



GENERAL CHARACTERISTICS

This control unit with double measuring channels was designed as **low cost interface for conductive level probes** and is used to control liquids that have a minimum electrical conductivity of $8 \mu\text{S}$.

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. The presence of two measurement channels simultaneously allows to realize systems of control, metering, and safety.

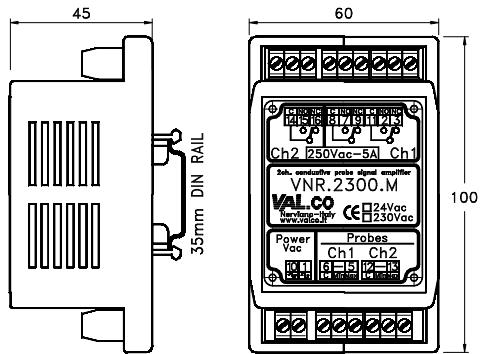
- Adjustable sensitivity and delay.
- 2 measuring channels
- Microprocessor technology
- DIN rail mounting

TECHNICAL DATA

Tab.1

Power supply	24 Vac 50/60 Hz	On request 230 Vac
Power consumption	10 VA	
Input signal	From conductive probes	
Power supply to probes	15 Vac	
N. 2 channels	2CH	Ch1
Output relay	Ch2	N. 2 SPDT
Sensitivity	8 + 250 μS	Factory setting 60 μS
Operation delay	0 + 6 min.	Factory setting 1 min.
Adjustments	Trimmers under front plate	
Operating temperature	-20° + 50° C	
Housing	ABS	IP40
Mounting	DIN rail	60 x 100 x 45 mm.
Electrical connection	17 poles terminal board	

DIMENSIONS



CONTROL AND ADJUSTMENT

Control:

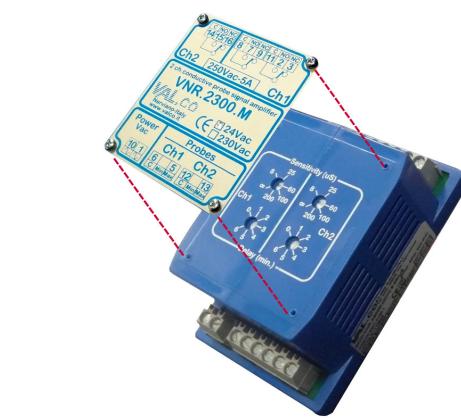
- Disconnect the electrodes leads from the terminal board (Ch1 - terminals 5 and 6) (Ch2 - terminals 12 and 13).
- Short circuit terminals 5 and 6 of the terminal board, in these conditions, the Ch1 relays must switch on.
- Short circuit terminals 12 and 13 of the terminal board, in these conditions, the Ch2 relays must switch on.

Sensitivity and delay adjustment:

- The unit is supplied with a factory setting of 60 μS .
- Submerge the electrodes in the liquid under control, turn the trimmer (Sensitivity) under the front plate to obtain the switching of the relays.
- The operation delay can be adjusted with the trimmer (Delay) also located under the front plate.

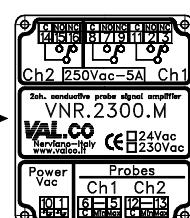
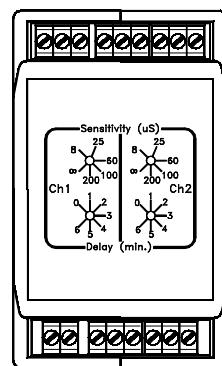
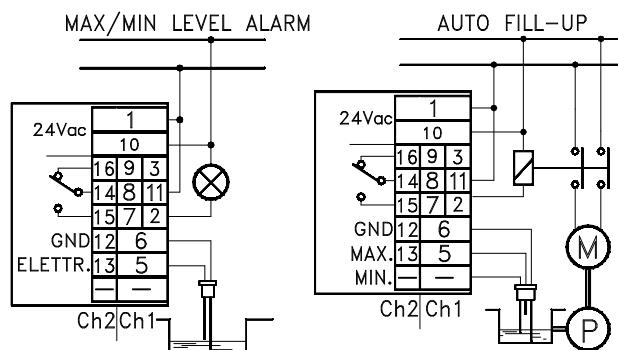
NOMENCLATURE

VNR.2300M	2CH	8 – 250 μS	24 VAC
•	•	•	•



TERMINAL	FUNCTION
10	Power supply 24 Vac 50/60 Hz
6	Tank ground / ground electrode
-	Minimum level electrode
5	Maximum level electrode
CH1	
2	NO
3	NC
11	COM
7	NO
9	NC
8	COM
15	NO
16	NC
14	COM
CH2	
	N. 2 SPDT
	Simultaneous action
	N. 1 SPDT Ch2

TYPICAL WIRING



Type	Tab.1
Number of channels	Tab.1
Sensitivity	Tab.1
Power supply	Tab.1

We reserve the right to change the data without notice

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