

**Date:** 10/11/2020

Qty. | Description

1 SP 160-3-A



Note! Product picture may differ from actual product

Product No.: 200243A3

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 37 kW MMS6 motor with sand shield, water-lubricated journal bearings and a volume compensating diaphragm. The rewindable motor contruction allows complete access to the windings for easy rewinding. The stator windings are PE/PA insulated made for continous operations (S1). Suitable for temperatures up to 50 °C. The motor is fitted with a mechanical shaft seal.

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

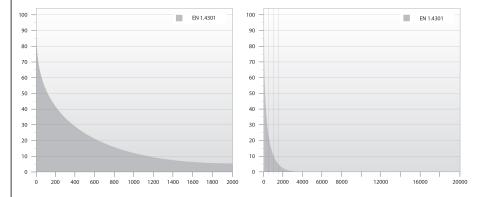
### **Further product details**

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) which ensures good wear resistance and long service intervals.

In case the pump is used for pumping water with high content of hydrocarbons or solvents, Grundfos offers FKM rubber parts (Fluorocarbon) which are oil and temperature-resistant up to 90 °C.

The pump is built with octagonal bearings with sand flush channels that minimise wear. As wear of the pump is inevitable, the pump design allows for easy replacement of all internal wear parts (bearings, impeller, wear rings and seal rings) to maintain high performance and a long lifetime.



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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.

#### Motor

The winding wire is made from pure electrolytic cobber insulated by extruded two layers of PE/PA with high dielectric strength properties allowing direct contact between the motor fluid and winding wire. This ensures the best possible cooling of the winding wire. The PA layer ensures high mechanical wear properties of the winding wire.

The shaft seal faces are SiC/SiC. The material combination gives good performance when abrasive particles (sand) is present. 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. This shaft seal is drinking water approved.

Liquid:

Pumped liquid: Water
Maximum liquid temperature: 50 °C
Max liquid t at 0.5 m/sec: 50 °C
Selected liquid temperature: 20 °C
Density: 998.2 kg/m³

Technical:

Pump speed on which pump data are based: 2900 rpm

Rated flow: 160 m³/h
Rated head: 54 m
Shaft seal for motor: SIC/SIC
Approvals on nameplate: CE

Curve tolerance: ISO9906:2012 3B

Motor version: T50

Materials:

Pump: Stainless steel

EN 1.4301 AISI AISI 304

Impeller: Stainless steel

EN 1.4301 AISI AISI 304

Motor: Cast iron

DIN W.-Nr. 0.6025 ASTM 35-40

Installation:

Pump outlet: RP6 Motor diameter: 6 inch

Electrical data:

Motor type: MMS6
Rated power - P2: 37 kW
Power (P2) required by pump: 37 kW
Mains frequency: 50 Hz

Rated voltage: 3 x 380-400-415 V

Service factor: 1.00

 Rated current:
 87.0-84.5-85.0 A

 Starting current:
 455-495-510 %

 Cos phi - power factor:
 0.85-0.82-0.79

 Rated speed:
 2830-2860-2870 rpm

Start. method: direct-on-line

Enclosure class (IEC 34-5): IP68
Motor No: 96879428
Windings: PE2/PA



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Others:

Minimum efficiency index, MEI ≥: -.--

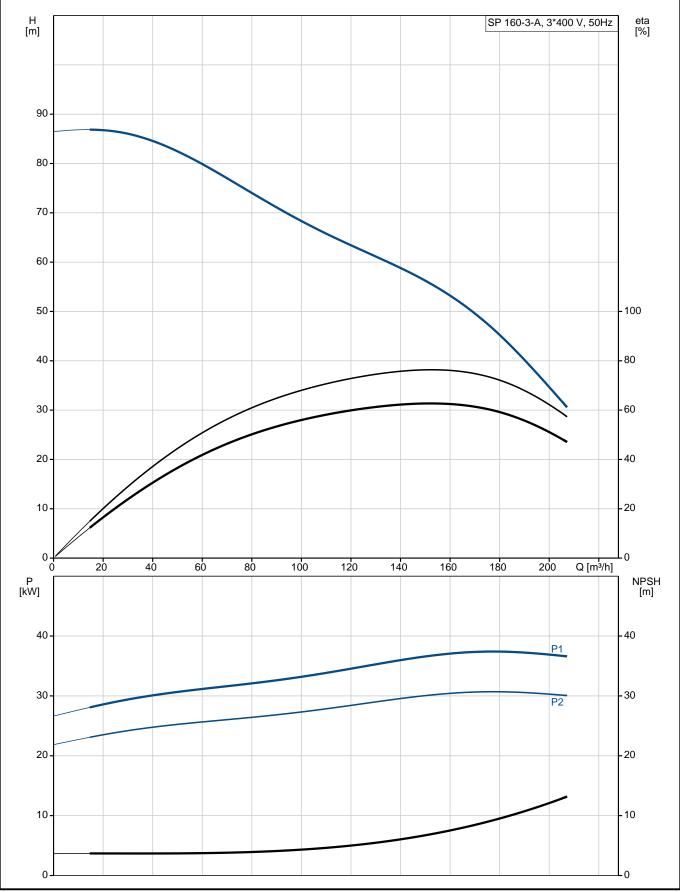
ErP status: EuP Standalone/Prod.

Net weight:165 kgGross weight:201 kgShipping volume:0.295 m³Country of origin:GBCustom tariff no.:84137029



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## 200243A3 SP 160-3-A 50 Hz

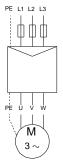




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Description	Value		
General information:			
Product name:	SP 160-3-A		
Product No:	200243A3		
EAN number:	5700831507291		
Price:	GBP 9851		
Technical:			
Pump speed on which pump data are	0000		
based:	2900 rpm		
Rated flow:	160 m³/h		
Rated head:	54 m		
Stages:	3		
Impeller reduc.:	Α		
Shaft seal for motor:	SIC/SIC		
Approvals on nameplate:	CE		
Curve tolerance:	ISO9906:2012 3B		
Model:	В		
Valve:	YES		
Motor version:	T50		
Materials:			
Pump:	Stainless steel		
Pump:	EN 1.4301		
Pump:	AISI AISI 304		
Impeller:	Stainless steel		
Impeller:	EN 1.4301		
Impeller:	AISI AISI 304		
Motor:	Cast iron		
Motor:	DIN WNr. 0.6025		
Motor:	ASTM 35-40		
Installation:	ASTIVI 33-40		
Pump outlet:	RP6		
Motor diameter:	6 inch		
Liquid:	O IIIGII		
Pumped liquid:	Water		
Maximum liquid temperature:	50 °C		
Max liquid t at 0.5 m/sec:	50 °C		
•			
Selected liquid temperature:	20 °C		
Density: Electrical data:	998.2 kg/m³		
	MMOO		
Motor type:	MMS6		
Applic. motor:	GRUNDFOS		
Rated power - P2:	37 kW		
Power (P2) required by pump:	37 kW		
Mains frequency:	50 Hz		
Rated voltage:	3 x 380-400-415 V		
Service factor:	1.00		
Rated current:	87.0-84.5-85.0 A		
Starting current:	455-495-510 %		
Cos phi - power factor:	0.85-0.82-0.79		
Rated speed:	2830-2860-2870 rpm		
Start. method:	direct-on-line		
Enclosure class (IEC 34-5):	IP68		
Motor protec:	NONE		
Thermal protec:	external		
Motor No:	96879428		
Windings:	PE2/PA		
Others:			
Minimum efficiency index, MEI ≥:	-,		
ErP status:	EuP Standalone/Prod.		
En siaius.			

ale.		10/1	1/2020				
H [m]			SP 16	0-3-A, 3*400 V	, 50Hz	eta [%]	
90 –							
80 -							
70 -							
60 -							
50 -						- 100	
40 -						- 80	
30 -						-60	
20 -					•	- 40	
10 -						- 20	
0-	5	0 10	00 15	50 C	[m³/h]	-0	
P [kW]						NPSH [m]	
40 -				P	1	<b>-</b> 40	
30 -				P	2	-30	
20 -						- 20	
10 -					_	-10	
0 -						-0	
11 (GN)	RP6						
1293 962.5	252E						





