

Date: 01/10/2020

Qty. | Description

SL1.50.65.09.E.EX.2.1.502



Note! Product picture may differ from actual product

Product No.: 96878452

Non-self-priming, single-stage, centrifugal pump designed for handling wastewater, process water and unscreened raw sewage.

The pump is designed for intermittent and continous operations in submerged installation. The revolutionary S-tube® impeller provides free spherical passage of solids up to 1 15/16 in and is suitable for wastewater with a dry matter content of up to 3 %. A unique stainless-steel clamp assembling system enables quick and easy disassembly of the pump from the motor unit for service and inspection. No special tools are required. Pipework connection is via a DIN flange.

The pump is explosion-proof.

Further product details

The pump is suitable for both temporary and permanent installation either as free-standing on ring stand or on an auto-coupling system.

Pump

The pump housing, motor top and impeller are made of cast iron (EN-GJL-250).

All surfaces of the cast iron parts are protected with cataphoresis coating. The surface of the cast iron pump parts is afterwards painted with environmental friendly powder coating (type NCS 9000N (black), gloss code 30, thickness 100 µm) which ensures high impact and corrosion protection. The final pump is assembled from already painted parts which ensures that no rust or scale can be formed in grooves between parts, etc.

The S-tube® impeller is providing free spherical passage through the impeller and pump housing and creates a natural extension of the pipework connected to the pump. The S-tube® impeller is a wet-balanced and tube-shaped channel impeller placed in a pump housing that matches the smooth tube shape leaving no obstructions or dead zones.

The key to the S-tube® design is simplicity, with no cutting or moving functions that can get worn over time, thereby ensuring constant, superior efficiency. The simple design means lower life cycle costs because abrasive wear is reduced and there are fewer cloqqing incidents.



Date: 01/10/2020



The shaft seal consists of two mechanical seals that ensure a reliable sealing between the pumped liquid and motor. The shaft seals are incorporated in a single-unit cartridge shaft seal system that is easy to replace in the field without use of special tools.

The combination of the primary and secondary seals in a cartridge shaft seal system results in a shorter assembly length compared to conventional shaft seals.

- Primary seal: Silicon carbide/silicon carbide (SiC/SiC)
- Secondary seal: Carbon/Ceramics

The shaft seal is bidirectional, meaning it operates correctly in case of backflow through the pump.



The pump is approved according to CE 0344. The pump is approved for installation in explosive atmospheres and holds the following examination certificate:

- ATEX (EU): KEMA08ATEX0125X
- IECEX: IECEX KEM08.0039X

The certificate has been issued according to the ATEX directive (94/9/EC).

For applications involving a risk of explosion, or where otherwise required, the pump is approved with the following explosion protection classifications.

Mains-driven pump, without sensor:

II2 G Ex cd IIB T3, T4 Gb

Mains-driven pump, with sensor:

II2 G Ex cd mb IIB T3, T4 Gb

Frequency converter pump, without sensor:

II2 G Ex cd IIB T3, T4 Gb

Frequency converter pump, with sensor:

II2 G Ex cd mb IIB T3, T4 Gb

Note: Explosion-proof pumps must always be fully submerged.

Motor

The motor is a watertight, totally encapsulated motor supplied with a 33 ft power cable. The stainless steel plug is fastened with a union nut. This nut and the O-rings provide sealing against ingress of the liquid.

The plug is polyurethane-embedded, ensuring a watertight and durable seal around the leads of the cable. This prevents the ingress of water into the motor through the cable in case of cable breakage or adverse handling in connection with installation or service.

A compact motor construction with a short shaft reduces vibrations, resulting in an increased efficiency and lifetime of the shaft seal and ball bearings.



Date: 01/10/2020

Qty. **Description**

The motor features built-in thermal protection to protect the motor against overheating and ensure the reliability. The pump is designed for speed-controlled operation to keep the energy consumption at a minimum. To avoid the risk of sedimentation in the pipes, we recommend that you operate the speed-controlled pump within a speed range of 30 % to 100 % and at a flow rate above 1 m/s.

