RAL11

Technical data

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:	**2 change-over contacts**
Contact rating:	**3A 250Vac (resistive load)**
Sensibility adjustment:	**trimmer**
Display:	**green LED =supply**
	red LED = level threshold

RAL11

825B013B

Conductivity level switch

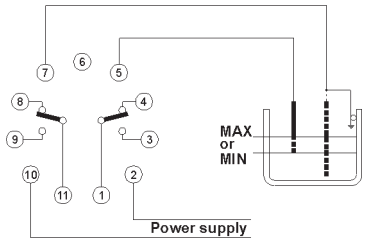
fig.1

RAL11 General

RAL11 unit is a conductivity level control able to work with one or two control points.
RAL11 works detecting the current flowing between the electrodes, due to the conductivity of the liquid under control. In order to avoid the electrolysis phenomenal the voltage applied to the electrodes is alternate.

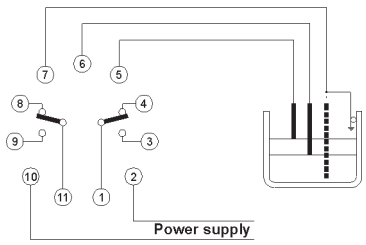
RAL11 Application

The RAL11 unit can work with a single control point (2 electrodes) or with two control points (3 electrodes).



Single control point
fig.2

When RAL11 is used with a single control point it operates as a minimum or maximum switch-point.
When RAL11 is used with a double control point it can drive directly a pump in the way to maintain the level between the two control points.



Double control point
fig.3

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.

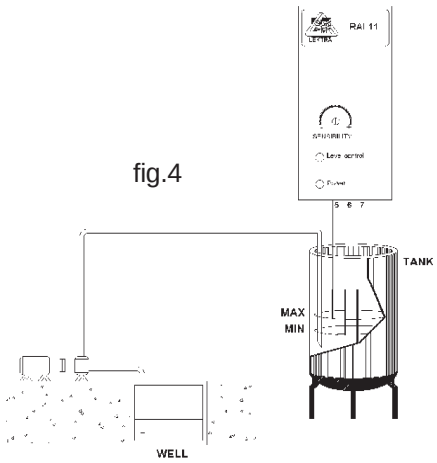


fig.4

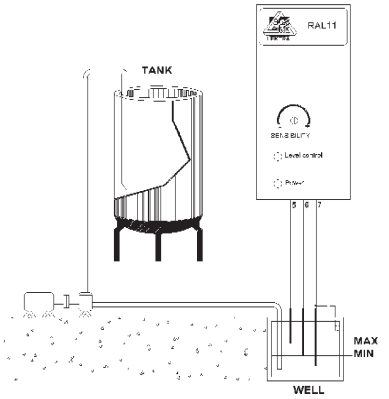
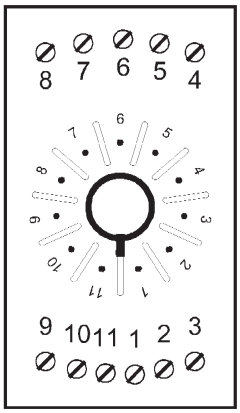


fig.5

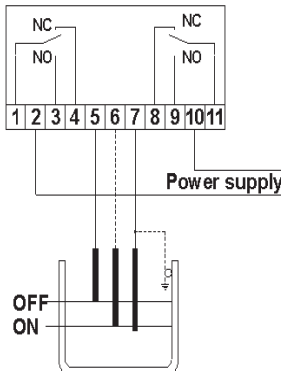
RAL11 Electrical connections



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 1mm^2.

ATTENTION! Look to the lateral label the RAL11 main supply voltage.

24Vac ☐ 110Vac ☐ 220Vac ☐



RAL11 Warranty

The warranty expires when damages they have provoked from the use not quite or from not correct installations. The warranty is valid for a period of 12 months from the acquisition behind presentation of the manual present of installation. All the reparations in warranty will have realised beside our establishment in Rodano (MI), the costs of dismounting and reinstalling of the device and the costs of transport will be paid by the customer.

RAL11 Factory test certificate

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

RAL11 ..... serial n. .....
satisfy technical characteristics as write in TECHNICAL DATA
and it is conform to the internal procedures
Quality control Manager

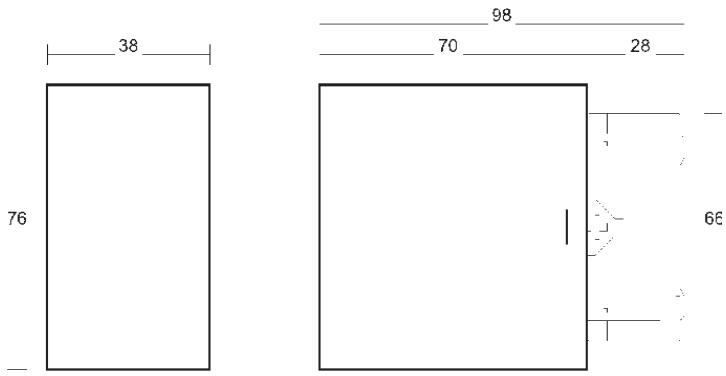
.....

Date of manufacture:

.....

CE

RAL11 Mechanical installation

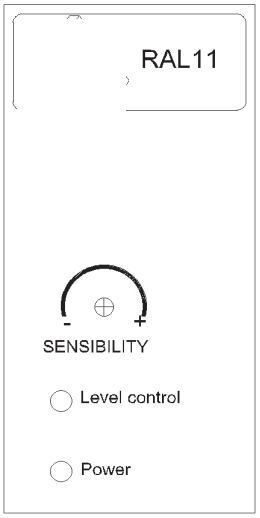


RAL11 Calibration

Single control point:
If the liquid is below to the MIN or MAX electrode (see fig.2) the output relay is energized and the red led lighted when the liquid reaches the MIN or MAX electrode the output relay will be de-energized and the red LED turns off.

Double control points
During the filling tank phase the output relay is energized (red LED lighted). When the liquid reaches the electrode of the MAX level than, relay will be de-energized (red LED off). The relay becomes again energized when the level fall down to the MIN level electrode.

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 (+)



GESINT S.r.l.
Via Perosi, 5
20010 Bareggio (MI)
Tel. 02/9014633 - 335/6282615
Fax. 02/90362295
e-mail: info@gesintsrl.it
WWW.GESINTSRL.IT