

|   |   |                     | Date:               | 10/11/2020   |               |
|---|---|---------------------|---------------------|--|---------------|
|   | Description   |                     |                     |  |               |
| t | SP 46-35  |                     |                     |  |               |
|   |   |                     |                     |  |               |
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|   |   |                     |                     |  |               |
|   | Note!   | Product pict        | ure may differ fron | n actual product   |               |
|   | Product No.: 15A44335   |                     |                     |  |               |
|   | Submersible borehole pump, suitable for   | r pumpina (         | clean water. Ca     | n be installed vertically or horizontally  | All ste       |
|   | components are made in stainless steel,   | EN 1.430            | 1 (AISI 304), tha   | at ensures high corrosive resistance. Th   | nis pu        |
|   | carries drinking water approval.  | <b>0</b> 0 <i>i</i> |                     |  |               |
|   | The pump is fitted with a 55 kW MMS80 compensating diaphragm. The rewindab            | UU motor w          | vith sand shield,   | water-lubricated journal bearings and a<br>s complete access to the windings for e | a volu<br>asv |
|   | rewinding. The stator windings are PE/P<br>temperatures up to 50 °C. The motor is f   | A insulated         | made for conti      | nous operations (S1). Suitable for   | ,             |
|   |   |                     |                     |  |               |
|   | The motor is not fitted with a temperature can be fitted.                             | e sensor. If        | f temperature m     | onitoring is desired, a Pt100 or Pt1000  | sens          |
|   |   |                     |                     |  |               |
|   | The motor is for direct-on-line starting (D   | /OL).               |                     |  |               |
|   | Further product details   |                     |                     |  |               |
|   | The pump is suitable for applications sin   | nilar to the        | followina:          |  |               |
|   | - raw-water supply  |                     | 5                   |  |               |
|   | - irrigation  |                     |                     |  |               |
|   | - groundwater lowering  |                     |                     |  |               |
|   | <ul> <li>pressure boosting</li> <li>fountain applications.</li> </ul>                 |                     |                     |  |               |
|   | The Grundfos SP pump is renowned for  | its high eff        | iciency and alre    | adv complies with the requirements of  | the           |
|   | Minimum Efficiency Index, and therefore   |                     |                     |  |               |
|   | EUP   |                     |                     |  |               |
|   | READY   |                     |                     |  |               |
|   | TECHNOLOGY  |                     |                     |  |               |
|   | GRUNDFOS X  |                     |                     |  |               |
|   |   |                     |                     |  |               |
|   | Pump  |                     |                     |  |               |
|   | All pump surfaces that are in contact wit<br>and wear-resistant. The corrosion diagra |                     |                     |  |               |
|   | temperature in Celsius (y-axis) and the c   | concentratio        | on of chloride in   | i ppm (x-axis).  | 10 11         |
|   | 100   | 100 -               |                     |  |               |
|   | EN 1.4301   | 90                  |                     | EN 1.4301  |               |
|   | 80  | 80 —                |                     |  |               |
|   | 70 -  | 70                  |                     |  |               |
|   | 60 -  | 60 -                |                     |  |               |
|   | 50  | 50 -                |                     |  |               |
|   | 40 -  | 40 -                |                     |  |               |
|   |   |                     |                     |  |               |
|   | 30  | 30 —                |                     |  |               |
|   | 20 -  | 20 -                |                     |  |               |
|   |   | -                   |                     |  |               |

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## 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.

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 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.

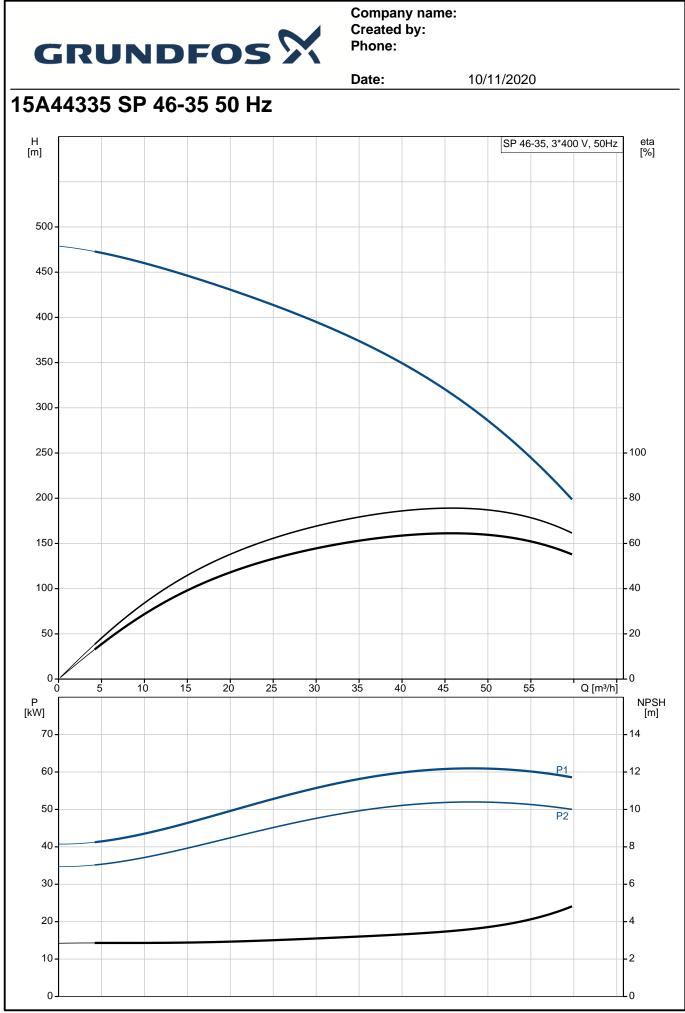
The motor can be fitted with a Pt100 or Pt1000 sensor that together with a control unit ensures that the maximum operating temperature conditions are not exceeded.

