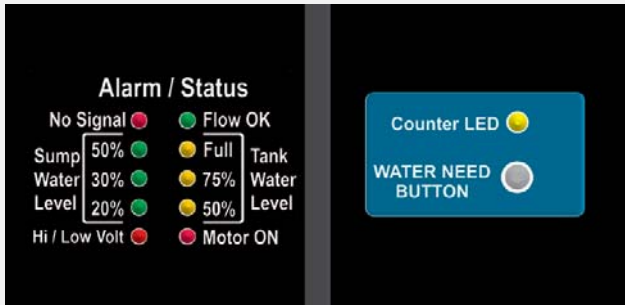


OPERATING MANUAL

AUTOMATIC MODEL: PRIMA



This model is designed for controlling the motor which pump water from sump tank to over head tank.

Operating Manual:

This model is designed to automate the motor which fills water to over head tank from under ground tank .

One transmitter is installed with level & flow sensor (optional) at over head and another water proof transmitter is installed inside/ near sump tank. Both the transmitters send the data of flow status/ water level status to controller.

The controller is installed near the existing switch of the motor. It receive the signals from both the transmitters and display the water level status of overhead and sump tank/ underground tank and other indications.

Whenever the water level in O.H. Tank falls below 50% level (the 50% LED is blinking) the controller will start the motor and keep running the motor till the O.H. Tank gets filled 100%(The 50% & 75% Level LED will glow steadily and the Full level LED will start blinking/ glow steadily). While filling the O.H Tank it will keep watch over the water level in underground Sump Tank. If the water level in underground Sump falls below 20% (20% LED will start blinking) it will not allow to run the motor. Once if water level in sump falls below 20% level it will not allow the running of motor until the water level in sump rises above 30% (20% & 30% LED will glow steadily). If the controller is reset it will start the motor even if the water level in O.H. Tank is above 50% but less then 75% (50% LED on, 75% LED off) and in sump tank water level is 20% or more. A "Water Need" button is provided to start the motor even if water in O.H. Tank is above 50% or 75%.While filling the water in O.H. Tank.

If the flow of water in overhead tank is interrupted for more then 2 minute it will stop the motor and after 2 min. gap it will again start the motor for 2 min. and check for flow of water in O.H. Tank . it will try for 3 times and even after 3 trial if water flow dose not start in tank, it will stop the motor and the flow LED will start blinking indicating fault/ dry run condition of motor.

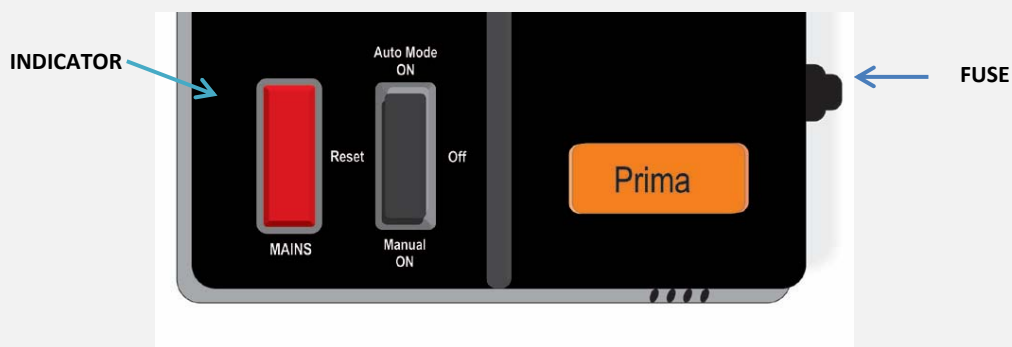
After rectification of fault of motor the controller should be reset for normal operation.

After every reset the controller performs self testing for 2 minutes. After 2 minutes it starts normal operation.

The Motor will not allowed to run or may be stopped in following conditions:

- 1) If the water Level in Overhead Tank is 50% or more
- 2) If the water level in sump tank falls below 20% while filling O.H Tank. The motor will start again only when water level in sump tank rises to 30% or more.(After reset, motor may run even if water level in sump is between 20% and 30%.
- 3) If the “No Signal” LED is glowing continuously.
- 4) If “ Hi/Low Volt” LED is blinking/ glowing.(If voltage protection is enabled)
- 5) If while running the motor flow of water tank is interrupted for more then 2 min.
- 6) If Water level in O.H tank is not changed within 2 hours in spite of running motor.(If timeout is enabled)

KNOW YOUR CONTROLLER



Main Switch: This is three stop switch. When pressed at top most position the controller will operate in Automatic Mode. When this switch is pressed at lower most position it will be in manual mode and the motor will be started. At center position of switch, the controller will be Off. To reset the controller the switch should be in off position for 5 sec. and afterward in “Auto-Mode” position.

