

Plug&GO.evo

4" complete submersible pump, made of ZDS hydraulic part, ZDS 2-wire single-phase encapsulated water-cooled motor, supply cable in different lengths and Evo diagnostic device.

It is particularly recommended for domestic installations, since it is completely automatic and easy to install (it only needs a pressure tank to compensate for any leaks in the plant). The integrated electronics ensures the operation of the pump (pressure switch is not needed) and protects the pump against many other possible problems.

The Evo diagnostic device allows to continuously display the Plug&GO.Evo operation and to monitor the possible system faults, such as current overload, low voltage or high voltage, too frequent starts and stops and dry running; ensuring a high degree of automation and restoration.

Evo allows to continuously monitor the submersible pump, guaranteeing its operation in the most efficient way through a Soft start procedure (first start attempt with low starting torque) and if needed, a Strong start procedure to benefit of more starting torque.

Evo allows to continuously detect and monitor in real time the power: the electrical parameters obtained are processed by a special software, which will efficiently guarantee the correct working conditions. With Evo, the Plug&Go. Evo submersible pump can work and be continuously protected also when actual supply voltage values are at tolerance limit, providing the effectiveness of the protection operation. In addition, Evo, thanks to a "smart software" at variable time and automatic restart, can ensure the optimization of water withdrawal from the borehole or tank when the pump is dry running.



**THE INNOVATIVE SOLUTION
IN ONE BOX**

AUTOMATIC PROTECTIONS



Protection against dry running and lack of water in the well or tank



Thermal protection



Current overload protection



Protection against leaks in the installation and too frequent starts and stops



Protection against low/high voltage



Protection against voltage peaks



Check-valve working test

THE EASIEST 4" SUBMERSIBLE PUMP TO INSTALL

HYDRAULIC PART

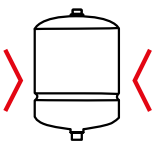


- ZDS hydraulic part with integrated electronic.
- Hydraulic part internal technology with floating ring and reinforced impeller.
- Great reliability with the integrated non-return valve.
- Special design and selected materials to ensure optimal resistance against sand and other abrasives.
- Improved impellers design, which requires less starting torque to the motor.

MOTOR



- 2 pole asynchronous 2-wire single-phase encapsulated water-cooled motor.
- Special and long lasting integrated start and run capacitor. In case of need it can be easily replaced.
- Soft start procedure.
- Axial and radial water-lubricated bearings allow for maintenance-free operation.
- Hermetically sealed stator by 304L stainless steel flanges, internal and external casings, filled by resin to guarantee optimal cooling capacity of temperature during operation.
- Rotor set on Kingsbury thrust block equipped with carbon clearance ring and oscillating pads in high-strength stainless steel to sustain high axial loads.
- Pre-filled with non-contaminating antifreeze lubricant liquid.
- Sand protection to guarantee optimal operation even with sand in the borehole.
- Removable lead connector to make installation and maintenance easier.
- Supply cable according to drinking water regulations (ACS), available in different lengths.

