

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 μ S.**

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.



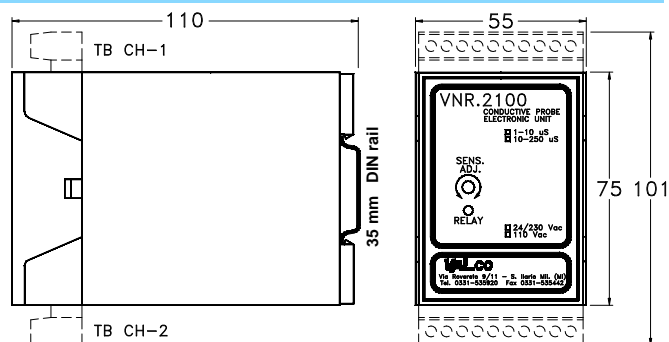
- One channel (**2100**) or two channels (**2200**) design.
- Adjustable sensitivity from 1 μ S.
- Relay output.
- Alarm led.
- DIN rail mounting.

TECHNICAL DATA

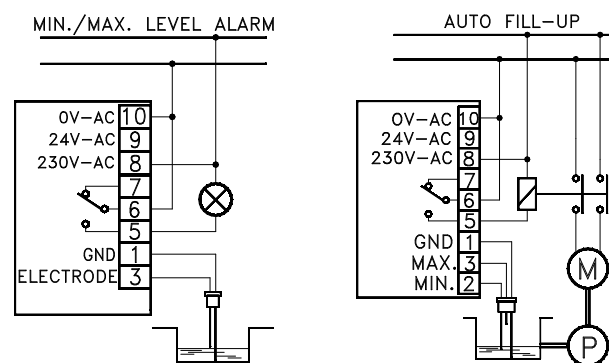
Tab.1

| 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 μ S | 10 -250 μ S | 1-10 μ S |
| 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 μ S.

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 μ S | 24/230VAC |
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Tab.1 One or two channels amplifier

Tab.1 Sensitivity

Tab.1 Power supply