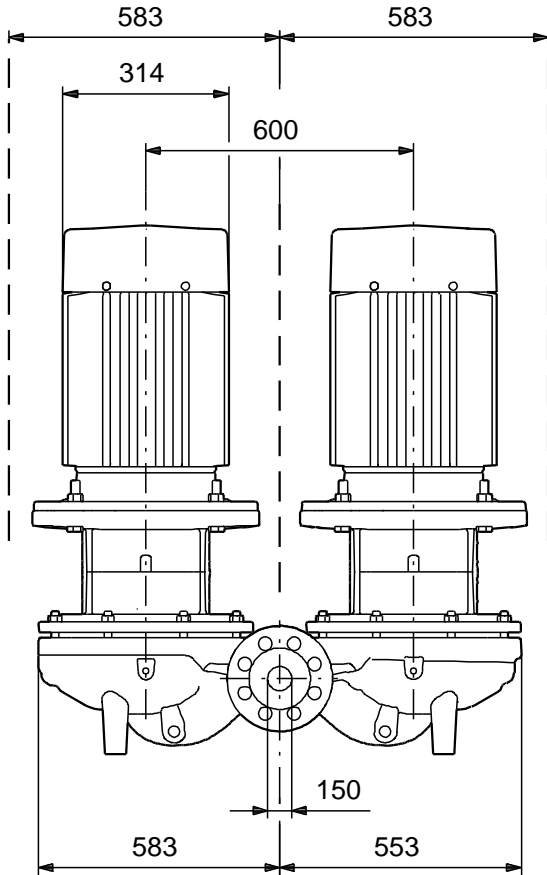
Phone:

Date:

05/10/2018

Description	Value
<b>Others:</b>	
Minimum efficiency index, MEI :	0.65
ErP status:	EuP Standalone/Prod.
Net weight:	744 kg
Gross weight:	852 kg
Shipping volume:	1.52 m <sup>3</sup>

**96109906 TPD 150-200/4 A-F-A-BQQE 50 Hz**



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

## 96109906 TPD 150-200/4 A-F-A-BQQE 50 Hz



IEC TP211 THERMALLY PROTECTED WHEN THE THERMISTORS ARE  
CONNECTED TO AMPLIFIER RELAY FOR CONTROL OF MAIN SUPPLY  
THERMISTORS PTC ACCORDING TO DIN 44082

Note! All units are in [mm] unless others are stated.