Controls:

Moisture sensor: without moisture sensors Water-in-oil sensor: without water-in-oil sensor

AUTOADAPT: YES

Liquid:

Pumped liquid: Any Newtonian liquid

Maximum liquid temperature: 104 °F 62.29 lb/ft3 Density:

Technical:

Type of impeller: SINGLE CHANNEL

Maximum particle size: 1 15/16 in Primary shaft seal: SIC/SIC Secondary shaft seal: LIPSEAL Approvals on nameplate: CE 0344

Curve tolerance: ISO9906:2012 3B2

Materials:

Pump housing: Cast iron EN-JL-1030

Cast iron

Impeller: EN-GJS-500-7

EN-GJL-200

Motor:

Installation:

Maximum ambient temperature: 104 °F Flange standard: DIN Pump inlet: 65 Pump outlet: 65 Pressure rating: PN 10 Maximum installation depth: 32.8 ft Frame range: Α

Electrical data:

Power input - P1: 1.3 kW Rated power - P2: 1.21 HP Mains frequency: 50 Hz Rated voltage: 1 x 230 V Voltage tolerance: +6/-10 % Max starts per, hour: 30 Rated current: 6.1 A Rated current at 3/4 load: 5.1 A Rated current at 1/2 load: 4.1 A Starting current: 38 A Rated current at no load: 2.6 A Cos phi - power factor: 0.96 Cos phi - p.f. at 3/4 load: 0.92 Cos phi - p.f. at 1/2 load: 0.86 Rated speed: 2920 rpm Motor efficiency at full load: 67 % Motor efficiency at 3/4 load: 63 % Motor efficiency at 1/2 load: 55 % Capacitor size - run: 20 µF



Date: 01/10/2020

Qty. Description

Number of poles: 2

Start. method: direct-on-line

Enclosure class (IEC 34-5): IP68
Insulation class (IEC 85): F
Explosion proof: yes
Length of cable: 33 ft
Cable type: LYNIFLEX

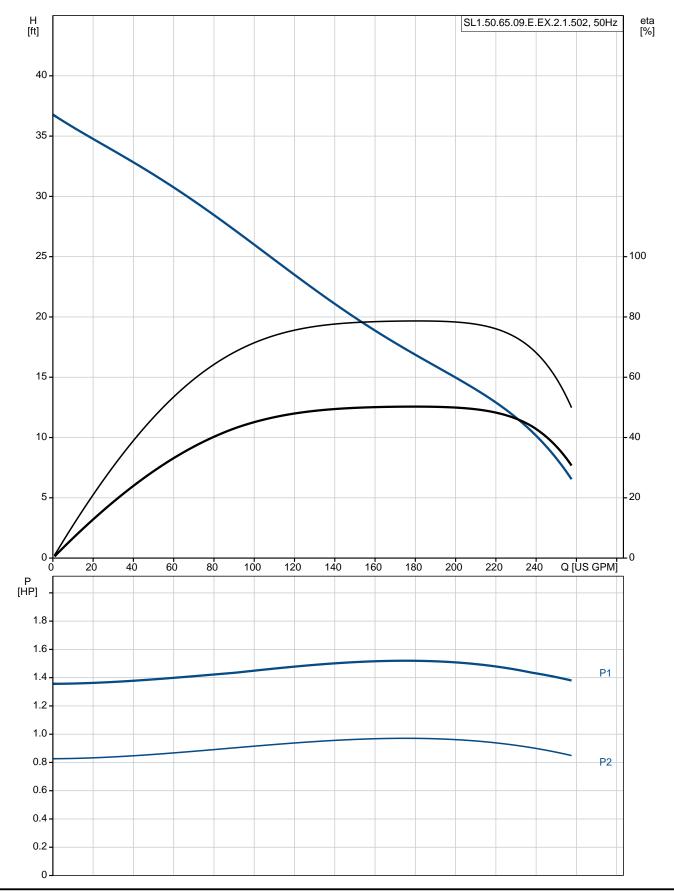
Others:

