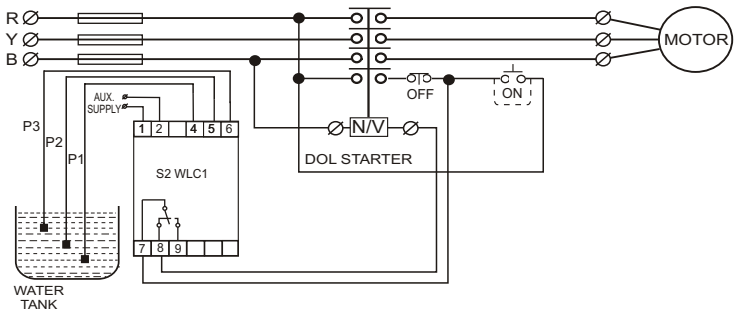
ELECTRICAL CONNECTION IN POWER AND CONTROL WIRING

Fig. 1

TWO LEVEL CONTROLLER FOR ONE TANK



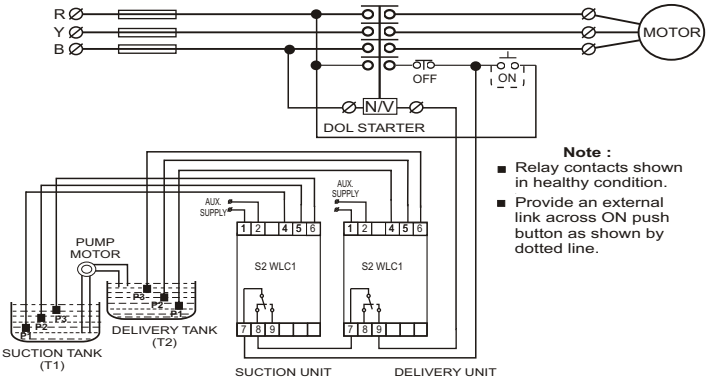
Note :-.

- For SUCTION LOGIC use terminals 7 & 8
- For DELIVERY LOGIC use terminals 7 & 9
- Provide an external link across ON push button as shown by dotted line.

ELECTRICAL CONNECTION IN POWER AND CONTROL WIRING

Fig. 2

TWO LEVEL CONTROLLER FOR TWO TANK



Note :

- Relay contacts shown in healthy condition.
- Provide an external link across ON push button as shown by dotted line.

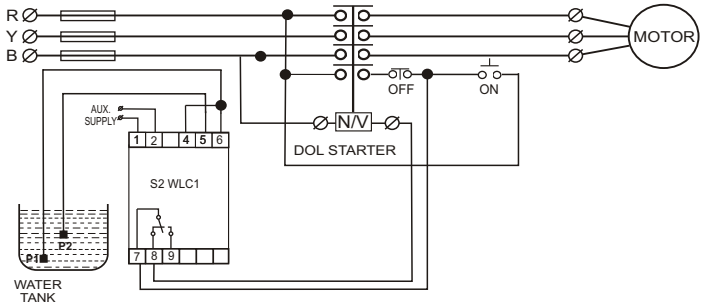
TESTING CHART

SENSOR PROD IN SUCTION TANK (T1)				SENSOR PROD IN DELIVERY TANK (T2)			PUMP / MOTOR STATUS
No.	P1	P2	P3	P1	P2	P3	
1	IN	IN	IN	IN	IN	IN	OFF
2	IN	IN	IN	IN	IN	OUT	OFF
3	IN	IN	IN	IN	OUT	OUT	ON
4	IN	IN	OUT	IN	IN	IN	OFF
5	IN	IN	OUT	IN	IN	OUT	OFF
6	IN	IN	OUT	IN	OUT	OUT	ON
7	IN	OUT	OUT	IN	IN	IN	OFF
8	IN	OUT	OUT	IN	IN	OUT	OFF
9	IN	OUT	OUT	IN	OUT	OUT	OFF

NOTE : IN : SENSOR PROD INSIDE THE WATER
OUT : SENSOR PROD OUTSIDE THE WATER

ELECTRICAL CONNECTION IN POWER AND CONTROL WIRING

SINGLE LEVEL CONTROLLER



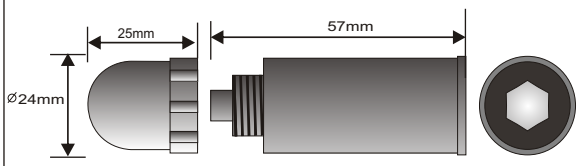
Note :-.

