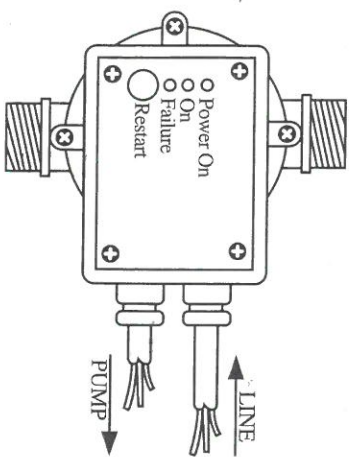


## UNIT STARTING AND WORKING



On the cover back and inside the terminal board, a drawing shows how to make connections 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 led is off.

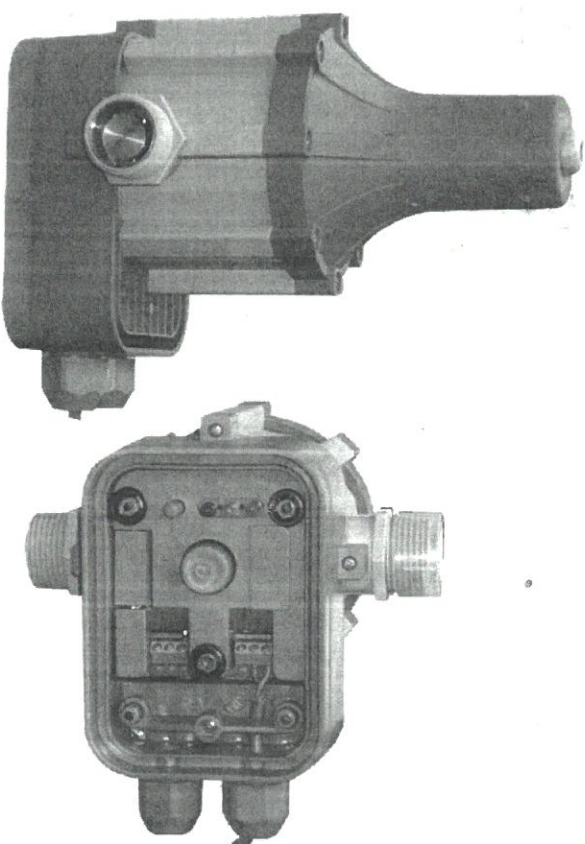
Once released the button and closed the tap, the unit stops the pump at its maximum pressure.

### 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.

## Automatic Control For Water Pump



### SPECIFICATIONS

Input voltage	220-240V	Maximum working pressure	10 bar
Frequency	50-60Hz	Maximum temperature rating	60 °C
Intensity Max	10A	Connection	1" male
Protection rating	IP 65		

## INSTRUCTIONS FOR CORRECT UNIT INSTALLATION

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

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

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

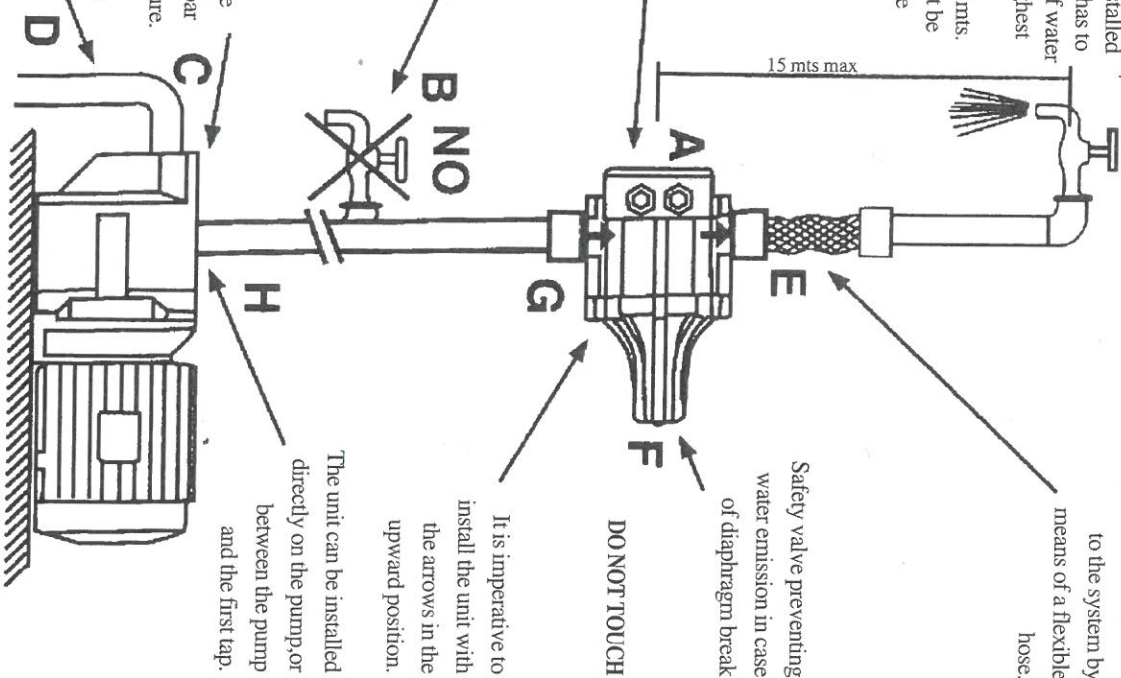
No taps can be installed between the pump and the unit.

### PUMPS PREWURE

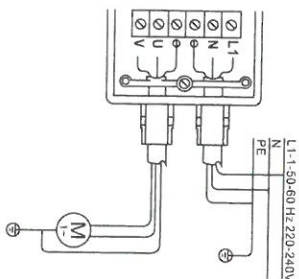
The unit is pre-set by the Manufacturer at a restarting Pressure of 1.5bar.

The pressure produced by the Pump must be normally 0.5bar higher than the pre-set pressure.

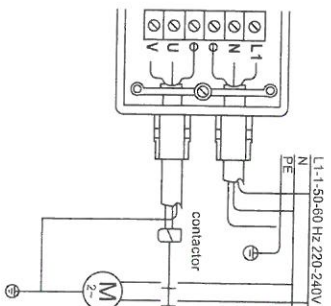
Before starting the unit check suction and ensure that the pump is primed.



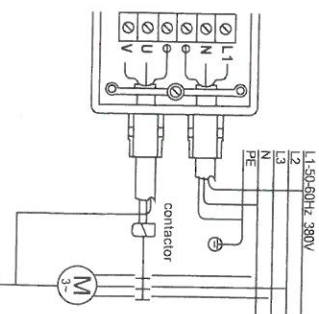
## WIRING DIAGRAMS FOR CONNECTING THE UNIT TO DIFFERENT KINDS OF PUMP'S MOTORS



Wiring diagram for connection of single-phase 220V pumps up to 1.1 Kw.



Wiring diagram for connection of single phase 220V pumps over 1.1 Kw through remote control switch.



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

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

**SPECIFICATIONS FOR REMOTE CONTROL SWITCH**  
Minimum contacts capacity of 4 Kw or 5.5 HP 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 l/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 l/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