Net weight: 131 lb
Country of origin: HU
Custom tariff no.: 84137021



Date: 01/10/2020

96878452 SL1.50.65.09.E.EX.2.1.502 50 Hz

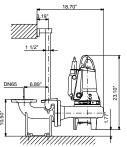


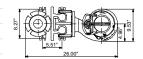


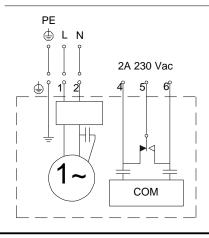
Date: 01/10/2020

| Description | Value |
|--------------------------------|---------------------------|
| General information: | |
| Product name: | SL1.50.65.09.E.EX.2.1.502 |
| Product No: | 96878452 |
| EAN number: | 5700312550303 |
| Price: | GBP 2415 |
| Technical: | |
| Maximum flow: | 257 US GPM |
| Max flow: | 257 US GPM |
| Head max: | 37.73 ft |
| Type of impeller: | SINGLE CHANNEL |
| Maximum particle size: | 1 15/16 in |
| Primary shaft seal: | SIC/SIC |
| Secondary shaft seal: | LIPSEAL |
| Approvals on nameplate: | CE 0344 |
| Curve tolerance: | ISO9906:2012 3B2 |
| Cooling jacket: | without cooling jacket |
| Materials: | marour ocoming jacrior |
| Pump housing: | Cast iron |
| Pump housing: | EN-JL-1030 |
| Impeller: | Cast iron |
| Impeller: | EN-GJS-500-7 |
| Motor: | EN-GJL-200 |
| Installation: | EN COL 200 |
| Maximum ambient temperature: | 104 °F |
| Flange standard: | DIN |
| Pump inlet: | 65 |
| Pump outlet: | 65 |
| Pressure rating: | PN 10 |
| Maximum installation depth: | 32.8 ft |
| Inst dry/wet: | SUBMERGED |
| Installation: | Vertical |
| Frame range: | A |
| Liquid: | |
| Pumped liquid: | Any Newtonian liquid |
| Maximum liquid temperature: | 104 °F |
| Density: | 62.29 lb/ft ³ |
| Electrical data: | 02.23 10/11 |
| Power input - P1: | 1.3 kW |
| Rated power - P2: | 1.21 HP |
| Mains frequency: | 50 Hz |
| Rated voltage: | 1 x 230 V |
| Voltage tolerance: | +6/-10 % |
| Max starts per. hour: | 30 |
| Rated current: | 6.1 A |
| Rated current at 3/4 load: | 5.1 A |
| Rated current at 1/2 load: | 4.1 A |
| Starting current: | 38 A |
| Rated current at no load: | 2.6 A |
| Cos phi - power factor: | 0.96 |
| Cos phi - p.f. at 3/4 load: | 0.92 |
| Cos phi - p.f. at 1/2 load: | 0.86 |
| Rated speed: | 2920 rpm |
| Motor efficiency at full load: | 67 % |
| Motor efficiency at 3/4 load: | 63 % |
| Motor efficiency at 1/2 load: | 55 % |
| Capacitor size - run: | 20 μF |
| Number of poles: | 20 με |
| Start. method: | direct-on-line |
| Jan. memou. | un Got-on-iil IG |

| | 0.7.072020 | |
|-----------|---------------------------------|--------------|
| H [ft] | SL1.50.65.09.E.EX.2.1.502, 50Hz | eta [%] |
| 40 - | | |
| 35 - | | |
| 30 - | | |
| 25 - | | - 100 |
| 20 - | | - 80 |
| 15 - | | - 60 |
| 10 - | | - 40 |
| 5 - | | - 20 |
| 0- | 50 100 150 200 Q [US GPM] | -0 |
| P [HP] | | |
| 1.5 - | | P1 |
| 1.0 - | | |
| 0.5 - | | P2 |
| 0 - | | |
| | | |









Date: 01/10/2020

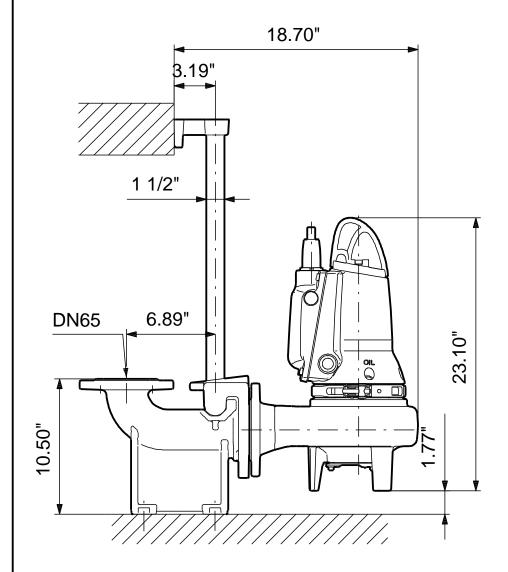
| Description | Value |
|-----------------------------|-----------------------------|
| Enclosure class (IEC 34-5): | IP68 |
| Insulation class (IEC 85): | F |
| Explosion proof: | yes |
| Motor protec: | THERMAL SWITCH |
| Length of cable: | 33 ft |
| Cable type: | LYNIFLEX |
| Controls: | |
| Control box: | not included |
| Moisture sensor: | without moisture sensors |
| Water-in-oil sensor: | without water-in-oil sensor |
| AUTOADAPT: | YES |
| Others: | |
| Net weight: | 131 lb |
| Country of origin: | HU |
| Custom tariff no.: | 84137021 |

