

RAL12

Technical data

RAL12

825B044E

Conductivity level switch with safety alarm

Power supply:	24-115-230 Vac.
Power consumption:	3 VA max.
Electrode voltage:	11 Vac max
Electrode current:	1,5 mA max
Sensibility:	0 ÷ 47kohm
Adjustment range:	470kohm ÷ 47kohm
Adjustment range (S):	21microS ÷ 2100microS
Storage temperature:	-30 ÷ +80 °C
Working temperature:	-10 ÷ +50 °C
Output:	1 change-over contact + 1 N.O.
Contact rating:	3A 250Vac (resistive load)
Sensibility adjustment:	trimmer
Display:	green led = supply yellow led = safety red led =level threshold



fig.1

RAL12 General

RAL12 unit works as resistive level switch. Internal circuits detect constantly the electrical connection to the electrodes. If a bad electrode connection happens the safety relay becomes de-energized giving the alarm. The above control avoid to damage the process if something happens on the wiring of the electrodes.

RAL12 Application

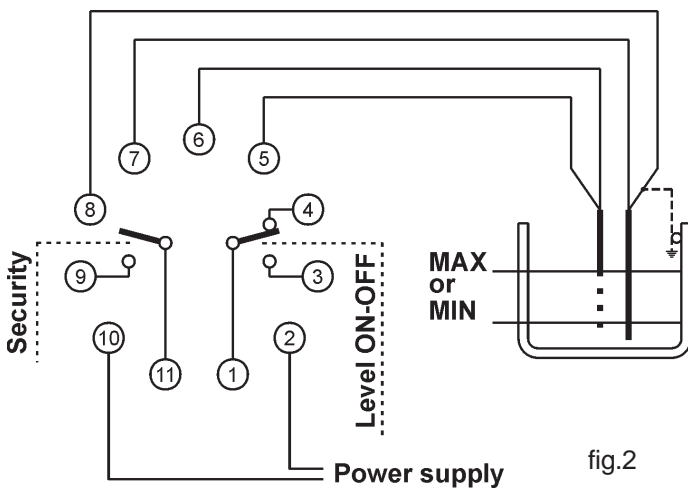
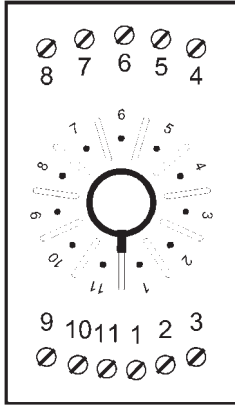


fig.2

RAL12 Application

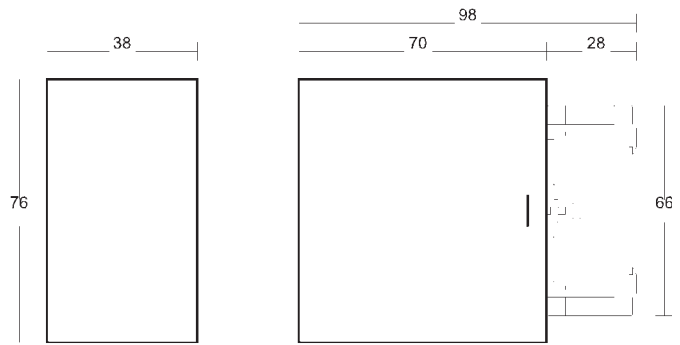
When RAL12 is used with a single control point it operates as a minimum or maximum switch-point. To works properly as a single control point need two electrodes, if the tank is metallic, one electrode can be substituted from the tank wall as a reference electrode consequently, for a double control point need three electrodes, but using the metallic wall of the tank as a reference electrodes, only two electrodes are requested. The electrode must installed in a vertical position. The safety relay is energized during normal working, if one of the four wires is cutted, than safety relay change in de-energized condition and the yellow LED switch off.

RAL12 Electrical connections

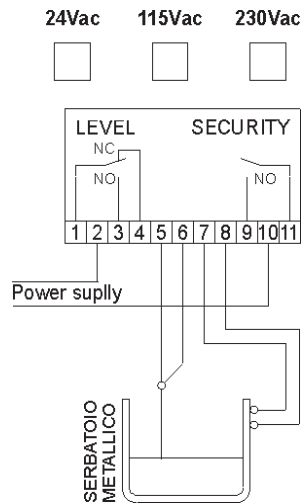


The electrical connection is made with the undecal socket. The socket is designed to be fixed in the din-rail. The suggested wires are from 0,5 to 1mm².

RAL12 Mechanical installation



ATTENTION! Look to the lateral label the RAL12 main supply voltage.

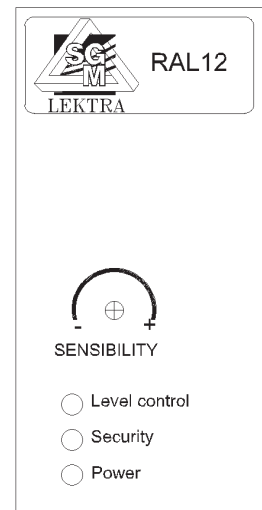


RAL12 Calibration

In absence of alarm (normal condition) the level relay is energized. It become de-energized when MAX level is detected, safety condition is detected (one or more of the four electrode wires are cutted) or power supply switch off

Normally no sensibility adjustment is required, but if it needs, to calibrate the sensibility do the following steps:

- put the sensibility trimmer to minimum (-)
- increase the level until to reach the active electrode and turn the trimmer until the relay becomes de-energized (red LED off)
- in order to have a sensibility margin turn again for 10-15% the trimmer toward maximum



RAL12 Warranty

Products supplied by SGM LEKTRA are guaranteed for a period of 12 (twelve) months from delivery date according to the conditions specified in our sale conditions document. SGM LEKTRA can choose to repair or replace the Product. If the Product is repaired it will mantein the original term of guarantee, whereas if the Product is replaced it will have 12 (twelve) months of guarantee. The warranty will be null if the Client modifies, repair or uses the Products for other purposes than the normal conditions foreseen by instructions or Contract. In no circumstances shall SGM LEKTRA be liable for direct, indirect or consequential or other loss or damage whether caused by negligence on the part of the company or its employees or otherwise howsoever arising out of defective goods.

RAL12 Factory test certificate

In conformity to the production and check procedures I certify the equipment:

RAL12 serial n.

satisfy technical characteristics as write in TECHNICAL DATA and it is conform to the internal procedures

Quality control ManagerDate of manufacture:

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