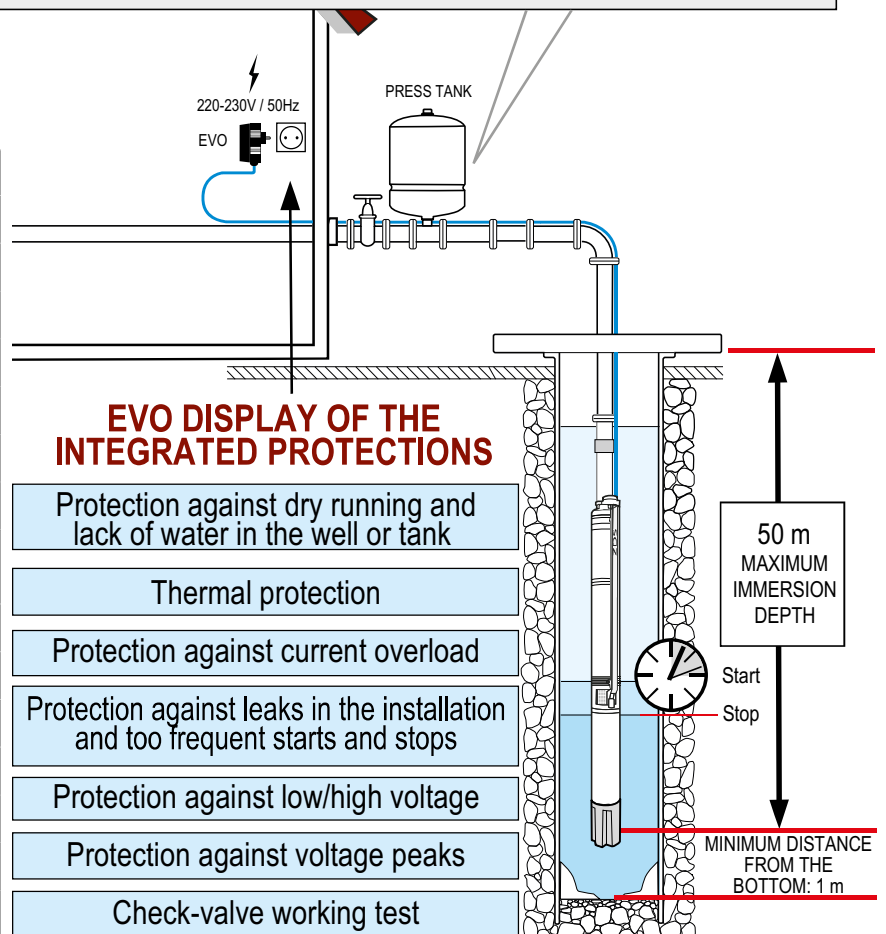


To guarantee the correct operation of Plug&GO.Evo, it is necessary to install a pressure tank if not provided already. The pressure tank should be correctly sized according to the installation requirements.

TECHNICAL SPECIFICATIONS










Power range:	0,37 - 1,1 kW
Voltage range:	1x220-230V / 50 Hz
Voltage tolerance 50Hz from nominal:	+6% / -10% U _N
Degree of protection:	IP 68
Insulation:	Cl. F
Rated ambient temperature:	max. 35° C
Required cooling flow:	min 8 cm/sec
Maximum quantity of suspended sand:	120 g/m ³
Maximum starts/h:	150, equally distributed
Mounting:	vertical/horizontal
Maximum immersion depth:	20-50 m
Allowed range of water PH:	6,4-8,0
Outlet diameter:	1"
Maximum delivery (Q):	6.000 l/h
Maximum head (H):	79 m



Evo: Display of the integrated protections



	<p>Protection against dry running and lack of water in the well The Plug&GO.Evo pump completely protects itself against lack of water in the well or tank, without the aid of other equipment (probes, cables, sensors, control panels etc.). In case of dry running, the Plug&GO.Evo pump automatically stops, to restart after a programmed cycle time.</p>
	<p>Thermal protection The Plug&GO.Evo pump is automatically protected against motor overheating due to an incorrect installation. In such cases, the thermal protection system stops the pump, which automatically restarts as soon as the correct working temperature parameters are restored.</p>
	<p>Current overload protection The Plug&GO.Evo pump is completely protected against overload. In case the pump is partially or totally blocked, the Plug&GO.Evo software, after some automatic restart attempts, makes the pump enter the stand-by mode.</p>
	<p>Protection against leaks in the installation and too frequent starts and stops The Plug&GO.Evo pump is automatically protected against leaks in the piping system (also when the pressure tank is exhausted or its membrane is damaged) and too frequent starts and stops (for example if the tank is of the incorrect size). In these cases, the Plug&GO.Evo automatically enters the stand-by mode.</p>
	<p>Protection against low/high voltage The Plug&GO.Evo pump is protected against low or high voltage, that can damage the motor. In these situations, in order to avoid potential damages, the pump stops running. A number of consecutive automatic attempts verifies if the operating parameters are correct; if they are not, the pump enters stand-by mode.</p>
	<p>Protection against voltage peaks The Evo diagnostic device is equipped with internal filters, designed to prevent voltage peaks from damaging the electronic components integrated in the Plug&GO.Evo. The filters are replaceable and easy to access. It is designed to filter the voltage peaks, eventually by interrupting the power supply. Evo diagnostic device works automatically and does not need any scheduled maintenance.</p>
	<p>Check-valve working test The Plug&GO.Evo pump regularly controls if the check valve works properly and if it is not clogged by any impurities. In case it is clogged, a special software procedure mechanically releases the check valve or makes the pump enter the stand-by mode.</p>

CHARACTERISTICS

Led interface for operation and protection's display

Alarm buzzer: audio signal during attempts and during stand-by

Ready to use, doesn't need any further calibration or setting up

Technical Specifications

Schuko plug:	Integrated
Casing:	Thermoplastic material
Voltage range:	1x220-230V +6% / -10% / 50 Hz
Degree of protection:	IP 40
Rated ambient temperature:	-10/+35° C
Size (cm):	7,6 x 13 x 5,5

ADVANTAGES:

INTEGRATED ELECTRONIC PROTECTIONS

INTEGRATED PRESSURE SWITCH

**MONITORING AND DIAGNOSTIC
OF PUMP STATUS**

ALARMS DIAGNOSTIC

SOFT START

NO CONTROL PANEL REQUIRED

