



Liquid Level Controller

Product code : REDPLL101

Features:

- One/Two level detection of water in a tank.
- One / Two Tank monitoring for draining or filling or draining and filling the water.
- Supports to externally connected 6 stainless steel sensors prob of 70mm.
- Support up to 1000m length cable for long cable distance prob sensing.
- Safe probe signals.
- High load switching capacity of out put up to 32 amp.
- Relay on indication, Each level indication using led.
- Manual start and stop switch for manual operation of pump.

Application:

The device monitor the water level in the tanks and controls the actuation of pumps or electric valves to regulate water levels in tank according to use of mode, it is also designed to protect submersible pumps against "Dry running" when lower tank is empty.

This unit is used in both place industrial and domestic. for control water level.

Device controlling mode:

1. Draining from lower tank and filling in upper tank.
2. Filling only one tank with 2 levels monitoring.
3. Filling only one tank with 1 level monitoring.
4. Draining only one tank with 2 levels monitoring.
5. Draining only one tank with 1 level monitoring.

Precautions:

- Keep device away from direct water fall or rain.
- keep safe from direct sun light.
- make screw tight properly.
- Keep wiring of sensor probes away from live/power wire. keep sensor wire insulation proper for better performance.

PRODUCT SPECIFICATION

Product code	REDPLL100
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Supply Characteristics

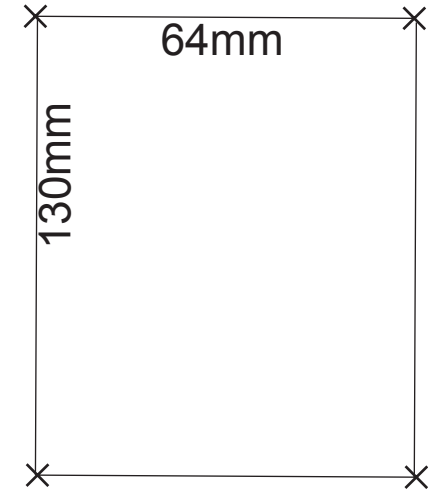
Supply Voltage	240VAC, +-20%
Supply Frequency	47-63 Hz.
Power consumption	4.5VA

DEVICE Characteristics

Conductive Sensor Probes	Stainless steel Ss304, 6 Probes
Prob Length	70mm
Probe voltage	9V DC. < 1mA
Prob cable	Cable gauge (min) 0.5mm ² with good insulation.
Led Indication	Led 1 : green : For relay on
	Led 2 : red : OH (Overhead High)
	Led 3 : red : OL (Overhead Low)
	Led 4 : red : UH (Underwater High)
	Led 5 : red : UL (Under water Low)
Output mode	Relay On / Off
Contact Ratings	1 N/O, 32 Amp @ 250VAC, +5Amp
Electrical life	10,00,000 Operation
Operating Temperature	-10°c to +60°c
Storage Temperature	-10°c to +70°c
Weight Approx.	1 k gm.
Relative Humidity	5 to 15% RH (non condensing)

Switches	Start and stop switch for manual start & stop the motor.
Mounting type	Base mount

DRILL DIAGRM



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Connection Diagram

Imagination To Creation

Product code : REDPLL101

- OH : Over head tank High Level
- OL : Over head tank Low Level
- C : Common terminal for both
- UH : Underwater tank High level
- UL : Underwater tank Low Level

> Fix-up **OH, OL, & C** probes in overhead tank considering following points.

