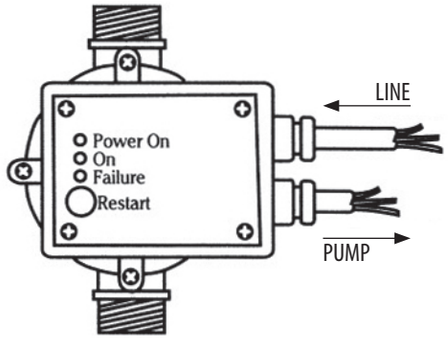
UNIT STARTING AND WORKING



On the cover back and inside the terminal board, a drawing shows how to make conections correctly. The cable used should have 6 mm min, and 9 mm max, outside diameter. In order to guarantee the water tight enclosure of the box, the four screws on its box must be tightly screwed.

STARTING
When the unit is connected to the electrical network, the green led "Power On" lights up and the yellow led "On" (pump in operation) indicates that the pump has been started.
The pump continues to operate for a few seconds enabling the system to fill in the pipes and to reach the required pressure.
If this lapse is insufficient, the red led "Failure" lights up. In this event, keep the "Restart" button pressed and wait, with a tap opened, until the red light is off.

Once the button is released and the tap is closed, the unit stops the pump at its maximum pressure.

FUNCTIONING
The starting operation archived, the unit is programmed to perform all the pump control operations automatically.
When particular operational breakdowns occur, such as water failure, obstruction of the suction pipe etc., the unit recognizes the breakdown and the red led "Failure" lights up: at the same time, a stop signal is sent to the pump to prevent damages caused by its working in the absence of water. Rectification of the failures that have caused the blockage, allows the system to be restarted by pressing the "Restart" button.

SPECIFICATIONS

Rating to	3.0kw	Protection rating	1P 65
Input voltage	220-250V	Maximum working pressure	10 bar
Frequency	50-60Hz	Maximum temperature rating	60°C
Intensity Max	15A	Connection	1" male
		CE approval	

UNIVERSAL PUMPS

Automatic Pump Control

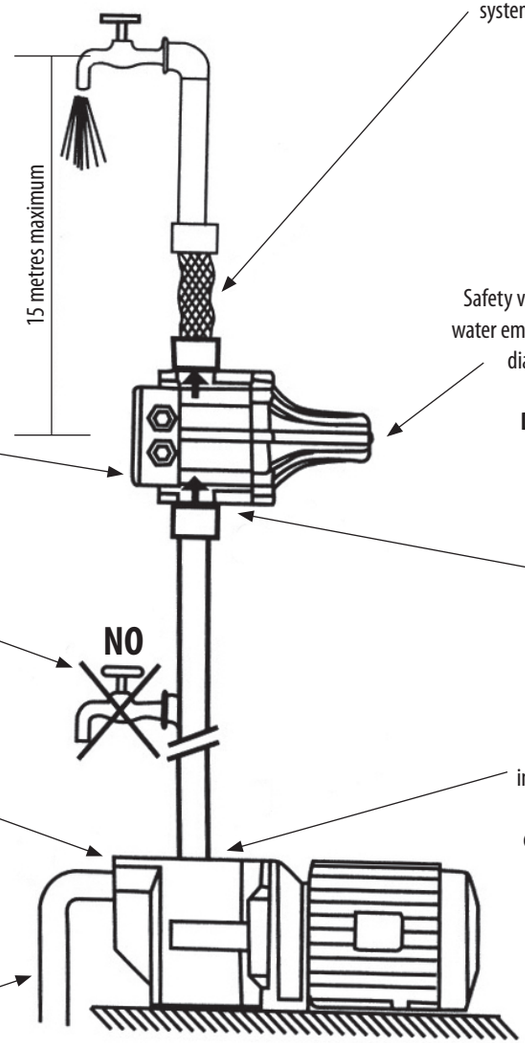
ELECTRONIC REGULATOR FOR ELECTRIC PUMPS

"moving water"

"moving water"

INSTRUCTIONS FOR CORRECT UNIT INSTALLATION

If the column of water between the pump and the highest tap exceeds 15 metres, the unit cannot be installed directly to the pump, but it has to be raised until the column of water between the unit and the highest tap does not exceed 15 metres.
i.e.: If the column of water is 20 metres from the pump, the unit must be placed 5 metres higher than the pump.



It is advisable to connect the unit outlet to the system by means of a flexible hose.

Safety valve preventing water emission in case of diaphragm break.

DO NOT TOUCH

The unit is equipped with a check valve to prevent the pipeline from loosing pressure.

Only install the unit with the arrows in the upward position.

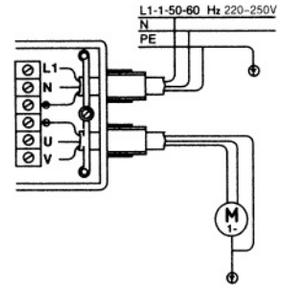
No taps can be installed between the pump and the unit.

PUMP'S PRESSURE
The unit is pre-set by the Manufacturer at a restarting pressure of 1.5 bar.
The pressure produced by the Pump must be normally 0.5 bar higher than the pre-set pressure.

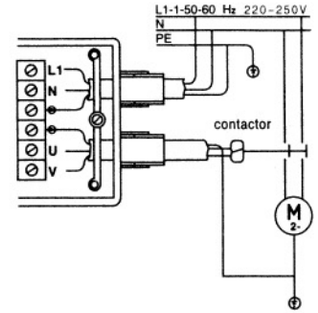
The unit can be installed directly on the pump, or between the pump and the first tap.

Before starting the unit check suction and ensure that the pump is primed.

WIRING DIAGRAMS FOR CONNECTING THE UNIT TO DIFFERENT PUMP MOTORS

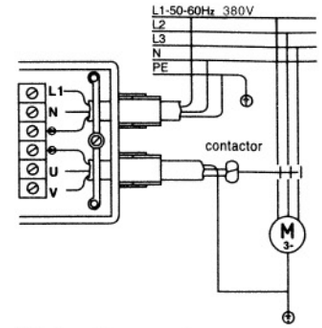


Wiring diagram for connection to a single phase 220V pumps up to 3.0kW.



Wiring diagram for connection to a single phase 220V pumps over 1.1kW through remote control switch.

SPECIFICATIONS FOR REMOTE CONTROL SWITCH
Minimum contacts capacity of 4kW or 5.5HP approx 220V.



Wiring diagram for connection of three phase 380V motor pumps through remote control switch.

SPECIFICATIONS FOR REMOTE CONTROL SWITCH
Minimum contacts capacity of 4kW or 5.5HP approx 220V.

POSSIBLE WORKING DEFECTS

TYPE OF DEFECT	CAUSES DEPENDING ON THE UNIT	CAUSES NOT DEPENDING ON THE UNIT
The pump does not start	The electronic card is broken	Voltage failure Pump jammed Electric cables inverted (Line/motor)
The pump does not stop	The electronic card is broken The flow detector is blocked in the upper position The reset button is blocked The pump does not provide sufficient pressure	Presence of leaks which are higher than the minimum flow 0.6 i/min
Intermittent pump working	The electronic card is broken The pump does not provide sufficient pressure	Presence of leaks which are lower than the minimum flow 0.6 i/min
The pump is jammed	The electronic card is broken The pump provides a pressure which is lower than the restarting pressure	Water failure Suction problems

"moving water"