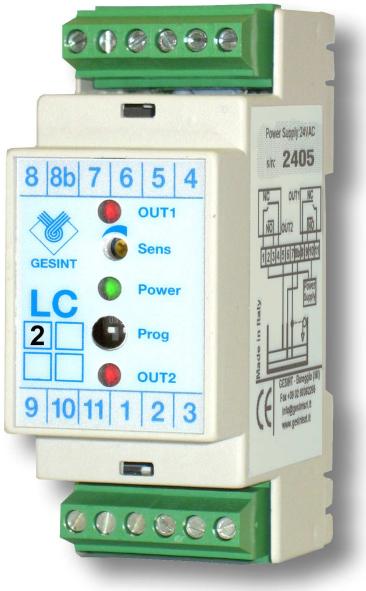
LC 2

2 Independent channel conductivity level switch

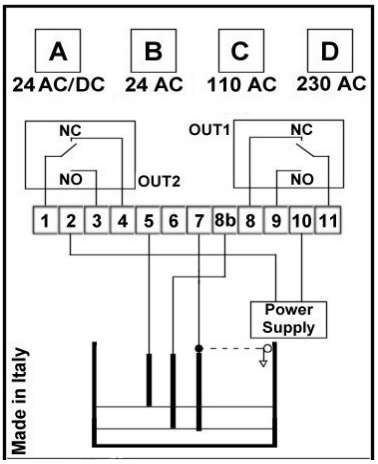


Technical data

Power supply:	24 VAC/DC 110-230 VAC
Programming:	Using dip-switch
Power consumption:	2VA / 1,8W max
Electrode voltage:	5 VAC max
Electrode current:	0,1 mA max
Sensibility:	0 – 70 KΩ (adjustable)
Minimum conductivity:	15 µS
Storage temperature:	from –30 to +80°C
Working temperature:	from –20 to +60°C
Relative humidity:	from 0 to 85%, no condensate
Output:	2 SPDT relays
Contact rating:	7A @ 250 VAC (resistive load) 3A @ 230 VAC (single-phase motor)
Switching time:	8 msec Max
Release time:	3 msec Max
Visual signalling:	Green LED → Power supply Red LED → Level threshold
Protection:	IP20
Installation:	35 mm DIN rail
Dimensions:	90(H) x 35(L) x 60(P) mm

CE mark according to *Directive 89/336/CEE,* complies with the following harmonised regulations: *EN50081-1*, *EN 50082-2*, *EN55022*, *EN61000-4-2*, *EN61000-4-3*, *EN61000-4-4*, *EN61000-4-5*, *EN61000-4-6*, *EN61000-4-11* and *Low Voltage Directive 73/23/CEE* and subsequent modifications.

Electrical connections and applications



LC2 level switch is capable of checking conductivity between two distinct electrodes and a common reference electrode. At each electrode is connected an output relay.

The switch needs two metal electrode for level detection, connected at terminal **(5)** and **(8b)**.

The common reference electrode, or the tank metal structure, have to be connected at terminal **(7).** Output OUT1 is linked at electrode connected at terminal **(5)**, while OUT2 is linked at electrode connected at terminal **(8b)**.

Operation and calibration

When electrode is uncovered, relay is energized (or de-energized, based on dip-switch programming) and the corresponding red LED on front will be lighted (or unlighted). When liquid reaches electrode, the relay and red LED state will change .

If you need to calibrate the sensibility, put the sensibility trimmer to minimum and liquid level to reach contact with the electrode. Then turn the trimmer until relay state will change. In order to have a sensibility margin, turn again the trimmer for 10-15% rotation toward maximum.

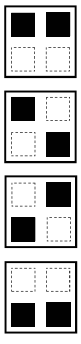
For a correct installation in the cabinet board, the instrument must be about 1cm far from other instruments.

General

LC2 sense liquid level detecting conductivity between two electrodes installed in a tank to control and a common reference electrode.
When liquid reaches electrodes, a current flows between them causing instrument intervention. The voltage between electrodes is alternate, to avoid electrolysis phenomenal in liquid and electrodes corrosion.

Programming

It is possible to change relays state and switching delay changing the configuration of dip switch present on front side of the instrument:



Relays normally de-energized N.O. to N.C. : 0,3 sec N.C. to N.O. : 1,5 sec	LC2 NV
Relays normally de-energized N.O. to N.C. : 1,5 sec N.C. to N.O. : 3,0 sec	LC2 NL
Relays normally energized N.C. to N.O. : 0,3 sec N.O. to N.C. : 1,5 sec	LC2 RV
Relays normally energized N.O. to N.C. : 1,5 sec N.C. to N.O. : 3,0 sec	LC2 RL

Dip-Switch programming must be done when instrument is disconnected from power supply.

Warranty

The warranty is valid for 12 months from purchase, and expires if instrument is improperly used or not correctly installed on system.

GESINT S.R.L.
Via Perosi, 5
20010 Bareggio (MI) - ITALY
Tel. +39-02-9014633
Mobile +39-335-6282615
Fax +39-02-90362295
E-mail: info@gesintsrl.it

WWW.GESINTSRL.IT