

		Date:	10/11/2020
	Description		
	SP 60-3		
	() T		
	PTE		
		duct picture may differ from	actual product
	Product No.: 14A01903		
	Submersible borehole pump, suitable for pu	mning clean water. Car	be installed vertically or borizontally. All st
	components are made in stainless steel, EN	1.4301 (AISI 304), that	t ensures high corrosive resistance. This p
	carries drinking water approval.		-
	The pump is fitted with a 5.5 kW MS4000 m	otor with sand shield, m	nechanical shaft seal, water-lubricated journ
	bearings and a volume compensating diaph	ragm. The motor is a ca	anned type submersible motor offering good
	mechanical stability and high efficiency. Suit	able for temperatures u	in to $40$ °C
L	mechanical stability and high efficiency. Suit	•	
	The motor is fitted with the Grundfos Tempo	on sensor that, by use	
	The motor is fitted with the Grundfos Tempo MP204 control panel, enables temperature r	on sensor that, by use monitoring.	
	The motor is fitted with the Grundfos Tempo	on sensor that, by use monitoring.	
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	The motor is fitted with the Grundfos Tempo MP204 control panel, enables temperature r The motor is for direct-on-line starting (DOL) <b>Further product details</b>	on sensor that, by use on onitoring. ).	
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	The motor is fitted with the Grundfos Tempor MP204 control panel, enables temperature of The motor is for direct-on-line starting (DOL) <b>Further product details</b> The pump is suitable for applications similar - raw-water supply - irrigation - groundwater lowering - pressure boosting - fountain applications. The Grundfos SP pump is renowned for its Minimum Efficiency Index, and therefore Gru <b>FURD</b> All pump surfaces that are in contact with pu and wear-resistant. The corrosion diagram b temperature in Celsius (y-axis) and the cont - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos SP pump is renowned for its for the function - The Grundfos - The Grund	on sensor that, by use monitoring. to the following: high efficiency and alread undfos is amongst the back sentration of chloride in	of powerline communication together with a ady complies with the requirements of the best in class within submersible pumps.
	The motor is fitted with the Grundfos Tempor MP204 control panel, enables temperature of The motor is for direct-on-line starting (DOL) <b>Further product details</b> The pump is suitable for applications similar - raw-water supply - irrigation - groundwater lowering - pressure boosting - fountain applications. The Grundfos SP pump is renowned for its f Minimum Efficiency Index, and therefore Gru <b>FURP</b> All pump surfaces that are in contact with pu and wear-resistant. The corrosion diagram b temperature in Celsius (y-axis) and the conc <b>10</b> <b>10</b> <b>10</b> <b>10</b> <b>10</b> <b>10</b> <b>10</b> <b>10</b>	in sensor that, by use of monitoring. to the following: high efficiency and alread undfos is amongst the back of the capability of the	of powerline communication together with a ady complies with the requirements of the best in class within submersible pumps.

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10/11/2020

Qty. | Description

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.

Date:

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.

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 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 is fitted with the Grundfos Tempcon temperature sensor device that includes a NTC-resistor which senses the temperature. The resistor is built-in close to the winding. The temperature is converted into a high-frequency signal which is sent via the submersible drop cable and which can be converted into a temperature reading by means of Grundfos MP204.

