## Liquid Level Controller

- Fully Automatic operation enabling both draining and filling simultaneously with a single device
- · Adjustable sensitivity level from 1k to 200k Ohm
- · Includes provision for Manual start
- Protects submersible pumps against dry running and prevents overfilling
- · Enables maximum utilization of incoming liquid (eg. water) supply
- Specially designed corrosion and shock resistant sensors to ensure trouble free operation.



### **Ordering Information**

Cat. No.	Description
4411AD1	110VAC, 1 C/O,1K to 200K Sensitivity, Draining & Filling
4421AD1	240VAC, 1 C/O,1K to 200K Sensitivity, Draining & Filling
4431AD1	400VAC, 1 C/O,1K to 200K Sensitivity, Draining & Filling
44S0003	Accessories, Set of 3 Stainless Steel Sensors
44S0006	Accessories, Set of 6 Stainless Steel Sensors

Note: Sensors for High Temperature (Up to 165 C) applications are available on request.

# Liquid Level Controller



Cat. No.	4411AD1	4421AD1	4431AD1	
Parameters				
Supply Voltage (⇌)	110VAC, +/-20%	240VAC, +/-20%	415VAC, +/-20%	
Frequency	47Hz - 63Hz			
Power Consumption (Max.)	3VA			
Device Characteristics				
Conductive Sensor Probes	Stainless Steel SS304, 3 or 6 Nos			
Sensor Length	10 cm			
Control Action Modes	Only Draining, Only Filling, Draining & Filling Simultaneous (One Tank or Two tanks)			
Sensitivity	1K to 200 K Ohm (Potentiometer adjustable)			
Sensor Voltage & Current	12 Vp-p, 100 Hz,< 1 mA			
Sensor cable	Cable gauge (Min):0.5 sq mm Tin coated, Cable dia(Min):1.5mm Max Cable Length-1000m (For set value < 50%) Max Cable Length-300m (For set value 100%) Max capacitances of wire- 80 nF / km			
Settable ON & OFF Delay Time	0.5 sec to 10 sec			
Manual Start Switch	If Lower tank water level is greater than Low level & upper tank water level is below High level then b pressing a switch Relay can be switched ON manually.			
Output Control Mode	Relay ON/OFF			
Contact Ratings	1 C/O,8A@250VAC,Resistive,Terminal 15-Pole, Terminal 16-NC,Terminal 18-NO			
Utilization Category	AC-15: Rated Voltage (Ue):120/240V, Rated Current(Ie): 3.0/1.5A DC-13: Rated Voltage (Ue):24/125/250V, Rated Current(Ie): 2.0/0.22/0.1A			
Electrical Life	1 x 10⁵Operations			
Mechanical Life	1 x 10 <sup>7</sup> Operations			
LED Indication	GREEN LED: Power ON, RED LED : Relay Output ON			
Operating Temperature	-10°C to +60°C			
Storage Temperature	-10°C to +70°C			
Relative Humidity	5 to 95 % RH (non condensing)			
Mounting	Base/DIN Rail			
Dimension (W x H x D) (in mm)	36 X 90 X 65			
Weight (unpacked)	235 g (Controller), 45 g (Sensor)			
Certification	CE Trais Compliant			

### EMI/EMC

Harmonic Current Emission IEC 61000-3-2
ESD IEC 61000-4-2
Radiated Susceptibility IEC 61000-4-3
Electrical Fast Transient IEC 61000-4-4
Surge IEC 61000-4-5
Conducted Susceptibility IEC 61000-4-6
Voltage Dips & Interruptions (AC)
Conducted Emission CISPR 14-1
Radiated Emission IEC 61000-3-2

#### Environmental

 Cold Heat
 EC 60068-2-1

 Dry Heat
 IEC 60068-2-2

 Vibration
 IEC 60068-2-6

 Repetitive Shock
 IEC 60068-2-27

 Non-Repetitive Shock
 IEC 60068-2-27