GENERAL CHARACTERISTICS

The VNR21.22 control units are designed as interface for conductive level probes SL series. **These electronic units are used to control liquids that have a minimum electrical conductivity of 1 µS**.

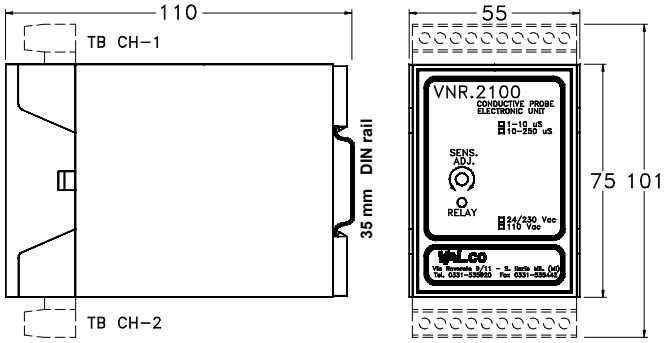
The system is based on measurement of the conductivity of the liquid to be controlled and works with low potential and with alternating currents, in order to avoid the incrustation of the electrodes and / or perforation of the tank normally caused by the use of direct currents, which cause a galvanic action on materials.
The contact of the electrode with the liquid under control determines the actuation of a relay inside the control unit and it is possible to drive any alarm system and / or actuator.
By using multiple probes and multiple control units, appropriately connected, a system of dosage and safety can be realized.

- One channel **(2100)** or two channels **(2200)** design.
- Adjustable sensitivity from 1µS.
- Relay output.
- Alarm led.
- DIN rail mounting.

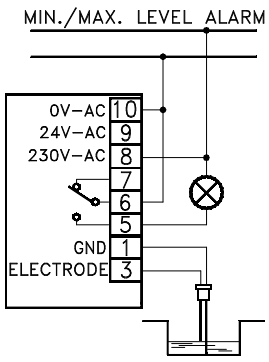
TECHNICAL DATA Tab.1

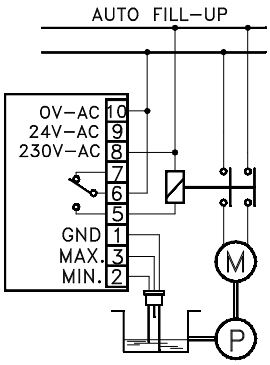
Description	1 channel VNR.2100	2 channels VNR.2200	On request
Power supply	**24 / 230 Vac** - 50/60 Hz	**24 / 230 Vac** - 50/60 Hz	**110 Vac**
Power consumption	5 VA	10 VA	-
Input signal	From conductive probes (SL series)	From conductive probes (SL series)	
Power supply to probes	22 Vac	22 Vac	
Output relay	SPDT — 230Vac — 6A	2 x SPDT — 230Vac — 6A	
Alarm display	Front panel led	Front panel led (2x)	
Sensitivity range	**10 -250 µS**	**10 -250 µS**	**1-10 µS**
Sensitivity adjustment	Front panel trimmer	Front panel trimmer (2x)	-
Operating ambient temperature	-20° ÷ +50° C	-20° ÷ +50° C	
Housing — Mounting	ABS DIN rail	ABS DIN rail	
Degree of protection	IP 40	IP 40	
Dimensions (mm)	55 x 75 x 110	55 x 75 x 110	
Electrical connection	10 poles terminal board	20 poles terminal board	

DIMENSIONS



TYPICAL WIRING





CONTROL AND ADJUSTMENT

Control.
Disconnect the electrodes leads from the terminal board (terminals 1 and 3 for single channel version) (terminals 1-11 and 3-13 for two-channel version). Short circuit terminals 1 and 3 (11 and 13) of the terminal board, in these conditions, the relay must switch on and led has to light.

Sensitivity adjustment.
The unit is supplied with a factory setting of 20 µS.
Submerge the electrodes in the liquid under control, turn the trimmer on the front panel to obtain the switching of the relay.

NOMENCLATURE

VNR.2100	10 – 250 µS	24/230VAC		
•			Tab.1	One or two channels amplifier
	•		Tab.1	Sensitivity
		•	Tab.1	Power supply