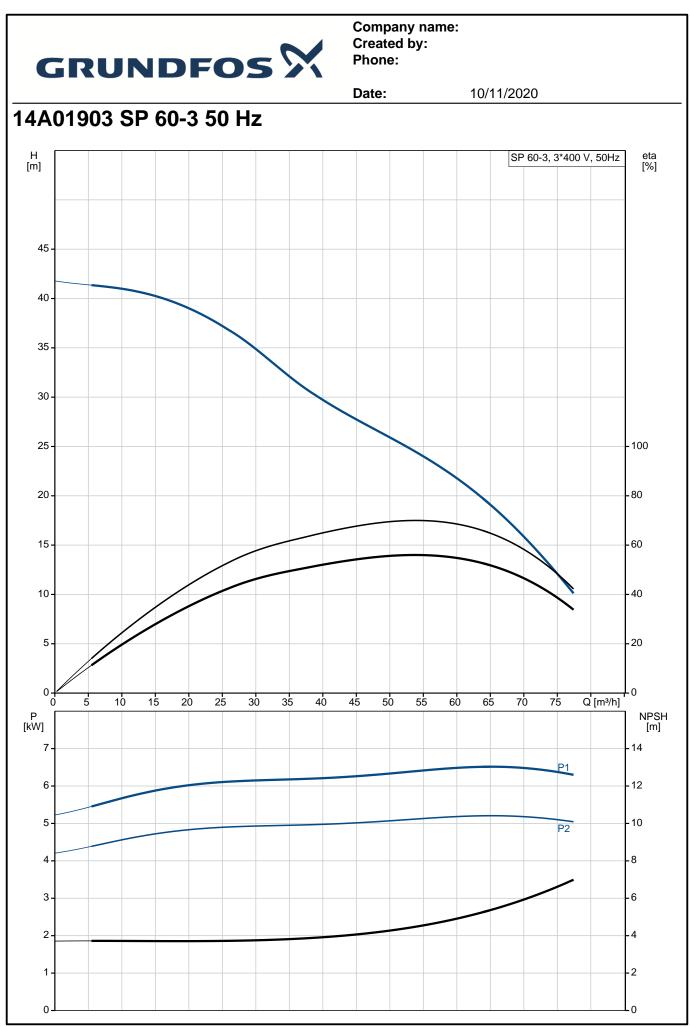
The MP204 is an electronic motor protection device that also monitors the supply network quality to protect the submersible motor against supply network disturbances.



Technical: Pump speed on which pump data are based: 2900 rpm Rated flow: 60 m³/h Rated head: 22 m Shaft seal for motor: HM/CER Approvals on nameplate: CE,EAC Curve tolerance: ISO9906:2012 3B Motor version: T40 Materials: Pump: Stainless steel EN 1.4301 AISI AISI 304 Impeller: Stainless steel EN 1.4201	Liquid: Pumped liquid: Maximum liquid temperature: Max liquid t at 0.15 m/sec: Selected liquid temperature: Density:	Water 40 °C 40 °C 20 °C 998.2 kg/m³
Pump: Stainless steel EN 1.4301 AISI AISI 304 Impeller: Stainless steel	Pump speed on which pump dat Rated flow: Rated head: Shaft seal for motor: Approvals on nameplate: Curve tolerance:	60 m <sup>3</sup> /h 22 m HM/CER CE,EAC ISO9906:2012 3B
Motor: Motor: Motor: Motor: Motor: Motor: Motor: AISI AISI 304 DIN WNr. 1.4301 AISI 304 AISI 304	Pump:	EN 1.4301 AISI AISI 304 Stainless steel EN 1.4301 AISI AISI 304 Stainless steel DIN WNr. 1.4301



In P M E M R P M R R S	escription Istallation: ump outlet: lotor diameter: lectrical data: lotor type: ated power - P2: ower (P2) required by pump: lains frequency:	RP4 4 inch MS4000 5.5 kW				
P M E M R P M R R S	ump outlet: lotor diameter: lectrical data: lotor type: ated power - P2: ower (P2) required by pump:	4 inch MS4000 5.5 kW				
M E M R P M R R S	lotor diameter: lectrical data: lotor type: ated power - P2: ower (P2) required by pump:	4 inch MS4000 5.5 kW				
E M R M R R S	lectrical data: lotor type: ated power - P2: ower (P2) required by pump:	MS4000 5.5 kW				
M R P M R S	lotor type: ated power - P2: ower (P2) required by pump:	5.5 kW				
R P M R S	ated power - P2: ower (P2) required by pump:	5.5 kW				
R P M R S	ated power - P2: ower (P2) required by pump:	5.5 kW				
P M R S	ower (P2) required by pump:					
M R R Si	lains frequency:	5.5 kW				
R R Si	laine negacitey.	50 Hz				
R St	ated voltage:	3 x 380-400-415 V				
S	ated current:	13.0-13.0-13.4 A				
	tarting current:	480-530-550 %				
10	os phi - power factor:	0.85-0.81-0.76				
	ated speed:	2850-2860-2870 rpm				
	tart. method:	direct-on-line				
		IP68				
	nclosure class (IEC 34-5):	F				
	sulation class (IEC 85):					
	uilt-in temp. transmitter:	yes				
	lotor No:	79195511				
	Others:					
	linimum efficiency index, MEI â					
	rP status:	EuP Standalone/Proc	3.			
	et weight:	38.9 kg				
	ross weight:	43.3 kg				
S	hipping volume:	0.052 m³				
D	anish VVS No.:	388466003				