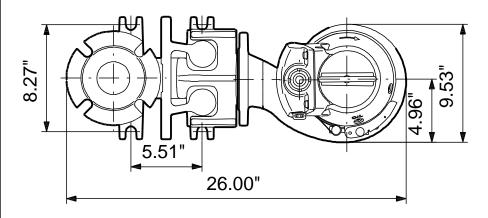


Date:

01/10/2020

96878452 SL1.50.65.09.E.EX.2.1.502 50 Hz





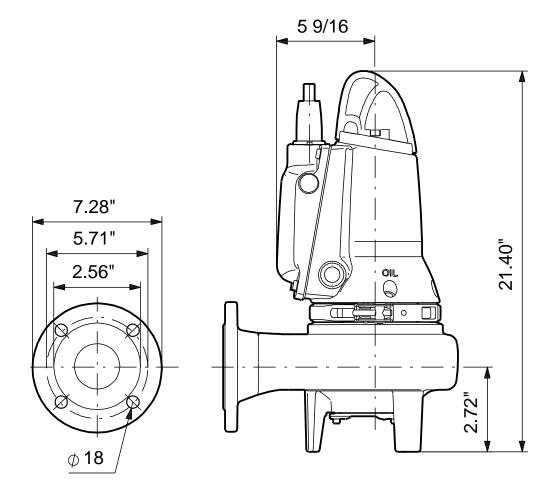
Note! All units are in [in] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.

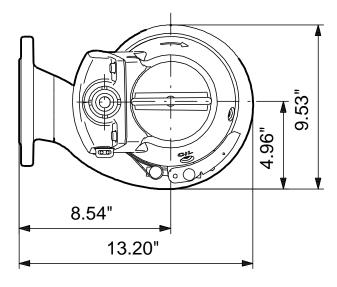


Date:

01/10/2020

96878452 SL1.50.65.09.E.EX.2.1.502 50 Hz





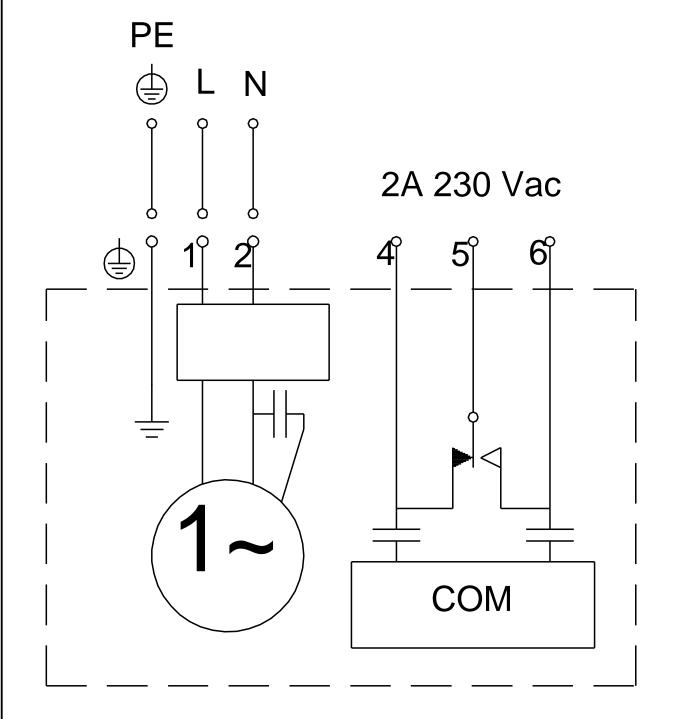
Note! All units are in [in] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.



Date:

01/10/2020

96878452 SL1.50.65.09.E.EX.2.1.502 50 Hz



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