Level control

➜ LN plug-in emptying function

- **Relay for controlling level of conductive liquids**
- **Regulation of two levels :**
  - **minimum**
  - **maximum**
- **Empty function**
- **Plug in (8 or 11 pins)**
- **Sensitivity adjustable from 5 kΩ to 100 kΩ**

Specifications

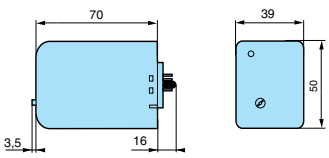
Type	Supply voltage	Base	Code
LN	24 V AC	8-pin	84 870 301
	120 V AC	8-pin	84 870 303
	230 V AC	8-pin	84 870 304
	24 V AC	11-pin	84 870 306
	120 V AC	11-pin	84 870 308
	230 V AC	11-pin	84 870 309
	230 V AC	11-pin (special base)	84 870 807

General characteristics

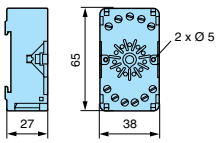
Supply voltage Un	230 V, 110 V, 48 V, 24 V AC, 50/60 Hz
Operating range	0.85 → 1.15 x Un
Max. absorbed power	3 VA
Adjustable sensitivity	5 kΩ → 100 kΩ
Measurement accuracy (at maximum sensitivity)	0 → +30 %
Electrode voltage (max)	24 V AC (50/60 Hz)
Electrode current (maximum)	1 mA (50/60 Hz)
Maximum cable capacity	10 nF
Response time high level	300 ms
Response time low level	500 ms
Output relay (according to AC1 resistive load)	1 AgCdO switch 8 A AC max.
Galvanic isolation via transformer (4 kV, 8 mm creepage distance)	Class II VDE 0551
Isolation of contacts and electrodes from power supply	2.5 kV AC
Temperature limit operation (°C)	-20 → +60
Temperature limits stored (°C)	-30 → +70
Weight (g)	140

Dimensions

LN



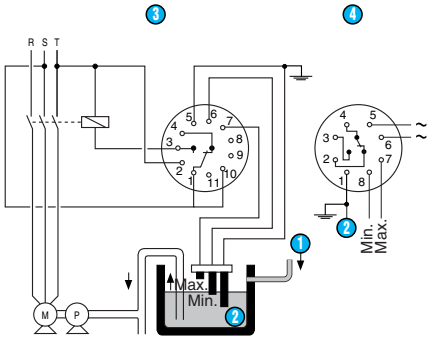
LN
Connector sockets
11-pin: 25 622 078
8-pin : 25 622 129



To order, see page 6

Connections

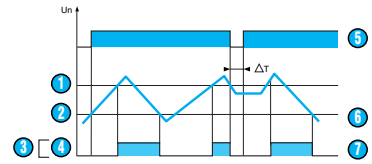
LN



1. Input
2. Common
3. 'LN' 11-pin
4. 'LN' 8-pin

Principles

Emptying control



1. Max. level
2. Min. level
3. Output relay
4. Down
5. Unit power-up
6. Controlled level
7. Empty function

Operating principle
Control of maximum and/or minimum levels of conductive liquids (tap water, sea water, waste water, chemical solutions, coffee etc).
The principle is based on measurement of the apparent resistance of the liquid between two submerged probes. When this value is lower than the preset threshold on the unit front face, the output relay changes state. To avoid electrolytic phenomena, an AC current funs across the probes. Applications found in environmental, chemical industries and food technology etc.

Regulation of two levels : Minimum / Maximum
The output relay changes state when the level of liquid reaches the maximum electrode, with the minimum electrode submerged. It returns to its initial state when the minimum probe is no longer in contact with the liquid.

Note
The probe wire (maximum 100 metres) does not have to be screened, but avoid mounting it in parallel with the power supply wires. A screened wire can be used, with the screening connected to the common.