

Qty. Description

1 TP 80-120/2 AI-F-A-RUUE



Note! Product picture may differ from actual product

Product No.: [96438846](#)

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 O-ring seal.

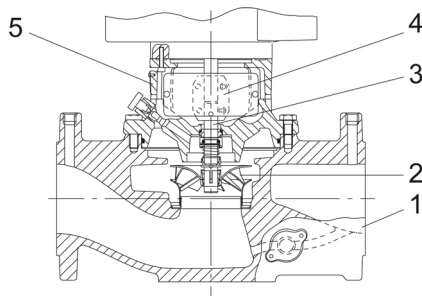
The shaft seal is according to EN 12756. Pipework connection is via PN 6 DIN flanges (EN 1092-2 and ISO 7005-2).

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

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.

Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

## Pump



1: Pump housing

2: Impeller

3: Shaft

4: Coupling

5: Pump head

The pump housing is provided with a replaceable stainless steel/PTFE neck ring to reduce the amount of liquid running from the discharge side of the impeller to the suction side.

The impeller is secured with a split cone with nut.

The pump is fitted with an unbalanced O-ring seal with a rigid torque-transmission system and reduced seal face. It has a fixed seal driver which ensures a reliable rotation of all parts.

The narrow seal face makes the seal perform well in high-viscosity and antifreezing liquids.

The dynamic secondary seal is an O-ring.

Primary seal:

- Rotating seal ring material: tungsten carbide (WC)
- Stationary seat material: tungsten carbide (WC)

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This material pairing is extremely wear resistant and can resist rough handling. The dry friction is high, meaning that the pairing has poor dry-running properties. Above certain pressures and temperatures, the seal may generate noise. The run-in wear period can generate noise up to four weeks.

Secondary seal material: EPDM (ethylene-propylene rubber)

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. Motor and pump shaft are connected via a shell coupling.

**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 tapped-hole flange (FT).

Motor-mounting designation in accordance with IEC 60034-7: IM B 14, IM V 18 (Code I) / IM 3601, IM 3611 (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.

**Further product details****Technical data**

Liquid:

Liquid temperature range: -25 .. 60 °C

Selected liquid temperature: 20 °C

Technical:

Materials:

Installation:

