

**Date:** 05/11/2020

Qty. | Description

1 SP 3A-45



Note! Product picture may differ from actual product

Product No.: 10101K45

Submersible borehole pump, suitable for pumping clean water. Can be installed vertically or horizontally. All steel components are made in stainless steel, EN 1.4301 (AISI 304), that ensures high corrosive resistance. This pump carries drinking water approval.

The pump is fitted with a 3 kW MS4000 motor with sand shield, mechanical shaft seal, water-lubricated journal bearings and a volume compensating diaphragm. The motor is a canned type submersible motor offering good mechanical stability and high efficiency. Suitable for temperatures up to 40 °C.

The motor is not fitted with a temperature sensor. If temperature monitoring is desired, a Pt1000 sensor can be fitted.

The motor is for direct-on-line starting (DOL).

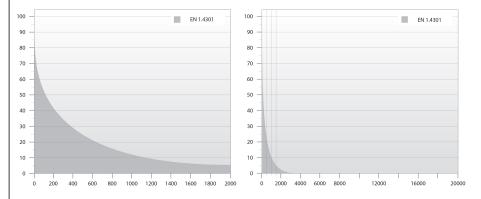
### Further product details

The pump is suitable for applications similar to the following:

- raw-water supply
- irrigation
- groundwater lowering
- pressure boosting
- fountain applications.

## **Pump**

All pump surfaces that are in contact with pumped liquids are made in stainless steel which makes them corrosionand wear-resistant. The corrosion diagram below shows the capabilities of the pump and motor in relation to the temperature in Celsius (y-axis) and the concentration of chloride in ppm (x-axis).



The elastomer parts in the pump are made of NBR (Nitrile-Butadiene Rubber) and TPU (Thermoplastic Poly-Urethane) which offers good wear resistance and long service intervals.

The suction interconnector is fitted with a strainer to prevent large particles from entering the pump. The suction interconnector is designed to comply with NEMA standards for motor mounting/dimensions.



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#### Motor

The stator is hermetically encapsulated in stainless steel and the windings are embedded in polymer compound. This results in high mechanical stability, optimum cooling and reduces the risk of short circuits in the windings.

The shaft seal is a tungsten carbide/ceramic replaceable mechanical shaft seal. The material combination provides optimum sealing, resistance and long life. Together with the shaft seal housing, the sand shield forms a labyrinth seal, which during normal operating conditions prevents penetration of sand particles into the shaft seal.

The motor can be fitted with a Pt100 or Pt1000 sensor that together with a control unit ensures that the maximum operating temperature conditions are not exceeded.

Liquid:

Pumped liquid: Water

Maximum liquid temperature: 40 °C

Max liquid t at 0.15 m/sec: 40 °C

Selected liquid temperature: 20 °C

Density: 998.2 kg/m³

Technical:

Pump speed on which pump data are based: 2900 rpm

Rated flow: 3 m³/h
Rated head: 210 m
Shaft seal for motor: HM/CER
Approvals on nameplate: CE,EAC

Curve tolerance: ISO9906:2012 3B

Motor version: T40

Specification for shaft end: CYLINDRICAL

Materials:

Pump: Stainless steel

EN 1.4301 AISI AISI 304

Impeller: Stainless steel

EN 1.4301 AISI AISI 304 Stainless steel

Motor: Stainless steel
DIN W.-Nr. 1.4301

AISI 304

Installation:

Pump outlet: Rp1 1/4 Motor diameter: 4 inch

Electrical data:

Motor type: MS4000 Rated power - P2: 3 kW Power (P2) required by pump: 3 kW Mains frequency: 50 Hz

 Rated voltage:
 3 x 380-400-415 V

 Rated current:
 7.70-7.85-8.10 A

 Starting current:
 460-490-500 %

 Cos phi - power factor:
 0.82-0.77-0.73

 Rated speed:
 2850-2865-2875 rpm

Start. method: direct-on-line

Enclosure class (IEC 34-5): IP68
Insulation class (IEC 85): F
Built-in temp. transmitter: no

Motor No: 79194508

Others:

Minimum efficiency index, MEI ≥: 0.70



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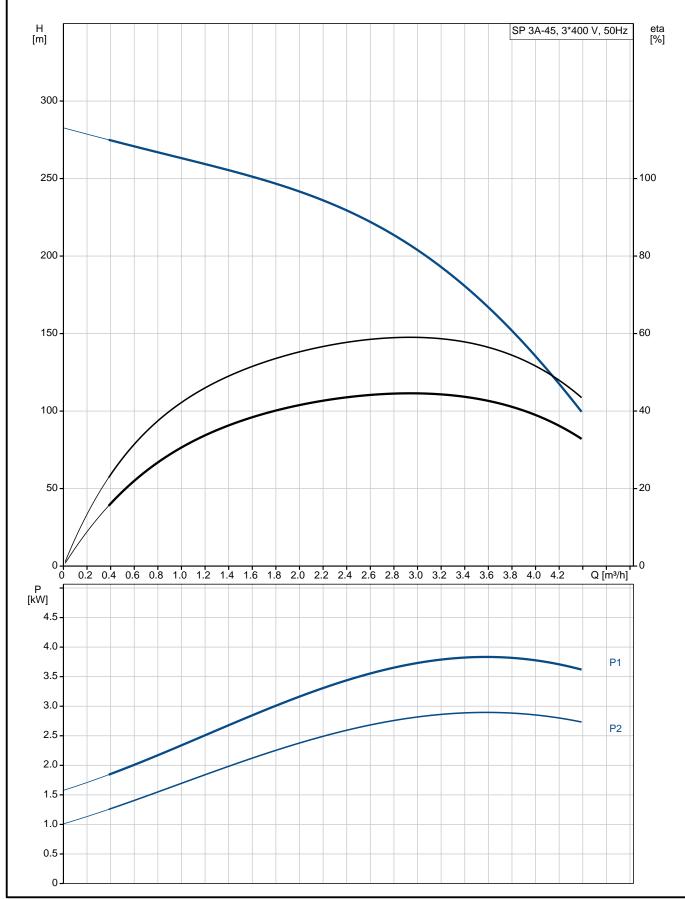
ErP status: EuP Standalone/Prod.

Net weight: 36.5 kg Gross weight: 42.1 kg Shipping volume: 66.8 m<sup>3</sup> Danish VVS No.: 388313450 Swedish RSK No.: 5852987 Finnish LVI No.: 4762660 Norwegian NRF no.: 9040862 Country of origin: GB Custom tariff no.: 84137029



**Date:** 05/11/2020

# 10101K45 SP 3A-45 50 Hz





Date: 05/11/2020 H [m] SP 3A-45, 3\*400 V, 50Hz eta [%] Description Value **General information:** 300 SP 3A-45 Product name: Product No: 10101K45 EAN number: 5700392980304 250 100 Price: GBP 2930 Technical: Pump speed on which pump data are 80 200 2900 rpm based: Rated flow: 3 m<sup>3</sup>/h Rated head: 210 m 60 150 Stages: 45 Impeller reduc.: NONE 100 40 Shaft seal for motor: HM/CER Approvals on nameplate: CE,EAC ISO9906:2012 3B Curve tolerance: 50 Model: YES Valve: T40 Motor version: 1.5 2.0 2.5 3.0 3.5 4.0 Q [m<sup>3</sup>/h] Specification for shaft end: CYLINDRICAL P [kW] Materials: Stainless steel Pump: Pump: EN 1.4301 AISI AISI 304 Pump: 3 Impeller: Stainless steel Impeller: EN 1.4301 Impeller: AISI AISI 304 Motor: Stainless steel Motor: DIN W.-Nr. 1.4301 Motor: **AISI 304** Installation: 101 Pump outlet: Rp1 1/4 Rp1 1/4 Motor diameter: 4 inch Liquid: Pumped liquid: Water Maximum liquid temperature: 40 °C 1140 Max liquid t at 0.15 m/sec: 40 °C Selected liquid temperature: 20 °C Density: 998.2 kg/m<sup>3</sup> 1637 Electrical data: Motor type: MS4000 **GRUNDFOS** Applic. motor: 497 95 Rated power - P2: 3 kW Power (P2) required by pump: 3 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-400-415 V L1 L2 L3 PE Rated current: 7.70-7.85-8.10 A Starting current: 460-490-500 % Cos phi - power factor: 0.82-0.77-0.73 Rated speed: 2850-2865-2875 rpm Start. method: direct-on-line Enclosure class (IEC 34-5): IP68 Insulation class (IEC 85): NONE Motor protec: Thermal protec: external Built-in temp. transmitter: nο Motor No: 79194508 Others: M Minimum efficiency index, MEI ≥: 0.70 3 ~



