



# TSV100

## AC voltage detector



### Short description

TSV100 is an AC voltage detector with optoisolated open collector output. It detects voltage in two ranges - from 85 to 250 VAC and from 170 to 250 VAC. The range is settable by jumper inside.

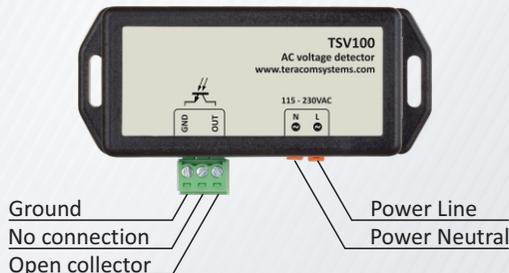
TSV100 utilizes only electronic components; there aren't any mechanical and electro-mechanical components. This improves detector's durability. Galvanic isolation is achieved by used photocoupler on the output. The detector is powered by monitored voltage only.

TSV100 can be used to indicate the presence or absence of line voltage in UPS, power supplies, electrical sources and power lines.

### Technical parameters

|   |                              |
|---|------------------------------|
| Working voltage range                       | 0 to 250 VAC                 |
| Detection level with open jumper            | 85 VAC                       |
| Detection level with close jumper (default) | 170 VAC                      |
| Threshold                                   | $\pm 8$ VAC                  |
| Operating temperature range                 | 0 to +40 °C                  |
| Dimensions                                  | 85 x 35.1 x 23.5 mm          |
| Operating humidity range                    | 5 to 85 %RH (non-condensing) |

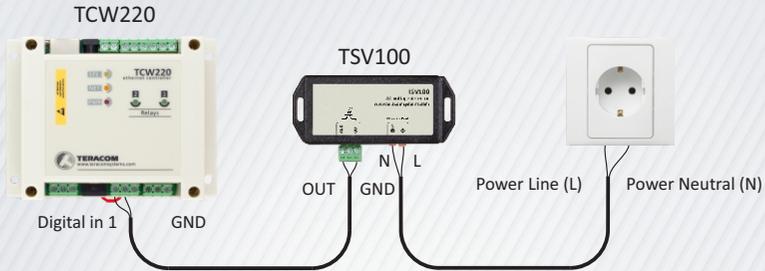
### Pinout





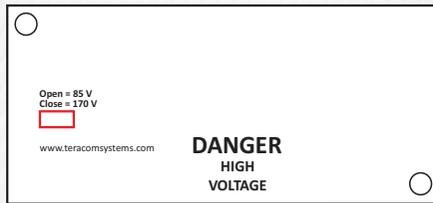
### Sensor connection

TSV100 is connected to digital inputs of TCW1xx, TCW2xx and TCG1xx controllers. The digital input should be in "dry contact" mode (see user manual).



### Detection level change

The detection level can be changed by jumper which is inside the box, on the PCB.



If the jumper is open detection level is 85VAC, if it is close, detection level is 170VAC.

For new devices, the jumper is closed and detection level is 170VAC.

**Attention: There is dangerous voltage inside the box. When change the detection level by jumper, disconnect the detector from the power line.**