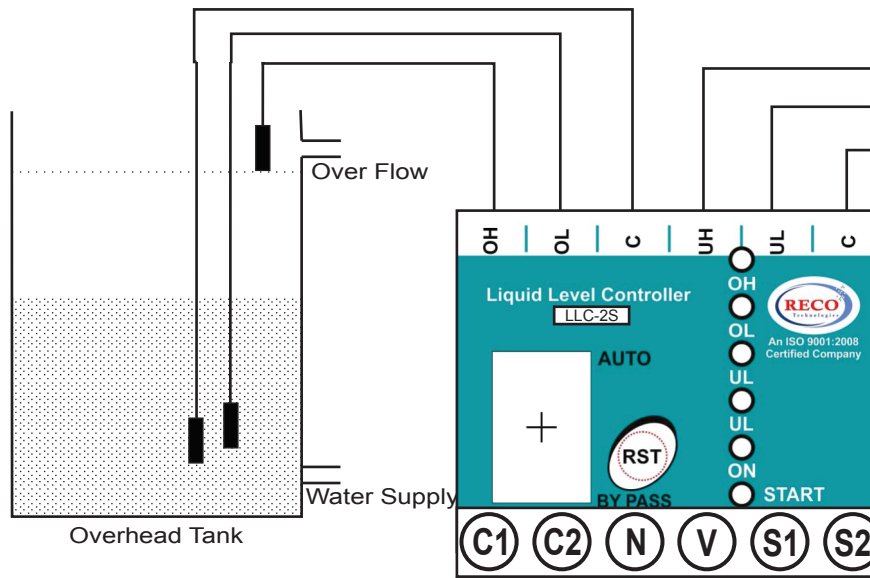
- **OH** probes should be installed at maximum level at which you want to stop pump. Keep probe slightly lower than overflow level.
- **OL** probe should be installed at level which you want start pump. **OL** probe should be such that it will keep some reserve stock in tank. Difference between **OL** and **OH** probe should not be very less otherwise it operates pump frequently.
- **C** probe should be installed at minimum level in the tank.
- Keep **OH, OL and C** probes away from waterfall from pump.

> Fix-up **UH, UL, and C** probes in underground tank considering following points.

- Keep **C** prob at lowest level of tank.
- Fix-up **UL** prob at slightly higher level then foot valve. Pump will stop if water goes down below this level even if overhead tank is empty.
- fix-up **UH** prob slightly higher then **UL** prob. keep sufficient distance between **UL & UH** so that Pump does not operate frequently.
- keep **C, UL and UH** near to manhole of the tank.
- keep **C, UH and UH** probe away from incoming water fall to the tank.

> For LLC connection for only upper tank.

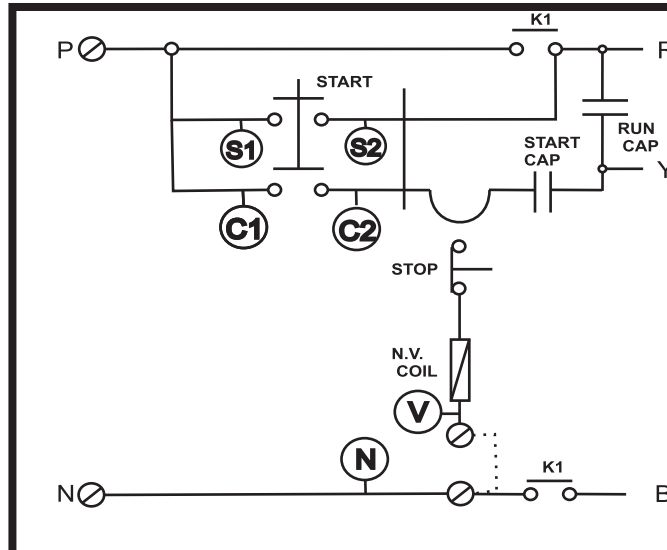
1. Connect UL & UH terminal to C prob



Two step for check unit

1. Short terminal UH, UL & C = **Motor On**
2. Short all terminal UH, UL, C, OH, & OL = **Motor Off**

PANEL CONNECTION



NOTE FOR AUTO OPERATION

- 1 : Connection wire from S1 & S2 Terminals of Start push button to LLC 2S single phase
- 2 : Remove link between n & V (Shown Dotted).
- 3 : Connect C1- C2 and N-V of LLC 2S to electrical panel
- 4: Keep switch in auto mode

UH : 2 ft higher than UL

UL : set upper than motor

RELAY STATUS

UL	UH	OL	OH	Relay Status	Relay status after start button press
OUT	OUT	OUT	OUT	OFF	OFF
IN	OUT	OUT	OUT	OFF	ON
IN	IN	OUT	OUT	ON	ON
IN	IN	IN	OUT	ON	ON
IN	IN	IN	IN	OFF	OFF
IN	IN	IN	OUT	OFF	ON
IN	IN	OUT	OUT	ON	ON
IN	OUT	OUT	OUT	ON	ON
OUT	OUT	OUT	OUT	OFF	OFF

