

## Conductivity level switch, series 200 – 201

### INSTRUCTION MANUAL - English

Thank you for purchasing 200/1 series level switch.

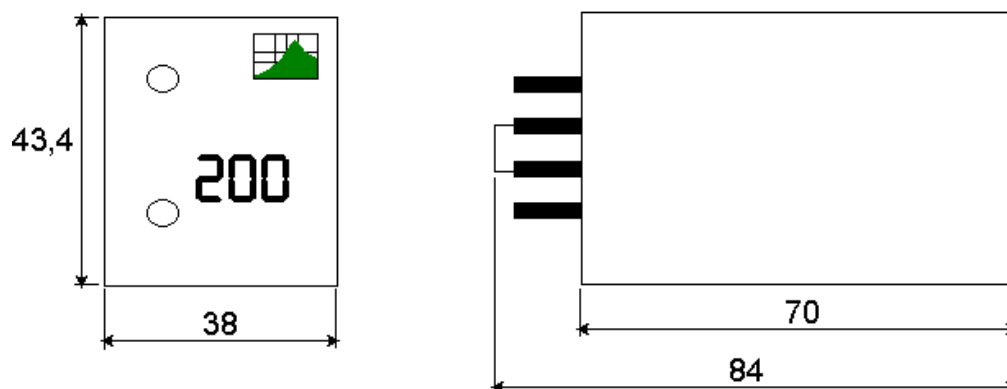
Before using the device, please read carefully this manual.

#### 1 – Description

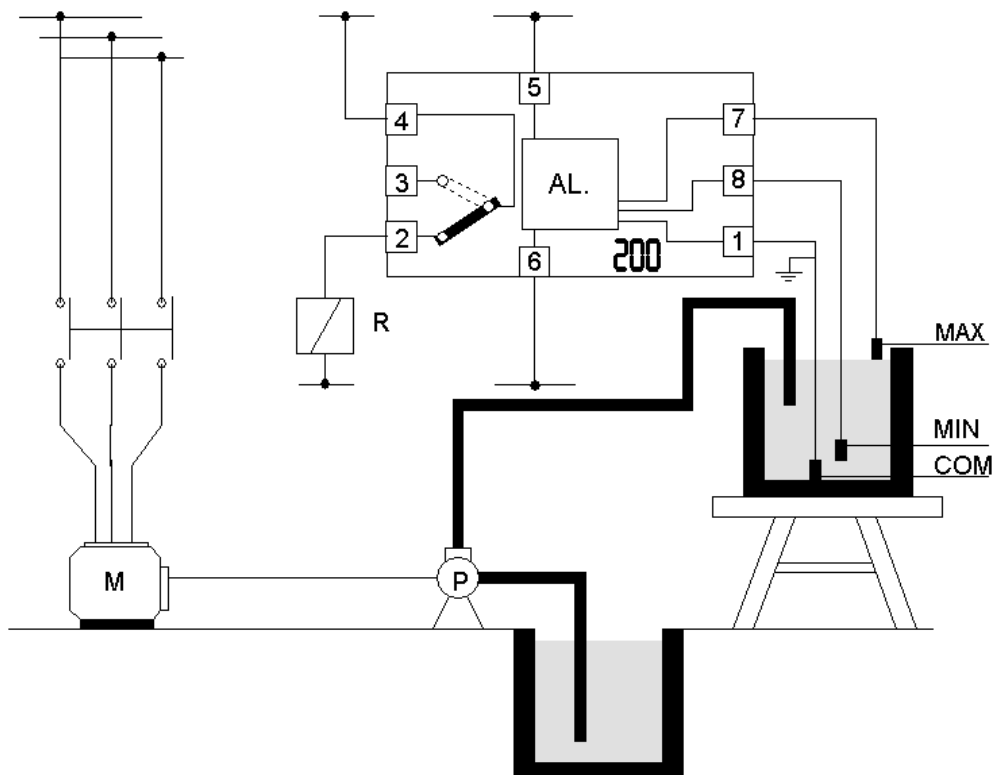
200 and 201 series are level switches for conductive liquids, with integral conductivity between 0.3 and 10000  $\mu$ S, according to the model. They cannot be used with oily materials, neither insulating, or inflammable liquids. For the level measurement, we recommend the use of our 395, 600 and 700 series, probes.

#### 2 - Technical characteristics

- dimensions are in millimeters:



- 2 front led lamps
- 1 N.O. contact switch 5 A/230V a.c. resistive load
- absorption: 5 VA
- sensitivity and time delay (only 201) adjustment
- no electrolysis (for a.c. models only)
- weight: 220 gr
- protection class: IP40
- operating temperature:  $-20 + 60^{\circ}\text{C}$
- operation:



**Water supply:** the pump stops when water level exceeds MAX; and starts when water level drops below MIN.

**Drainage:** in the drawing above, move the wire connected to terminal #2, to terminal #3,. The pump starts when water level exceeds MAX, and stops when water level drops below MIN.



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### 3 – Installation and use

- Before to power the device, be sure that the power supply voltage is equal to the value indicated on the labels of the device, between -10% and +5%.
- Use only sockets made according security regulations.
- Be sure to ground terminal #1.
- With correct supply, the front green lamp must be always on; the front red lamp is on when the internal relay is on, in presence of water between the electrodes.
- The wiring to the 395, 600 and 700 series probes can be made using unshielded cables, with copper section higher than 1 mmq. Signal cables and power cables, doesn't run parallel. For standard and low sensitivity a.c. switches, and for all d.c. models, cable length can be up to 200 m. For high sensitivity, cable length must be as short as possible; in particular for 1÷20 µS models, the maximum length must be 40 m; for 0.3÷2 µS models, the maximum length must be 10 m.
- Electrodes must be separate: a separator is available on request.
- Do not connect to the internal relay a load higher than 5 A (resistive load) at voltage higher than 230 V. a.c. 50/60 Hz
- Sensitivity and time delay (201 only) adjustment:



- The standard switches are factory set to 30µS integral sensitivity, using the internal trimmer: sensitivity increases by clockwise rotation .
- Only levels switch series 201 are factory set to a delay of 5"; the delay trimmer allows delay between 0.5" to 15", rotating clockwise.
- For levels switch series 201, you can choose if the delay may be delayed-to-on or delayed-to-off, simply moving the jumper between the trimmer: right (for delayed-to-off) or left (for delayed-to-on).

**This adjustment should be made in the absence of power supply.**

delayed-to-on:

the internal relay switches ON only after the water level remains above the selected level (MAX) for all the time set.

delayed-to-off:

the internal relay switches OFF only after the water level remains below the selected level (MIN) for all the time set.