- For SUCTION LOGIC use terminals 7 & 8
- For DELIVERY LOGIC use terminals 7 & 9

.

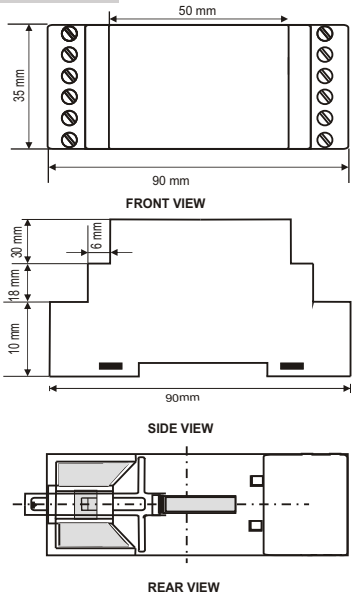
INPUT SENSOR DIMENSION

Fig.4

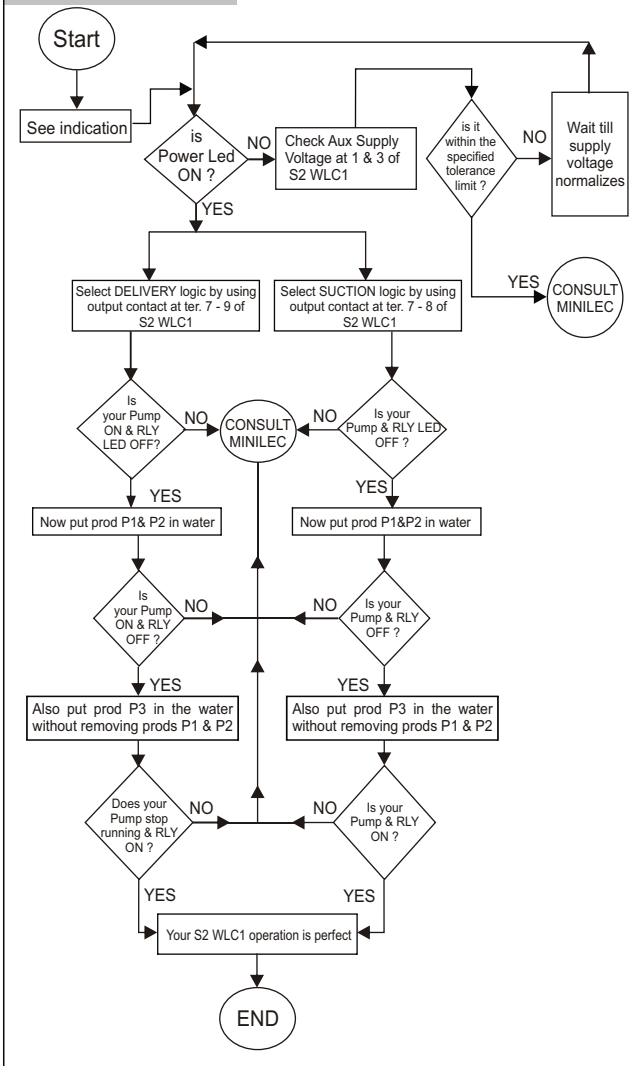


MOUNTING ON DIN RAIL

Fig. 5



TESTING PROCEDURE



- **To avoid rusting of electrodes,apply TEFLON TAPE over the joint where cable is fitted to electrodes.**

INSTALLATION INSTRUCTIONS FOR S2 WLC1

INTRODUCTION

It's the company's pleasure to enlist you as one of our esteemed user customer. Thank you for selecting and purchasing MINILEC make water level controller.

The Following installation instructions would guide you in installing your unit (S2 WLC1) and making best use of it. S2 WLC1 is water level controller operating on electrical conductivity principle for controlling the pump operation automatically at two desired water levels in either the overhead tank or under ground tank.

S2 WLC1 is an auxillary relay and should be used in control circuit.The output of switching relay is 1 change over contact of 5A/240 VAC rating (Resistive)

S2 WLC1 unit is operating in AUTOMATIC MODE only.

APPLICATIONS

The S2 WLC1 is basically two level controller for either overhead or underground tank. It can be used as one level controller for either overhead or underground tank.(ref. Fig.No.3 For electrical connections).The S2 WLC1 can be used as two level controller for both overhead & underground tanks.In this case two units are required.(ref. Fig.No.2 For electrical connections).