		Date:	10/11/	10/11/2020		
Description	Value	H [m]		SP 60-3, 3*400 V, 50Hz	eta [%]	
General information:						
Product name:	SP 60-3					
Product No:	14A01903	45 -			_	
EAN number:	5700391138973					
Price:	3700031100073	40 -			_	
Technical:		25				
		35 -				
Pump speed on which pump data are based:	2900 rpm	30 -		<b></b>		
Rated flow:	60 m³/h	25 -			100	
Rated head:	22 m	25 -			100	
Stages:	3	20 -			- 80	
Impeller reduc.:	NONE	20				
Shaft seal for motor:	HM/CER	15 -		- \	- 60	
Approvals on nameplate:	CE,EAC					
Curve tolerance:	ISO9906:2012 3B	10-			- 40	
Model:	B					
Valve:	YES	5-			- 20	
Motor version:	T40	0 <del>       </del>	20 30 40	50 60 70 Q [m³/h]		
Materials:		P	40		NPSH	
Pump:	Stainless steel	[kW]			[m]	
Pump:	EN 1.4301	6		P1	12	
Pump:	AISI AISI 304					
Impeller:	Stainless steel	5-		P2	- 10	
Impeller:	EN 1.4301	4			- 8	
Impeller:	AISI AISI 304	3-			- 6	
Motor:	Stainless steel					
Motor:	DIN WNr. 1.4301	2			- 4	
Motor:	AISI 304	1 -			-2	
Installation:	AI01 304	0				
		I			Ū	
Pump outlet:	RP4	146 GN	RP4			
Motor diameter:	4 inch					
Liquid:						
Pumped liquid:	Water					
Maximum liquid temperature:	40 °C					
Max liquid t at 0.15 m/sec:	40 °C					
Selected liquid temperature:	20 °C	604				
Density:	998.2 kg/m <sup>3</sup>					
Electrical data:						
Motor type:	MS4000					
Applic. motor:	GRUNDFOS					
Rated power - P2:	5.5 kW					
Power (P2) required by pump:	5.5 kW					
Mains frequency:	5.5 KW 50 Hz	-↓ N # 7/ ↓				
		95				
Rated voltage:	3 x 380-400-415 V					
Rated current:	13.0-13.0-13.4 A	L1 L2 L3 PE				
Starting current:	480-530-550 %					
Cos phi - power factor:	0.85-0.81-0.76	ΦΦΦί				
Rated speed:	2850-2860-2870 rpm	ΦΦΦį				
Start. method:	direct-on-line					
Enclosure class (IEC 34-5):	IP68					
Insulation class (IEC 85):	F					
Motor protec:	NONE					
Thermal protec:	external					
Built-in temp. transmitter:	yes					
Motor No:	79195511	U V W PE				
	19190011					
Others:	0.40					
Minimum efficiency index, MEI ≥:	0.40	(м \/				
	EuP Standalone/Prod.	(3~)				



Date:10/11/2020DescriptionValueNet weight:38.9 kgGross weight:43.3 kgShipping volume:0.052 m³Danish VVS No.:388466003

