

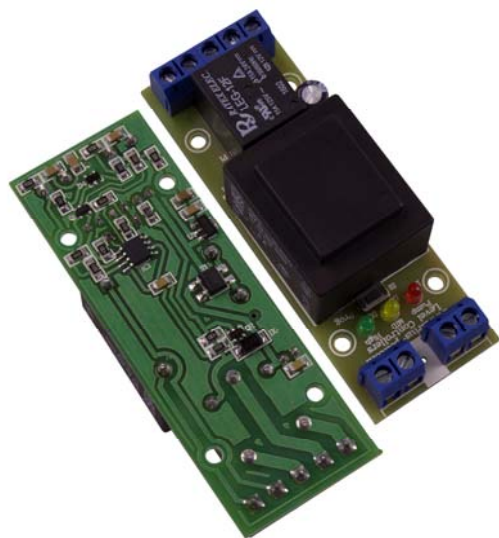


SIRIUS-PCB Ltd

www.sirius-pcb.com e-mail: office@sirius-pcb.com

Liquid Level Controller 230V

№100787



Liquid level controller is applicable for liquid level monitoring and control (water type for e.g. and the device allows to be programmed to detect liquids with low conductivity when it is set in self-study mode) in water storage tanks and other types of tanks using two probes.

The device is based on contemporary microcontroller and has an option for self-study mode (if necessary).

Main specifications:

Supply Voltage: 220V AC

Output for mounting of liquid sensor probe for low level

Output for mounting of liquid sensor probe for high level

Output relay contacts for load control with **NO** - normally open; **NC** - normally closed; **COM** - common contact with maximum load rating AC 240V /7A

Self-study mode button

LED indication for high liquid level

LED indication for low liquid level

LED indication for ON/OFF relay state

Suitable for mounting in DIN rail box – **Z-103**

Size: 82mm x 30mm

Important!!!

All precautions for High Voltage Safety Work must be followed when the device is mounted and used!

Description

- liquid level controller, operating with two conductivity sensors (plate or tube sensor type)
- one sensor detects low liquid level and a second sensor detects high liquid level
- In1** is for low level input on **J2** terminal
- In2** is for high level input on **J2** terminal

Signalling

- green LED **D3** – LED D3 illuminates when low level sensor is activated (submerge), meaning it is in normal mode
- yellow LED **D2** – LED D2 illuminates when low level sensor is above liquid level (no submerge) and it actuates the pump relay
- both LEDs illuminate together when both sensors are activated (submerge) and the tank liquid level reached its maximum limit
- red LED **D1** illuminates when the pump relay is actuated (since low liquid level is detected until level of liquid in tank reaches its maximum limit)

Control algorithm is the following:

- if the liquid level drops and the low level sensor is not submerged, the pump relay is actuated
- the relay remains activated until high liquid level sensor is actuated (submerge), only then the relay is deactivated
- the controller is set by default to operate properly with conductive water or liquid on the basis of water conductivity type
- in case of necessity liquid conductivity to be detected, button Prog can be used (if the controller is not able to detect it by default settings)

Programming a controller for liquids with low conductivity

- in order to program the controller at your request, the first step is to actuate (submerge) both sensors
- the second step is to press and hold button Prog until **yellow** and **green** LEDs start flashing slowly one after another, then release the button
- if during this process one of the sensors is not submerged or if a sensor can't be detected (for e.g. a cable is broken and etc.) both LEDs will start flashing fast one after another
- these LED signals indicate that programming can't be completed correctly and previous settings must be applied
- to continue further you must restart the device (turn the controller off, wait 30 seconds and turn on the controller power supply)

Reset device to factory default settings:

- turn off the power supply
- press and hold button **Prog** and turn the controller power supply on while holding the button
- the two LEDs (**yellow** and **green**) are going to start flashing slowly one after another, now release the button
- the controller default settings are reset

Example of Device Wiring Diagram by using a normally open relay contact