FUNCTION DURING SUCTION LOGIC

When you select SUCTION LOGIC by using output contact at terminals 7& 8 (C-NO) then the level sensing prods P1,P2,P3 are to be put into the under-ground water tank as shown in Fig1.The pump motor will start automatically when the undergound tank is full (i.e when prod P1,P2 and P3 are under water) and will stop automatically when the tank is empty(i.e when prod P2 and P3 are out of water)

FUNCTION DURING DELIVERY LOGIC

When you select DELIVERY LOGIC by using output contact terminals 7& 9 (C-NC) then the level sensing prods P1,P2,P3 are to be put into the over head water tank.The pump motor will start automatically when the overhead tank is empty(i.e when prod P1 is under water and P2,P3 are out of water)and will stop automatically when the over head tank is full(i.e when prod P1, P2 and P3 are under water).

SENSITIVITY SETTING :

Fix the sensitivity according to the liquid conductivity with the help of sensitivity potentiometer.

1. Keep all the prods in water and Pot at maximum position. Now relay becomes ON.
2. Turn the pot towards minimum side till the relay become Off.
3. Now adjust the pot above the setting where relay becomes ON & doesn`t chatter by turning the pot towards maximum side. Now check this operatiuon for 2/3 times for repeat functional accuracy.

INPUT SENSORS:

S2 WLC1 is to be used with Minilec sensor prod(Electrodes) only.The sensor is of stainless steel material (for specific and typical applications, you may use a sensor prod of suitable electrically conductive material in case Minilec sensor prod does not suit your requirment).Consult Minilec before using different prod. Minilec sensor prod has a bolting arrangment for connecting a suitable cable and it is to be suspended from top opening of the water tank.(Refer fig.4 For Dimentions)

CAUTIONS:

1. Ensure that your S2 WLC1 is
   - Not installed near any heat sources like Burner,Sunlight,Electric arc, etc
   - Not subjected to abnormal operations.
   - Installed as near to starter as possible.
   - Not subjected to direct rain,Stormy wind and Dust.
2. Ensure that the sensor prods are suspended from top opening of the water tank in suitable PVC piping. Metal pipe should not be used.
   Sensor prod should not be wall mounted on metallic water tanks.
3. Ensure required water resistance by adjusting the sensitivity potentiometer given on front panel.

WARRANTY

AGAINST ALL MANUFACTURING DEFECTS FOR 18 MONTHS FROM DATE OF SUPPLY OR 12 MONTHS FROM DATE OF INSTALLATION WHICHEVER IS EARLIER

MANUFACTURED BY:

minilec®

www.minilecgroup.com

Minilec (India) Pvt.Ltd.
S. NO.1073 / 1-2-3,PIRANGUT,PUNE, (INDIA) PIN : 412 111
VERSION - 03 (29/05/2009)

INSTALLATION INSTRUCTION
S2 WLC1
WATER LEVEL CONTROLLER

Sr. No	PARAMETERS	DESCRIPTION
1	Auxillary supply.	100 -120 / 220 - 240 ± 20% 24VAC/ DC ± 20%
2	Frequency of AC voltage	50 / 60 Hz ± 3%
3	Power consumption	3VA
4	Input sensor	3 Nos Stainless steel prods.(Electrodes)
5	Sensitivity range	1 Kohms to 200 KOhms
6	Output Relay & contact rating (Resistive)	1 change over contact and 5 Amp,240VAC
7	Operating condition Temperature Humidity	 - 5°C to 60°C upto 95 %Rh
8	Life Expectancy	0.5 x 10^6 operations at 100% rating
9	Trip setting	Acoording to the levels of sensors placed in water tank.
10	Resetting	Automatic.
11	Indications Power ON Relay ON	 ON (green) RLY (red)
12	Enclosure	ABS / PC ABS
13	Mounting	35 mm rail mounting
14	Unit weight (gms.)Approx.	120 Gms.
15	Unit Dimensions over all(mm) (L X W X D)	90 X 35 X 60
16	Sensor weight(gms.)Approx.	50 each
17	Sensor Dimensions overall(mm)	24(Dia) X 72(L)

MOUNTING

The S2 WLC1 is suitable for DIN RAIL mounting.

FUNCTIONAL DIAGRAMN :