

## LN plug-in emptying function LN Part number 84870308



- 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 k $\Omega$  to 100 k $\Omega$

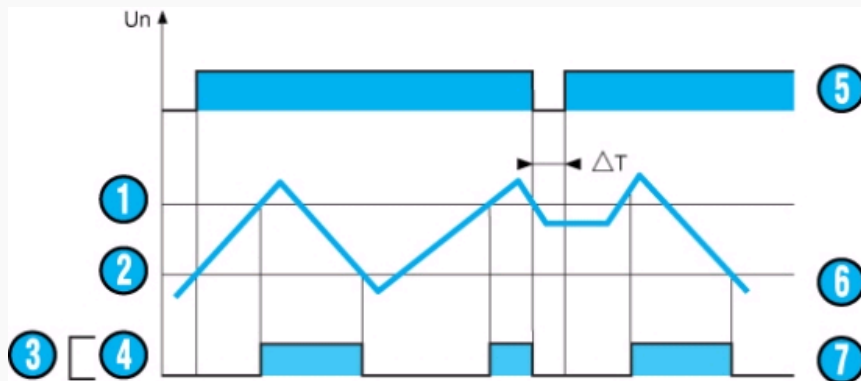
### Part numbers

| Type        | Supply voltage | Base   |
|-------------|----------------|--------|
| 84870308 LN | 120 V AC       | 11-pin |

### Specifications

|   |                                       |
|---|---------------------------------------|
| 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 k $\Omega$ → 100 k $\Omega$         |
| 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                              |
| Isolation of contacts and electrodes from power supply            | 2,5 kV AC                             |
| Operating temperature range (°C)                                  | -20 → +60                             |
| Storage temperature range (°C)                                    | -30 → +70                             |
| Weight (g)  | 140                                   |

### Principles



#### 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 runs 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

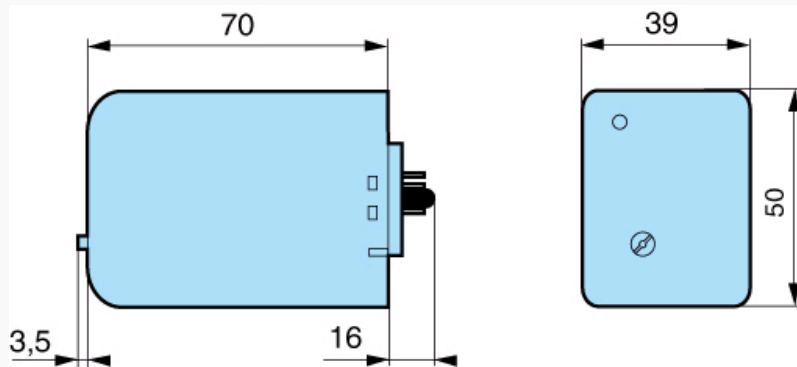
The probe wire (max length 100 metres) does not have to be screened, but avoid mounting it in parallel with the power supply wires. A screened wire can be used, with the screening connected to the common.

| N° | Legend     |
|----|------------|
| ①  | Max. level |
| ②  | Min. level |

|   |                  |
|---|------------------|
| ④ | Output relay     |
| ⑤ | Down             |
| ⑥ | Unit power-up    |
| ⑦ | Controlled level |
| ⑧ | Empty function   |

#### Dimensions (mm)

LN

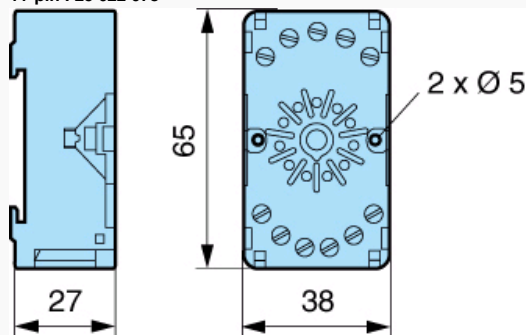


#### Dimensions (mm)

LN connector sockets

8-pin : 25 622 129

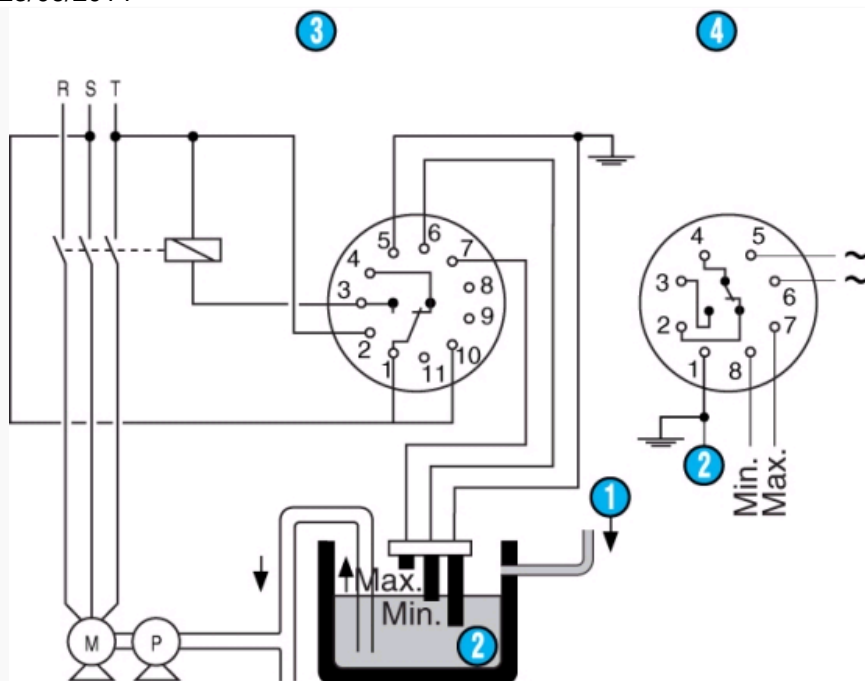
11-pin : 25 622 078



TRADOS Empty Field

#### Connections

LN



| N° | Legend    |
|----|-----------|
| 1  | Input     |
| 2  | Common    |
| 3  | LN 11-pin |
| 4  | LN 8-pin  |