

# P.H3.DRP

## По вопросам продаж и поддержки обращайтесь:

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Вологда (8172)26-41-59	Липецк (4742)52-20-81	Рязань (4912)46-61-64	Ульяновск (8422)24-23-59
Воронеж (473)204-51-73	Магнитогорск (3519)55-03-13	Самара (846)206-03-16	Уфа (347)229-48-12
Екатеринбург (343)384-55-89	Москва (495)268-04-70	Санкт-Петербург (812)309-46-40	Хабаровск (4212)92-98-04
Иваново (4932)77-34-06	Мурманск (8152)59-64-93	Саратов (845)249-38-78	Челябинск (351)202-03-61
Ижевск (3412)26-03-58	Набережные Челны (8552)20-53-41	Севастополь (8692)22-31-93	Череповец (8202)49-02-64
Иркутск (395)279-98-46	Нижний Новгород (831)429-08-12	Симферополь (3652)67-13-56	Ярославль (4852)69-52-93
Россия (495)268-04-70	Киргизия (996)312-96-26-47	Казахстан (7172)727-132	

# P.H3.DRP

## P.H3.DRP SINGLE-PHASE COMPLETE SUBMERSIBLE PUMP (1X220-230V / 50 HZ)

4" complete pump made of technopolymer ZDS hydraulic part, DRP Dry-Running protection, ZDS single-phase PSC encapsulated water-cooled H3 motor, ZDS Control Box (which includes start and run capacitor) and supply cable in different lengths. Reliable, strong and easy to maintain, it's available in a wide range of models. It can be protected against many possible installation or operation faults thanks to the DRP protection device. The DRP is an electronic device that guarantees optimal protection of the submersible pump from dry-running, positioned in the pump supply cable just above the pump. In case of water drops below the DRP to allow water to flow into the bore hole. Thus the pump operation is directly proportional to the water supply for optimum efficiency. Unlike traditional solutions, there is no need for additional cables, sensors or control boxes. The P.H3.DRP submersible pumps are designed to be used in 4" boreholes (or larger) and thanks, for lifting, distribution, pressurization of water in water systems.

**kW:** 0,37 - 2,2

**Voltage range:** 1x220-230V / 50Hz

**Degree of protection:** IP 68

**Voltage tolerance 50Hz from nominal:** +6% / -10%  $U_n$

**Maximum quantity of suspended sand:** 150 g/m<sup>3</sup>

**Insulation:** F

**Rated ambient temperature:** max 35° C

**Cooling flow:** min 8 cm/sec

**Maximum starts/h:** 150, equally distributed

**Mounting:** vertical/horizontal

**Maximum delivery (Q):** 6.000 l/h

**Maximum head (H):** 150 m

**Maximum immersion depth:** 300 m

**Outlet diameter:** 1" 1" ¼ G-F

**Allowed range of water pH:** 6,4 - 8,0

## AUTOMATIC PROTECTIONS

### DRY-RUNNING PROTECTION

The DRP completely protects the P.H3.DRP submersible pump against lack of water in the well, without the aid of other equipment (probes, cables, sensors, control panels etc.). In case of dry running, the DRP automatically stops the pump. When the water level is restored in the well, the DRP restarts the motor after a programmed cycle time.

### PROTECTION AGAINST TOO FREQUENT START&STOPS

The DRP protects the P.H3.DRP submersible pump against leaks in the piping system (also when the

pressure tank is exhausted or its membrane is defective, or when there is a defective pressure switch) and too frequent starts and stops (for example if the tank is too small for the system). In such cases, to avoid potential damages, the DRP makes the pump enter the stand-by mode.

### **LOW VOLTAGE PROTECTION**

The DRP protects the P.H3.DRP submersible pump against low voltage. Low voltage can occur, for example, if the section of the power cable is not adequate considering the motor power and the distance between the plug and the pump itself; or if a generator is faulty or undersized for the pump.

### **CURRENT OVERLOAD PROTECTION**

The ZDS Control Box protects the P.H3.DRP complete pump against overload. In case the pump is partially or totally blocked, the overload protection in the ZDS Control Box stops the pump to protect it.

## **INFORMATION ON A PROPER INSTALLATION**

- If you are using a generator with an internal combustion engine, it is necessary that the generator's power measured in kW (in continuous delivery) is three times the rated power in kW of the submersible pump.
- The DRP must NOT be used with a frequency inverter.
- DRP doesn't work with demineralized water (such as rain water).
- DRP must not be used as a float.
- The DRP must be immersed in the same water as the pump in order to ensure continuity between the DRP and the pump casing.
- In order to reset the electronic protections, disconnect the pump power, wait 10 seconds, then plug it in again.

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