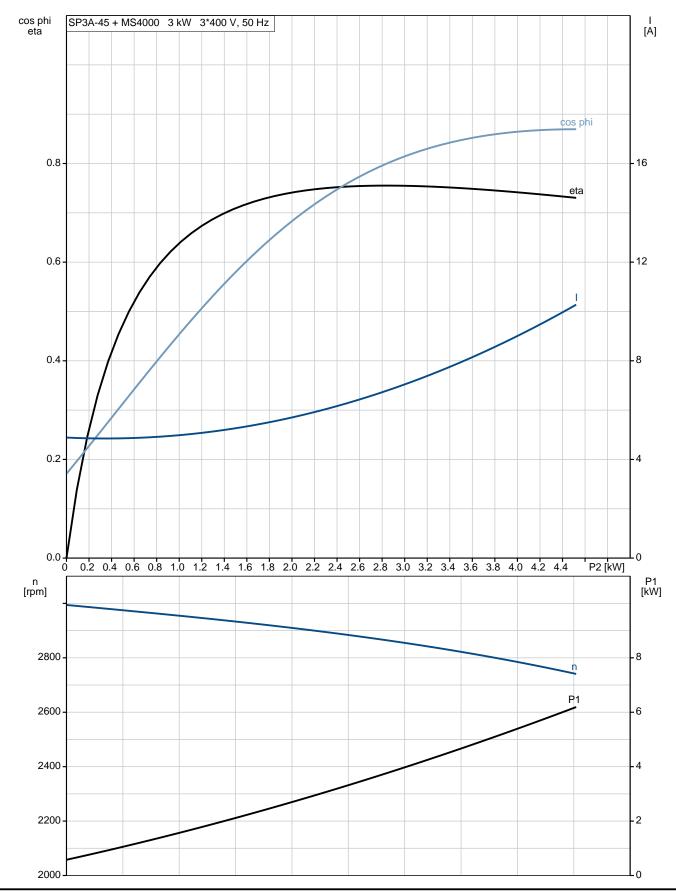
**Date:** 05/11/2020

Description	Value
ErP status:	EuP Standalone/Prod.
Net weight:	36.5 kg
Gross weight:	42.1 kg
Shipping volume:	66.8 m³
Danish VVS No.:	388313450
Swedish RSK No.:	5852987
Finnish LVI No.:	4762660
Norwegian NRF no.:	9040862
Country of origin:	GB
Custom tariff no.:	84137029



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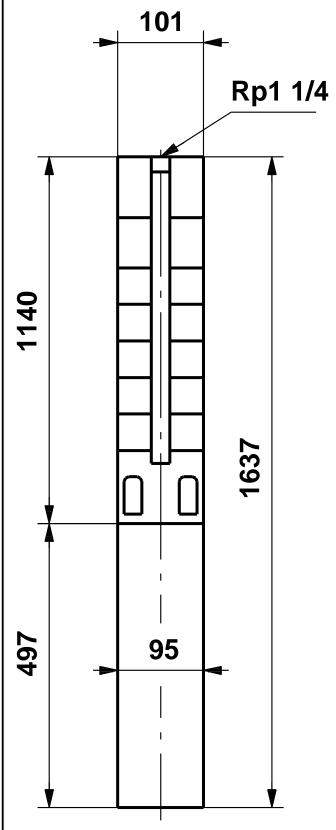
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10101K45 SP 3A-45 50 Hz

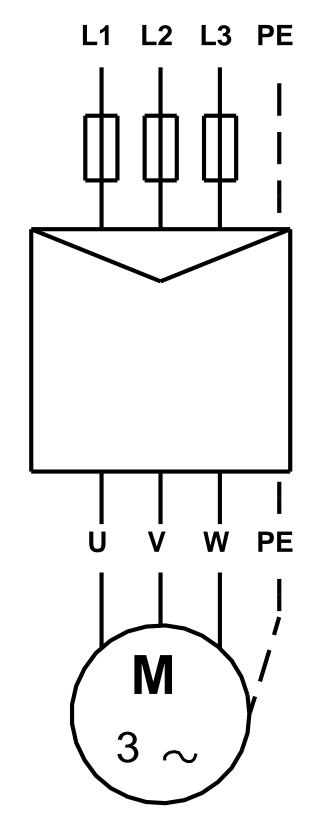


Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.



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10101K45 SP 3A-45 50 Hz



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