| Liquid:<br>Pumped liquid:<br>Maximum liquid temperature:<br>Max liquid t at 0.15 m/sec:<br>Max liquid t at 0.5 m/sec:<br>Selected liquid temperature:<br>Density: | Water<br>45 °C<br>40 °C<br>45 °C<br>20 °C<br>998.2 kg/m <sup>3</sup>   |
|---|--|
| Technical:<br>Pump speed on which pump dat<br>Rated flow:<br>Rated head:<br>Shaft seal for motor:<br>Curve tolerance:<br>Motor version:                           | a are based: 2900 rpm<br>46 m³/h<br>308 m<br>SIC/SIC<br>ISO9906:2012 3B<br>T45   |
| Materials:<br>Pump:<br>Impeller:<br>Motor:  | Stainless steel<br>EN 1.4301<br>AISI AISI 304<br>Stainless steel<br>EN 1.4301<br>AISI AISI 304<br>Cast iron<br>DIN WNr. 0.6025<br>ASTM 35-40 |
| Installation:<br>Pump outlet:<br>Motor diameter:  | R4<br>8 inch   |
| Electrical data:<br>Motor type:<br>Rated power - P2:<br>Power (P2) required by pump:<br>Mains frequency:<br>Rated voltage:<br>Rated current:                      | MMS8000<br>55 kW<br>55 kW<br>50 Hz<br>3 x 380-400-415 V<br>116-114-112 A   |



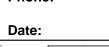
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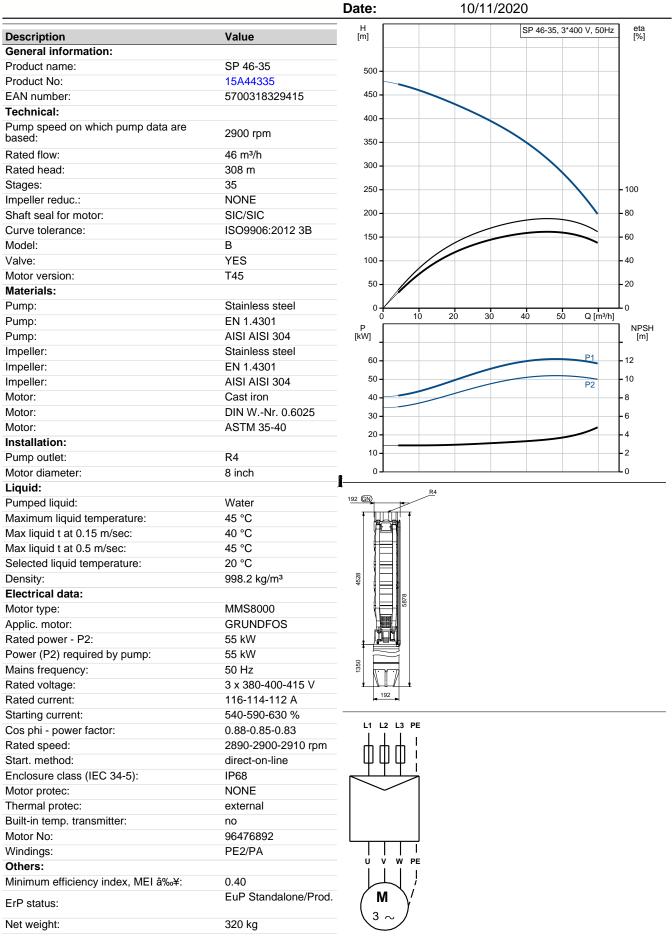
| GRUNDF                       |                      | Date: | 10/11/2020 |  |  |  |
|------------------------------|----------------------|-------|------------|--|--|--|
| Description                  |                      |       |            |  |  |  |
| Starting current:            | 540-590-630 %        |       |            |  |  |  |
| Cos phi - power factor:      | 0.88-0.85-0.83       |       |            |  |  |  |
| Rated speed:                 | 2890-2900-2910 rpm   |       |            |  |  |  |
| Start. method:               | direct-on-line       |       |            |  |  |  |
| Enclosure class (IEC 34-5):  | IP68                 |       |            |  |  |  |
| Built-in temp. transmitter:  | no                   |       |            |  |  |  |
| Motor No:                    | 96476892             |       |            |  |  |  |
| Windings:                    |                      |       |            |  |  |  |
| windings:                    | PE2/PA               |       |            |  |  |  |
| Others:                      |                      |       |            |  |  |  |
| Minimum efficiency index, ME |                      |       |            |  |  |  |
| ErP status:                  | EuP Standalone/Proc  | ł.    |            |  |  |  |
| Net weight:                  | 320 kg               |       |            |  |  |  |
| Gross weight:                | 435 kg               |       |            |  |  |  |
| Shipping volume:             | 0.927 m <sup>3</sup> |       |            |  |  |  |
| Country of origin:           | DK                   |       |            |  |  |  |
| Custom tariff no.:           | 84137029             |       |            |  |  |  |
|                              |                      |       |            |  |  |  |
|                              |                      |       |            |  |  |  |
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Date:10/11/2020DescriptionValueGross weight:435 kgShipping volume:0.927 m³Country of origin:DKCustom tariff no.:84137029