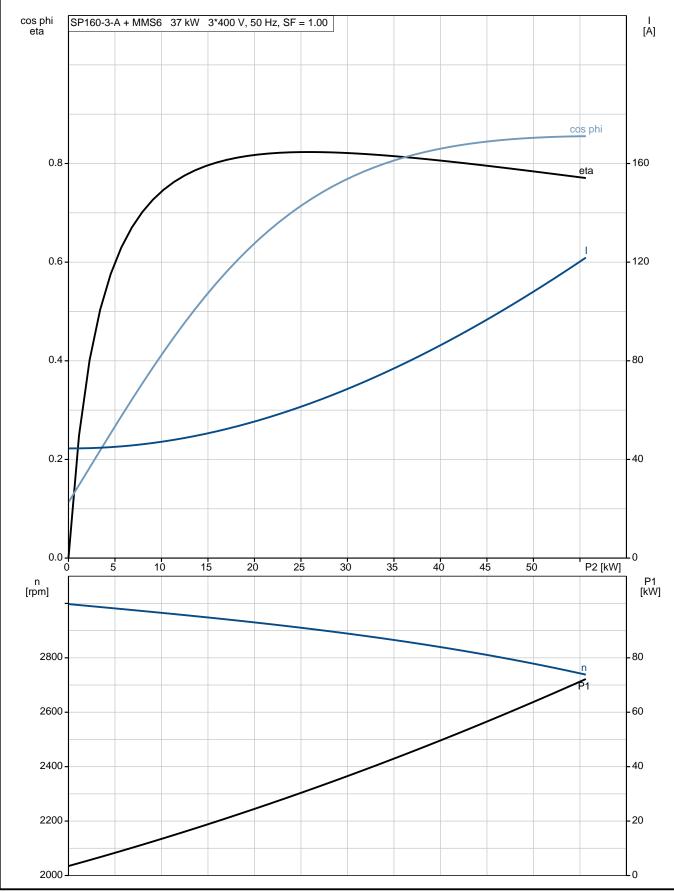
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Description	Value
Net weight:	165 kg
Gross weight:	201 kg
Shipping volume:	0.295 m <sup>3</sup>
Country of origin:	GB
Custom tariff no.:	84137029



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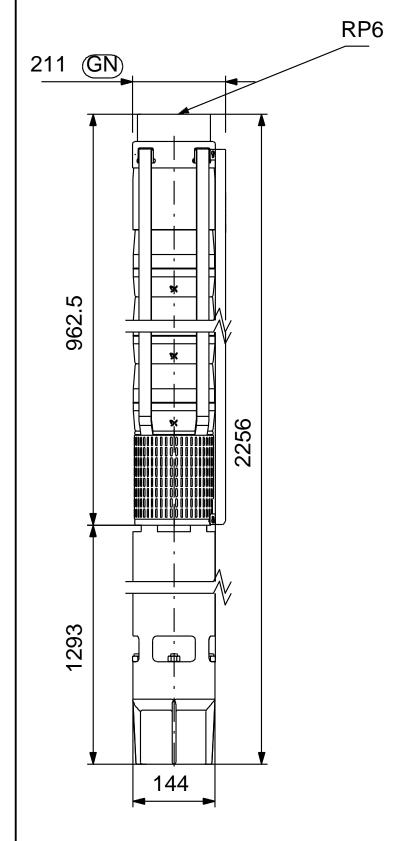
## 200243A3 SP 160-3-A 50 Hz





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# 200243A3 SP 160-3-A 50 Hz

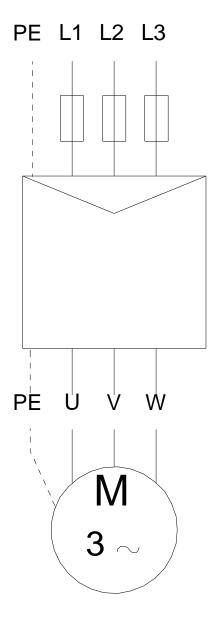


Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.



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