

# Level control

## → ENR

- Adjusting two levels (min./max.)
- Monitoring filling (UP) or emptying (DOWN) , selected by a switch on the front panel.
- Probes supplied with AC current.
- Sensitivity adjustable on front panel from 5 k $\Omega$  to 100 k $\Omega$ .



### Specifications

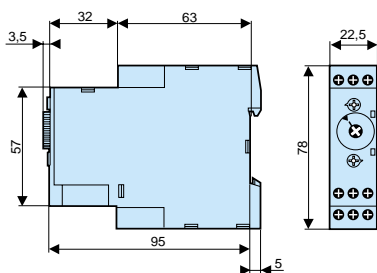
Type	Characteristics	Voltages	Code
ENR	Monitoring filling UP Monitoring emptying DOWN	24 V AC	84 870 201
		48 V AC	84 870 202
		120 V AC	84 870 203
		230 V AC	84 870 204

### General characteristics

Operating range	0.85 → 1.10 x Un
Maximum power consumption	3 VA
Adjustable sensitivity	5 k $\Omega$ → 100 k $\Omega$
Measurement accuracy (at maximum sensitivity)	± 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 AgNi changeover relay 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
Operating temperature range (°C)	-20 → +50°C
Storage temperature range (°C)	-40 → +70°C
Weight (g)	150

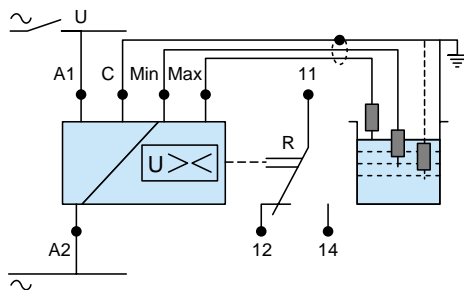
### Dimensions

ENR



## Connections

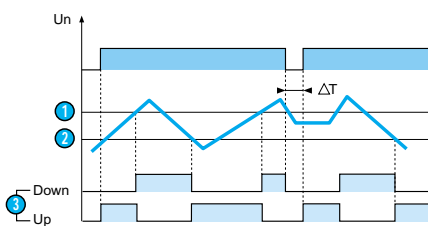
### ENR



A1-A2 : power supply

## Principles

### Monitoring filling or emptying ENR



- ① Maximum level
- ② Minimum level
- ③ Output relay : Down or Up

#### Operating principle

Monitoring maximum and/or minimum levels of conductive liquids (tap water, sea water, waste water, chemical solutions, coffee, etc).

The principle is based on measuring the apparent resistance of the liquid between two submerged probes. When this value is lower than the preset threshold displayed on the unit's front panel, the output relay changes state. To prevent any occurrences of electrolysis, an AC current is passed through the probes. Areas of application include the agri-food, chemical and other industries.

#### Adjusting 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

If the power break T lasts for 1 second or more, the relay reenergises instantly when in "UP" mode and is de-energised when in "DOWN" mode.

## Other informations

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