Water Level Controller

WLCA2M1



DIN 35mm

Features :

- Specially designed sensors
- Trip relay indication
- Used for drain and fill control
- 1 C/O Output
- Adjustable sensitivity 1k to 200k Ohms
- DIN Rail mount

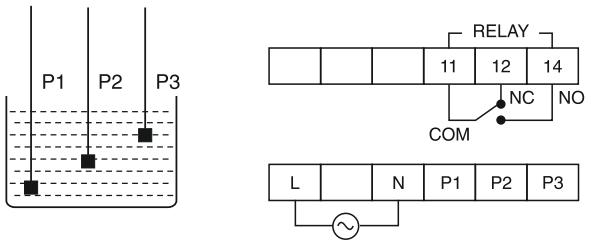
Certification : CE

Technical specifications

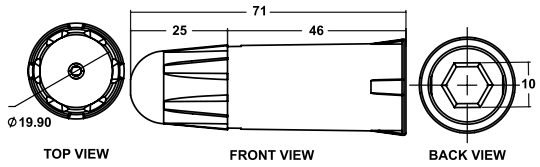
Display specifications		
Type	Analog	
No. of LED	2	
No. of knob	1	
LED indication	Power ON, Relay ON	
LED Indication chart		
Conditions	**'ON' LED**	**'R' LED**
Nominal condition	ON	ON
Fault condition	ON	OFF
Input specifications		
Functions		
Function	Level monitoring of conductive liquid, One level or two level monitoring One tank or two tank level monitoring, Using suction logic & delivery Logic	
Reset	Automatic	
Input sensor	3 no. Stainless steel prods	
Electrical connection	1Ø - 2 wire	
Trip settings	According to the levels of sensor placed in the water tank	
Trip time settings	0.5sec (approx.)	
Output specifications		
Relay contact	SPDT (1 C/O)	
Relay rating	10A@250VAC / 28VDC	
Auxiliary supply specifications		
Supply voltage	85 to 270V AC / DC	
Frequency	50 / 60Hz	
Power consumption	3VA max	
Environmental specifications		
Operating temperature	0 to 50°C	
Storage temperature	-20 to 70°C	
Humidity (Non - condensing)	Upto 95% RH	
Pollution degree	For PCB 2, For Product 3	
Degree of protection devices	IP20	
Mechanical specifications		
Mounting	DIN Rail mount	
Weight	Sensors : 50gms each, Unit : 105gms	
Screw tightening torque	0.5 NM	

Terminal connection

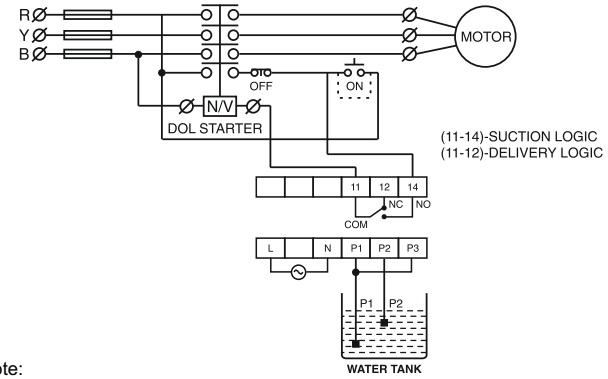
P1 : Reference prod
P2 : Lower level
P3 : Upper level



Input sensor dimensions



One level controller

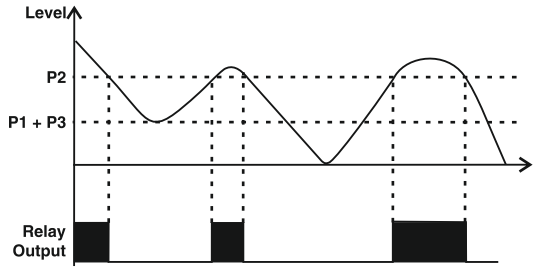


Note:
1. Relay contacts shown in healthy condition
2. The connection shown in fig 1 for suction logic.
3. Provide an external link across ON push button as shown by dotted line

