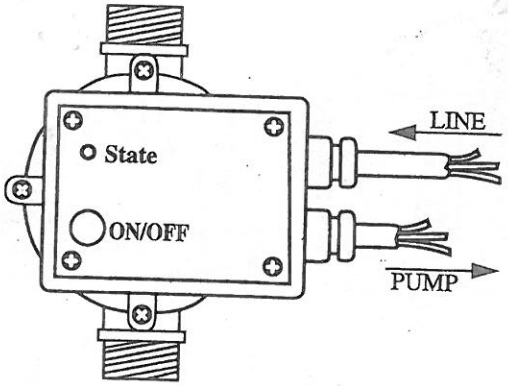
UNIT STARTING AND WORKING



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.

FUNCTION:

1. Start and stop the pump automatically
2. Protcct the pump from damage caused by dry-running
3. Examinc the water automatically
4. After cutting-off. start automatically with electric
5. Protect the pump from damage caused by overheat
6. Forced start

State LED:

1. Green led lights up: the unit is off
2. Green led and red led flash alternately (in 1HZ): pump in operation
3. Green led and red led flash alternately (Green led 2.5S. Red led 0.5S, flash alternately 3S/time): pump stops. waiting to start.
4. Red led lights up: system failure: after troubleshooting. restart the unit after the power is turned off for less than 5S can solve the state.(Anytime, press ON/OFF button lasts 3S. red led lights up. the unit is forced protection)

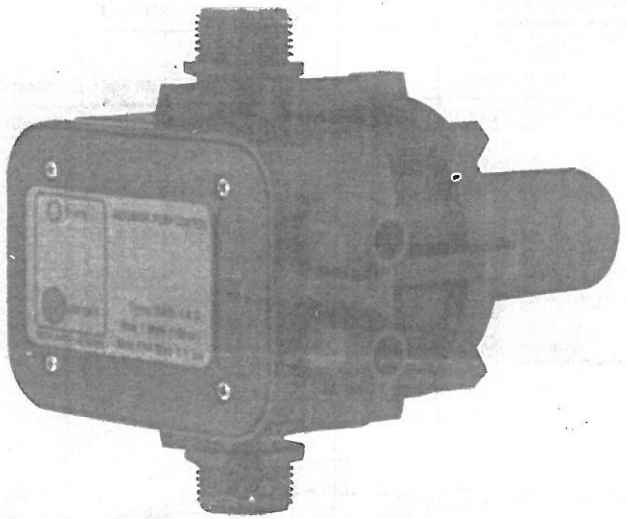
Dcscription of forced start

When pump stops. press ON/OFF button. green led and red led flash alternately (1HZ): if there was water in the pipe. the pump into constant pressure after 60S delay: if the pipe was in the absence of the water, pump into waiting restarted after 80S delay.

Dcscription for the exam process:

While the pump is in the absence of the water. after it start exam 30S. close the motor into waiting restarted, the led flash 3s/time: if keeping in the absence of the water continually, the unit will examine 4 times in every 15 mins, and examine in the following 12 times in every 1 hour: Then the unit will examine 4 times in every 3 hours: and examine 4 times in every 6 houre: finally. last always circling in every 24 hours. Until there is enough water. water shortage will be solved in the state.

Automatic Control For Water Pump

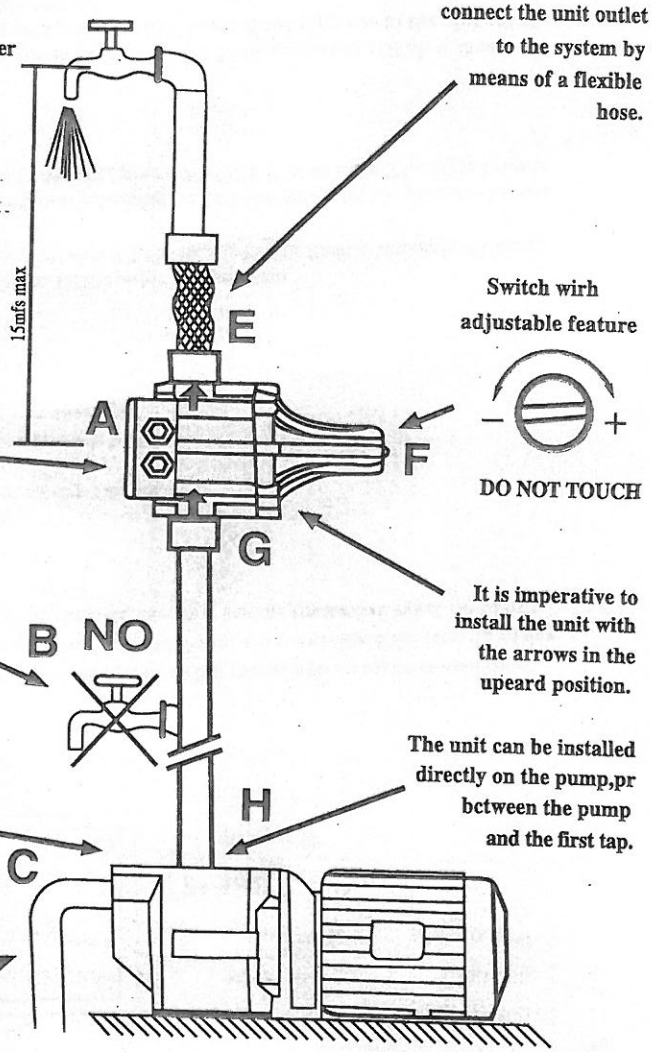


SPECIFICATIONS

Input voltage	220-250V	Maximum working pressure	10 bar
Frequency	50-60Hz	Maximum temperature rating	60℃
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 columnn of water between the unit and the highest tap does not exceed 15 mts.
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.

Switch wirh adjustable feature

DO NOT TOUCH

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.

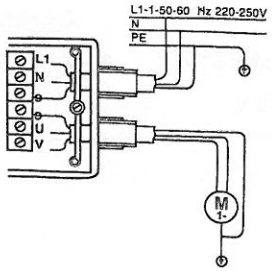
It is imperative to install the unit with the arrows in the upeard position.

PUMPS 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.

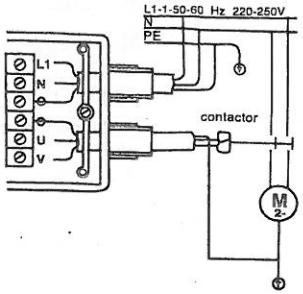
The unit can be installed directly on the pump,pr bctween the pump and the first tap.

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

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

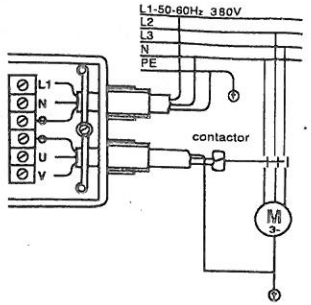


Wiring diagram for connection of single-phase 220V pumps up to 1.1 Kw.



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

SPECIFICATIONS FOR REMOTE CONTROL SWITCH
Minimum contacts capacity of 4 Kw or 5.5 HP 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 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 pusition -The reset button is blocked -The pump does not provide sufficient pressure	-Presence of leaks which are higher than the minimum flow 0.6 1/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 1/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