# Switchmatic 1 Switchmatic 2 complet pump protection

#### Electronic pressure switch. Patented model.

This unit **SWITCHMATIC 1** is an electronic pressure switch with an integrated digital pressure gauge. It can manage the start and stop of single-phase electric pumps up to 3 HP (2,2 kW). Cut-in and cut-out pressure implementation can be set easily and accurately through user friendly control panel. Wiring is carried out identically to a conventional electromechanical switch. It can operate as a differential pressure switch or as an inverted pressure switch. **SWITCHMATIC 2** also includes instantaneous current lecture and it can be mounted individually or in groups of 2 pumps synchronized and operating in cascade mode with alternated sequence of operation. This patented version controls and manages the overcurrent, the dry-run protection of the pump and fast cycling protection. The unit SWITCHMATIC 2/in-out includes an output for alarms and an input for external level connection.



**SWITCHMATIC 1 SWITCHMATIC 2 SWITCHMATIC 2/in-out** 



# **OPERATING CHARACTERISTICS**

- Operation modes: differential, inverted and synchronized (only SWITCHMATIC 2).
- Inner pressure transmitter.
- Integrated pressure gauge with bar and psi instantaneous display.
- User friendly control panel includinf manual start push-button, 3-digits display, led-lights and pushbuttons.
- Dry-running protection by current (SWITCHMATIC 2) and by minimal pressure (for type SWITCHMATIC 1).
- ART function (Automatic Reset Test). If the device has been stoped due the action of the safety system against dry operation, the ART tries to connect the pump, with a programmed periodicity because the water supply could have been restored.
- Rapid-cycle alarm: when the hydropneumatic tank has lost the air and frequent start-stops are produced an alarm is activated and is delayed the start.
- Overload alarm (only type SWITCHMATIC 2).
- Sleep mode with low power consumption.
- Advanced configuration menu: differentials, delay settings and other parameters.
- SWITCHMATIC 2/in-out also includes:
  - Volt-free contact for monitoring the alarms displayed in screen originated by irregularities or problems of the system.
  - Float switch connection, for minimum level detection in the suction tank, its use is optional. This system is independent of the dry-running safety system.
- Register of operational parameters. Information about: operating hours, counter of starts, counter of connections to the power supply.
- Register of alarms. Information about type and number of alarms.











Low Voltage Directive 2014/35/EC Electromagnetic Compatibility 2014/30/EC RoHS 2011/65/EC + 2015/863/EC



### **CONTROL PANEL**





- 3 digits display:
  - Operating mode: Instantaneus pressure.
  - Set mode: Cut in and cut out pressure.
- Bar-psi led-lights (green):
  - Operating mode: Bright bar or psi.
  - Pump on: Flashing bar or psi.
- Star-Stop led-light (green):
  - Bright: displayed Pressure start or Pressure stop.
  - Flashing: Setting Psart or Pstop.
- Push Buttons ▲▼: Increase or dicrease configuration parameters.
- ENTER push-button:
  - Manual start and stop.
  - Confirm configuration value.
- Alarm led-light  $\triangle$  (red): dry-run and fast cyclying.

#### **Only for SWITCHMATIC 2**

- "A" led-light (yellow):
  - Bright: Displayed instantaneous current consumption of the pump.
  - Flashing: Setting maximum current of the pump.
- Alarm led-light  $\bigtriangleup$ : dry-run, over current, fast cyclying
- "A" push-button: set and display current intensity.

#### **TECHNICAL CHARACTERISTICS**

	SWITCHMATIC 1 SWITCHMATIC 2
Power supply voltage	~1 x 110-230 Vac
Frequency	50/60 Hz
Max. current	16 A
Maximum pump power	2,2 kW (3 HP)
Starting pressure range (cut-in)	0,5 ÷ 11,5 bar
Stop pressure range (cut-out)	1 ÷ 12 bar
Maximum differential	11,5 bar
Minimum differential	0,3 bar (SW1) 0,5 bar (SW2)
Factory setting (cut-in/cut-out)	3 / 4 bar
Protection degree	IP55
Max. water temperature	40 °C
Max. environment temperature	50 °C
Net weight (without cables)	0,4 kg
Inlet thread	G1/4"F rotative nut NPT1/4"F

## **DIMENSIONS**