Maximum ambient temperature: 40 °C

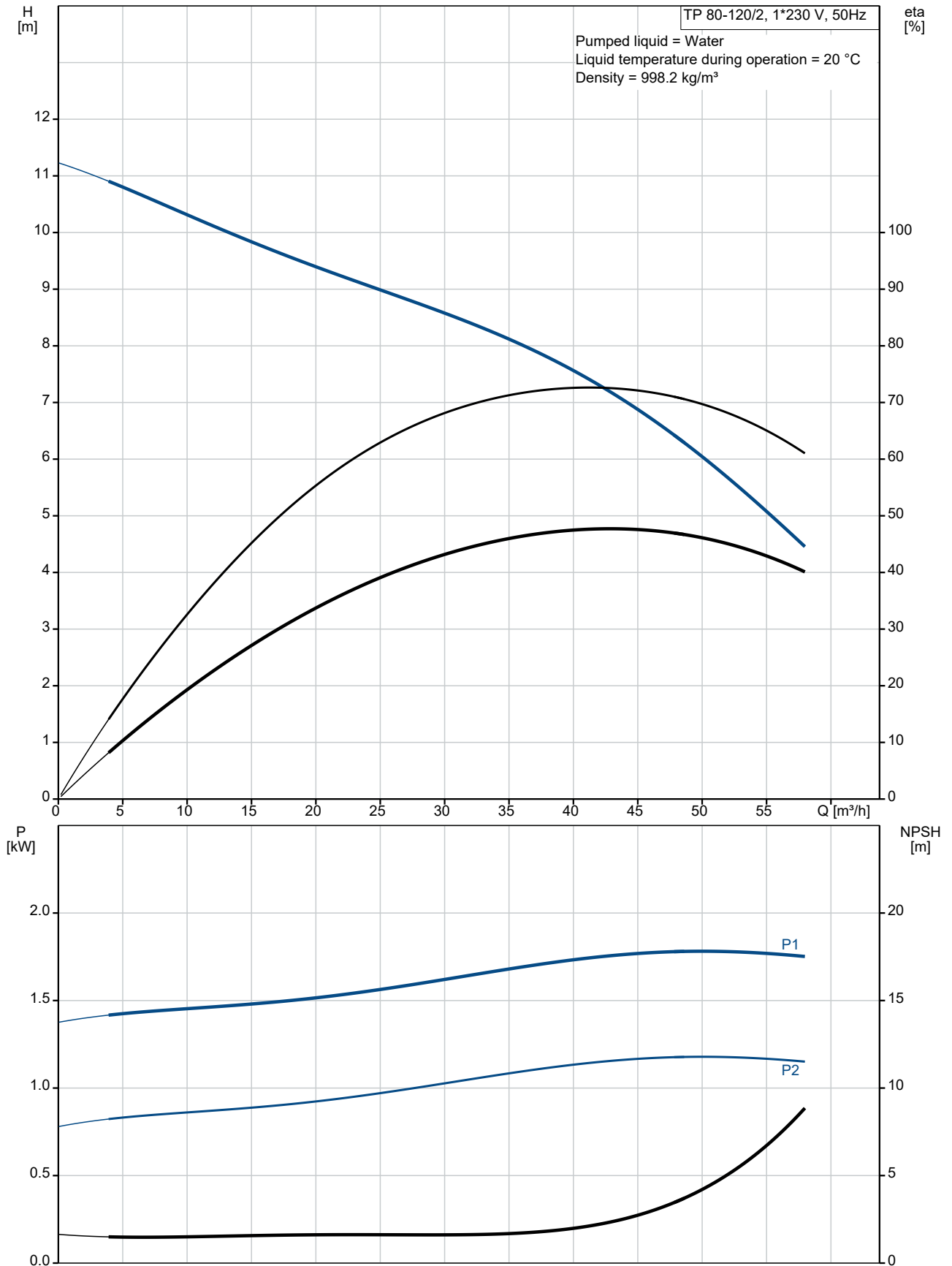
Maximum operating pressure: 6 bar

Electrical data:

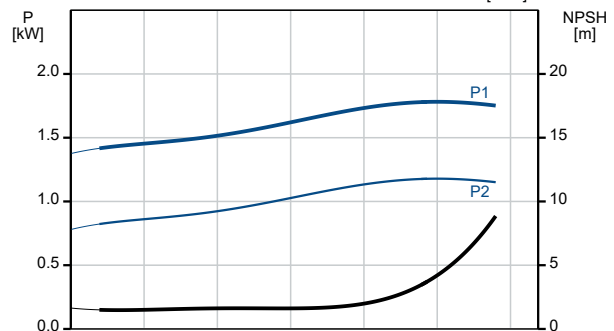
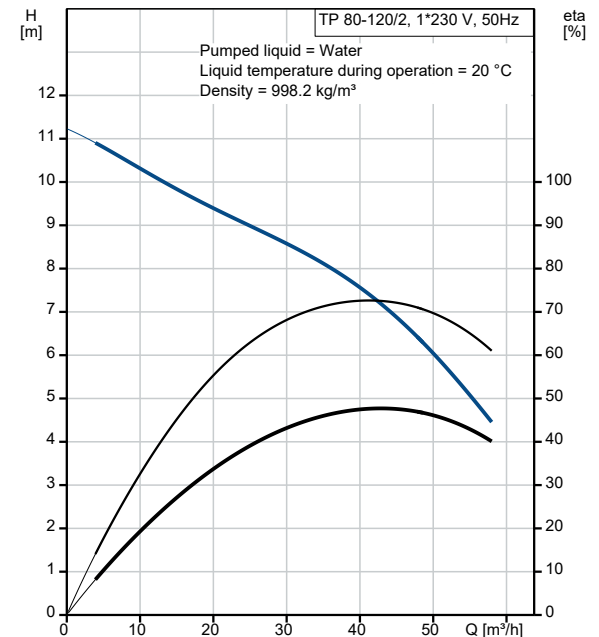
Starting current: 390 %

Others:

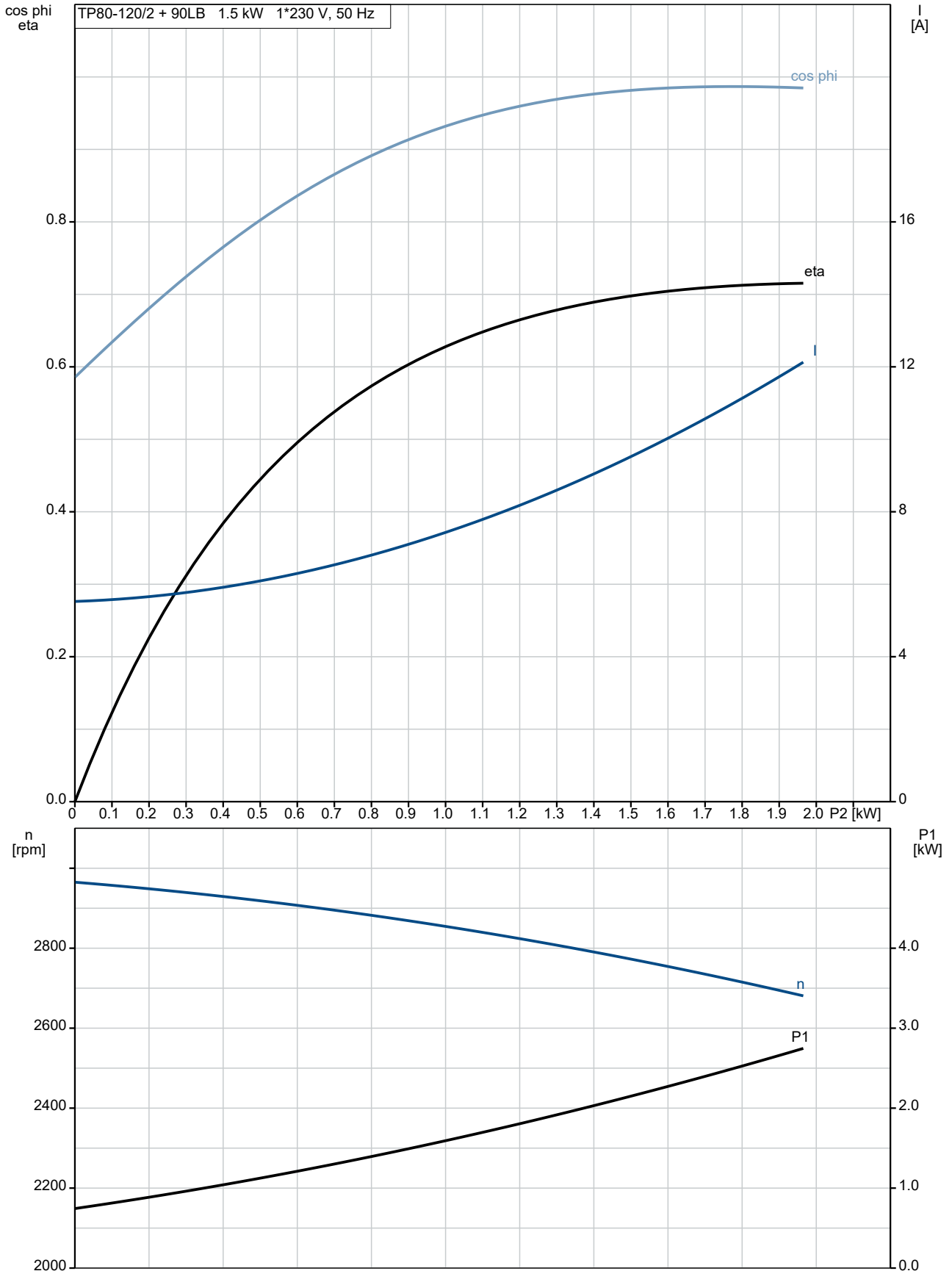
## 96438846 TP 80-120/2 AI-F-A-RUUE 50 Hz



