

**HIDRONIVEL  
UH1**

**Water Level Controller**

**Main features**

- Probe level relay based on a conductive system.
- Well or tank control.
- Adjustable sensitivity.
- Supply 230 VAC (400 VAC on demand).
- Maximum and minimum level probes



**Probe installation**

**Tank:** install the maximum level probe (max.) immediately below the overflow level, and the minimum level probe (min.) at the required water reserve level.

**Well:** install the minimum level probe (min.) above the suction valve, and the maximum level probe (max.) at the required level for the optimum use of well water flow (according to the season).

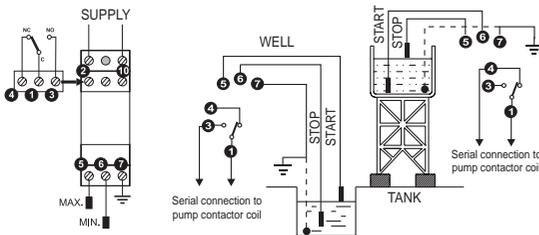
**IMPORTANT:** Probe wiring must be properly insulated, since a faulty ground contact may cause the equipment to malfunction.

**Ground connection (terminal block 7)**

To ensure a proper operation of the level controller, it is mandatory to have a correct ground connection. It is recommended to connect any part of pipe or pump (screw, flange, valve, etc.) to a pickaxe or a sunken probe at the bottom of the tank, if it is made of isolating material (asbestos, fiberglass and plastics in general).

**Connection**

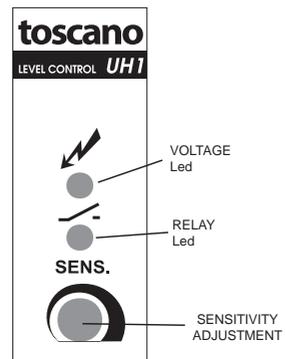
**Frontal Description**



**WARNING**



The minimum distance between two UH1 modules must be 20 mm, in order to avoid heating due to magnetic flux lines induced by the transformers' cores.



## Sensitivity adjustment

Unit is set to maximum sensitivity from factory. This configuration should run properly, except in specific installations where certain factors (such as high humidity, long distance between probes and level controller, or probe ground

capacitance) require sensitivity to be reduced to prevent the level controller to be activated in these circumstances.

## Troubleshooting

To verify that the level controller operating properly:

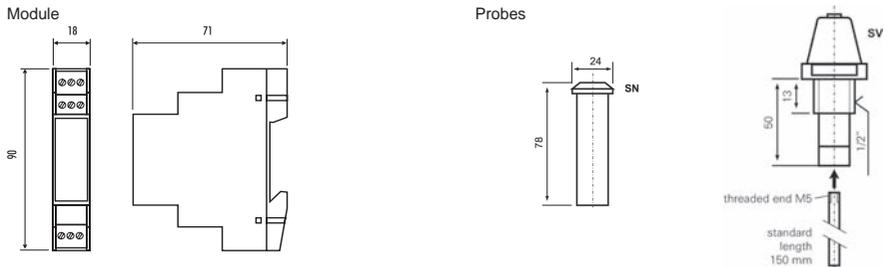
1. Check supply voltage in terminal blocks 2-10.
2. Disconnect probe wiring from terminal blocks.
3. Power the unit on (green pilot light “” on). Jumper terminal blocks 6 and 7 (nothing should happen). Link this to terminal block 5, getting linked terminal blocks 5, 6 and 7 (relay activated and red

pilot light “” on). Un-jumper terminal block 5 (relay remains activated).

4. Un-jumper terminal blocks 6 and 7 (relay is switched-off and red pilot light is off).

If unit operates correctly during these tests, check ground connection as probes are being connected. Otherwise, due to isolating material, install a third probe at the tank or well bottom, connected to terminal block 7.

## Size



## Technical features

LED status indication	VOLTAGE and RELAY
Supply Voltage	230 Vac - 50 Hz (ask for other voltages)
Power consumption	2 VA
Permissible voltage fluctuations	+10% -20%
Temperature operating range	-10° +60° C
Response sensitivity	Adjustable 3-60 Kohms
Voltage in probes	12 Vac. 50 Hz
Current in probes	1,2 mA max. in shortcircuit
Max. terminal block section	2 x 2,5 mm <sup>2</sup>
Contact use	2 A - 250 Vac
Approx. average weight	85 g
Mounting	DIN 35 rail

### TOSCANO LINEA ELECTRONICA, S.L.

Autovia A-92, Km. 6,5 - 41500 - Alcalá de Guadaíra - SEVILLA - ESPAÑA  
Tfno. 34 954 999 900 - Fax. 34 95 425 93 60 / 70  
www.toscانو.es - info@toscano.es

Custom Service  
+34 954 999 900  
English speaker

**toscانو**

ISO9001:2000 certified by Bureau Veritas