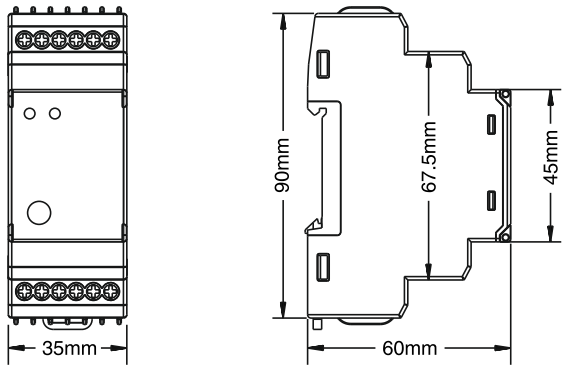
TESTING CHART

Sr No.	P1+P3	P2	Relay Output
1	OUT	OUT	OFF
2	IN	OUT	OFF
3	IN	IN	ON
4	IN	OUT	OFF
5	OUT	OUT	OFF

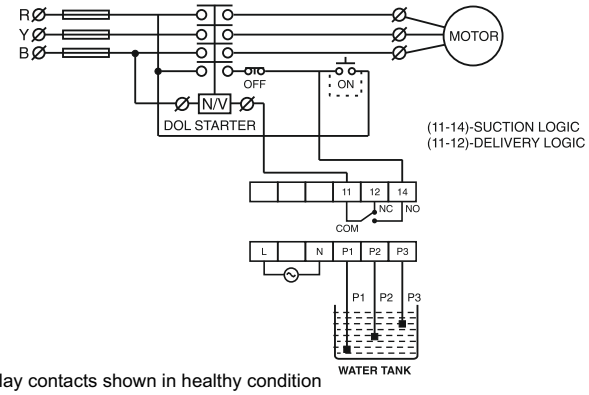
Timing diagram



Dimensions (All are in mm)



Two level controller

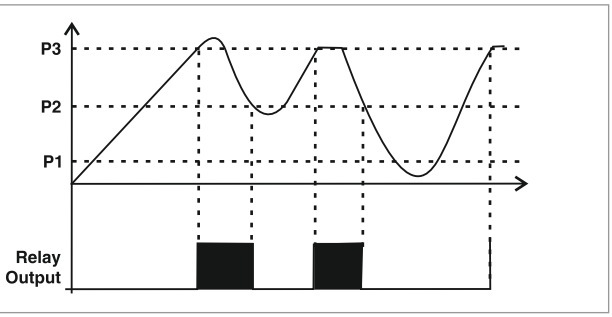


Note:
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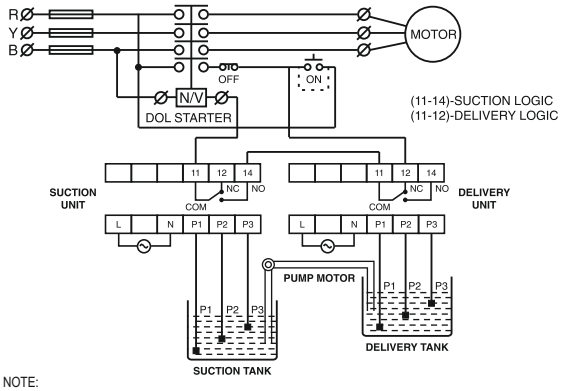
TESTING CHART

Sr No.	P1	P2	P2	Relay Output
1	OUT	OUT	OUT	OFF
2	IN	OUT	OUT	OFF
3	IN	IN	OUT	OFF
4	IN	IN	IN	ON
5	IN	IN	OUT	ON
6	IN	OUT	OUT	OFF

Timing diagram



Two level controller for both tank



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

Testing chart

Sr. No.	Sensor prod in suction tank (T1)			Sensor prod in delivery tank (T2)			Relay output status WLCA2M1
	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

Standards compliance

Applicable EMI / EMC Standards

Product Standard : IEC 60947-2

Category	Reference standards	Testing level
Radio frequency interference radiation disturbance test	IEC 61000-4-20	Class-A
Electrostatic discharge immunity test	IEC 61000-4-2	Class-A
Radio frequency interference conducted disturbance test	CISPR 11	Class-A
Immunity to conducted disturbances, Introduced by radio frequency fields test	IEC 61000-4-6	Class-A
Electrical test transient / Burst immunity	IEC 61000-4-4	Class-A
Radiated, Radio-Frquency, electromagnetic field immunity test	IEC 61000-4-8	Class-A
Surge immunity test	IEC 61000-4-3	Class-A
Voltage dips, Short interruption and vlotage variations immunity iest	IEC 61000-4-5	Class-C
AC Voltage test	IEC 61000-4-11	Clause 6.7
Temperature rise test	IEC 61010-1	Clause 10.1-10.4
Resistance to Heat Test (RTH)	IEC 61010-1	Clause 10.5
Single Fault Test (SFT)	IEC 61010-1	Clause 4.4

Ordering information

Product code	Supply voltage	Certification
WLCA2M1-CE-RoHS	85 to 270V AC / DC	CE