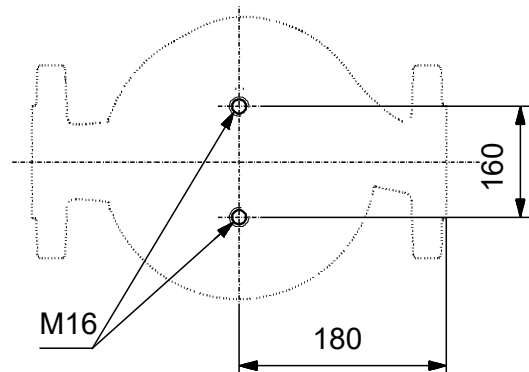
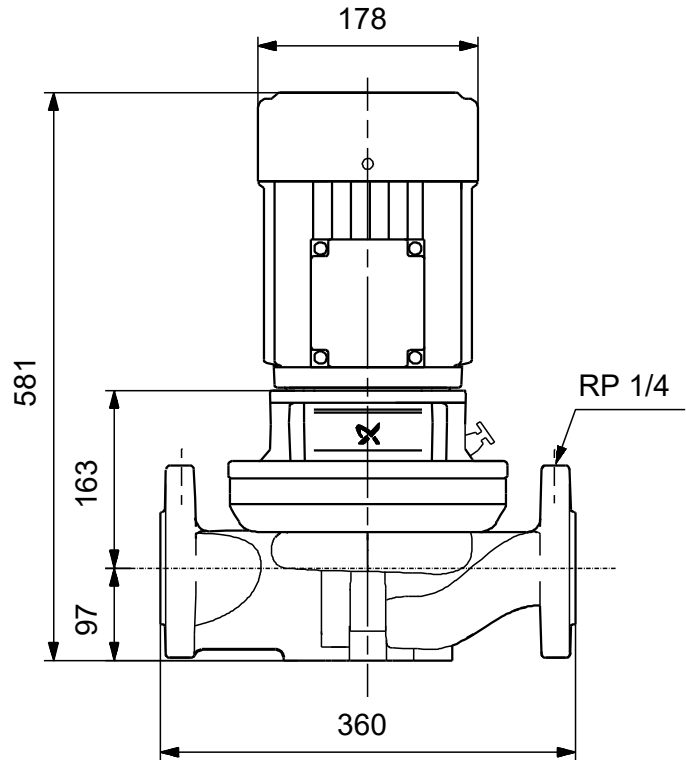
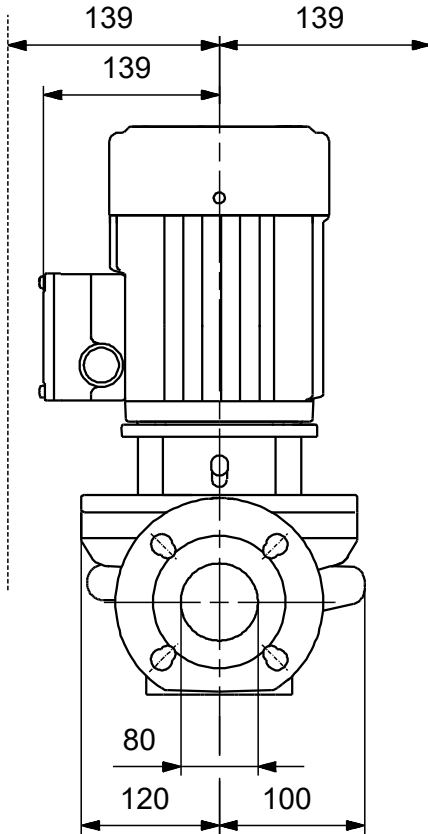
Description	Value
<b>General information:</b>	
Product name:	TP 80-120/2 AI-F-A-RUUE
Product No:	96438846
EAN number:	5700393862517
Price:	
<b>Technical:</b>	
Pump speed on which pump data are based:	2910 rpm
Rated flow:	42.5 m <sup>3</sup> /h
Rated head:	7.91 m
Maximum head:	120 dm
Actual impeller diameter:	95 mm
Code for shaft seal:	RUUE
Curve tolerance:	ISO9906:2012 3B
Pump version:	AI
<b>Materials:</b>	
Pump housing:	Cast iron
Pump housing:	EN-JL1040
Pump housing:	A48-40 B
Impeller:	Stainless steel
Impeller:	1.4301
Impeller:	304
Material code:	A
<b>Installation:</b>	
Maximum ambient temperature:	40 °C
Maximum operating pressure:	6 bar
Type of connection:	DIN
Size of connection:	DN 80
Pressure rating for connection:	PN 6
Port-to-port length:	360 mm
Connect code:	F
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature range:	-25 .. 60 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m <sup>3</sup>
<b>Electrical data:</b>	
Motor type:	90LB
Rated power - P2:	1.5 kW
Mains frequency:	50 Hz
Rated voltage:	1 x 220-230/240 V
Rated current:	9.90/8.90 A
Starting current:	390 %
Cos phi - power factor:	0.98/0.99
Rated speed:	2750/2740 rpm
Motor efficiency at full load:	72-70 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Built-in motor protection:	PTO
Motor No:	85215706
<b>Others:</b>	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	49.5 kg
Gross weight:	55.4 kg
Shipping volume:	0.16 m <sup>3</sup>



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