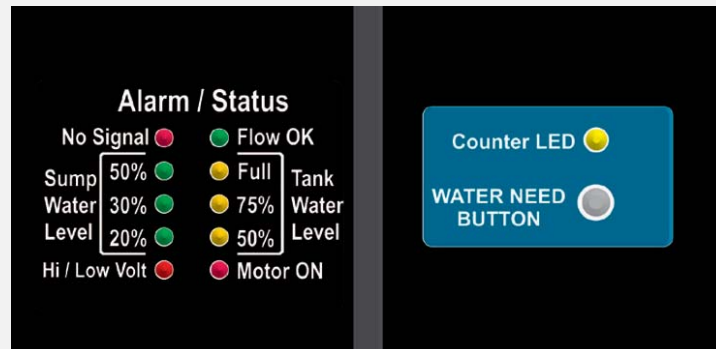
MAINS Indicator: It indicates that power supply is reaching up to controller unit.

Fuse : A fuse is provided for protection against heavy current due to fault in motor or short circuiting. In case fuse is blown away the motor and wires upto motor should be get checked by electrician/ manufacturing company of motor.

Water Need Button: If this button is pressed for 5 seconds, it will start the motor (Even if the water level in O.H. tank is 50% or 75%) and after filling the tank it will switch of the motor

Description of L.E.D. Indications

(Not valid for initial 2 min. while in self testing operation after reset)



No Signal: This LED will blink if it dose not receive signal from sump tank transmitter and glow steadily, if it dose not receive signal from O.H Tank transmitter. If it is receiving signal from both transmitter it will remain off.

Sump Water Level:

50%- This LED indicates that the water level in sump tank is above 50%.

30%- This LED indicates that water level in sump tank is between 30% to 50%.

20%- If this LED is glowing, it indicates that water level in Sump Tank is between 20% and 30%. If this LED is blinking it indicates that water level in Sump Tank is below 20%.

Hi/Low Volt: If it is blinking it indicates that supply voltage is less then 170V, if it is glowing steadily it indicates that supply voltage is above 250V (It can be disabled/ enabled).

Flow OK: If it is glowing it indicates that water is falling in O.H Tank. If it is blinking it indicates that even after three trials, water dose not start falling in O.H Tank.

O.H. Tank Water Level:

Full- If this LED is glowing/ blinking, it indicates that the water level in O.H. Tank is 100%

75%- If this LED is glowing, it indicates that water level in O.H. Tank is between 75% and 99%.

50%- If this LED is glowing, it indicates that water level in O.H. Tank is between 50% and 74%. If this LED is blinking it indicates that water level in O.H. Tank is below 50%.

Motor ON: If this LED is glowing , it indicates that controller has started the motor. If this LED is blinking, it indicates that controller has stopped the motor because water level in O.H. Tank is not changing even after continuous running the motor for 2 hours.(If the time-out is enabled. It can be disable/ enabled .)

SETTINGS

Enabling/ Disabling Voltage Protection:

Voltage protection can be disabled/ enabled by pressing “Water Search” button 3 times. If both the LED of High Volt & Low Volt is started blinking, it conforms that voltage protection is disabled. If this button is again pressed 3 times, protection is enabled. This protection is generally required to be disabled where there is continuous fluctuation of voltage beyond the operating voltage due to which controller stops the operation of motor. Customer can disable this protection at his own risks, as it may damage motor.

Enabling/ Disabling Time out:

A 2 hours time out protection is provided in this model, i.e. if the water level in controller does not change even after continuous operation of motor for 2 hours, the controller will switch-off the motor and stop all further operation until system is reset. For large tanks this “Time-out” feature can be disabled/ enabled by pressing “Water Search” button 9 times (One beep will indicate that it is disabled). If this button is pressed again 9 times, it will be enabled (Two beeps will indicate that it is enabled).

(Due to ongoing improvement the specifications/ working may be changed without prior notice)