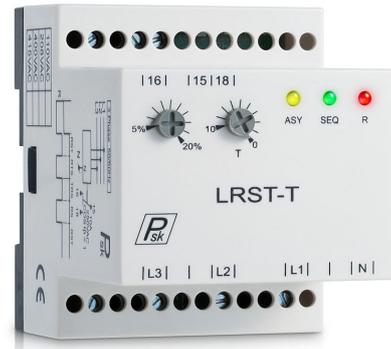


LRST- T

Phase control with asymmetry detection, delay on recovery.

- Monitors its own supply voltage.
- Detects phase failure, phase sequence and phase asymmetry.
- Detects loss of neutral.
- Detect phase failure with regenerated voltage present (back EMF).
- Asymmetry rate from $\pm 5\%$ to $\pm 20\%$ of U_n
- Measuring voltage with neutral.
- Adjustable time delay from 0.1 to 10s on voltage recovery.
- LED indicates for: relay status, asymmetry and sequence.



Operating

When the phase sequence and voltage are correct, the output relay energizes and the red LED is lit. In the event of a wrong phase sequence, phase failure, total loss of phase, asymmetry between the phases, voltage exceeds or descends (with respect to the adjustment value) and lost of neutral, the output relay switches into off-position and the red LED extinguished. Faults are signaled via LEDs, distinguishing the origin of the fault. An adjustable time delay from 0.1 to 10s can be used to

General specifications

- Casing: 60mm
- Asymmetry adjustment: $\pm 5\% \rightarrow \pm 20\%$
- Hysteresis: 3%
- Terminal block protection IP20 acc IEC 60529
- Self-extinguishing plastic housing UL V0 acc IEC 529
- Mounting position: on DIN-rail TS 35 according to EN 50022
- Mounting position: vertically
- Terminal : acc IEC 60947-7-1, IEC 60998-1
- Terminal Capacity: $1 \times 4 \text{mm}^2$ without multicore cable end
 1×0.5 to 2.5mm^2 with/without multicore cable end

Display

- Red LED- relay status (red LED On – relay energizes)
- Yellow LED - Asymmetry (yellow LED On – asymmetry between phase)
- Green LED - Sequence (green LED On – phase sequence wrong)

Incoming supply circuit

- Voltage Failure in one phase detects 96 - 144Vac
- Symmetry voltage Failure in 3 phase detects 166 - 249Vac
- Frequency: 50 / 60 Hz
- Galvanic isolation of power supply / measurement: No
- Power consumption: 1.8 VA in ~

Output circuit

- Relay: 1 C/O
- Rated voltage: 250 Vac
- Switching capacity ac: 2000 VA (8A / 250V) $\text{COS } \varphi = 1$
- Switching capacity dc: 6 A 30 Vdc
- Max switching capacity ac: 10 A
- Mechanical life: 1×10^6 operations
- Electrical life at 1000 VA $\text{COS } \varphi = 1$: 200.000 operations

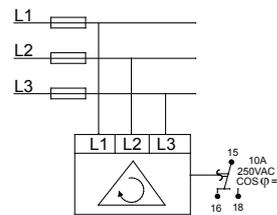
Environmental conditions

- Permissible ambient temperature: $-20^\circ\text{C} \dots +50^\circ\text{C}$
- Storage temperature: $-25^\circ\text{C} \dots +70^\circ\text{C}$
- Transport temperature: $-25^\circ\text{C} \dots +70^\circ\text{C}$
- Relative humidity (acc. IEC 721-3-3 CLASS 3K3): 15% to 85%
- Vibration resistance (acc. IEC 68-2-6): 10 TO 55 H

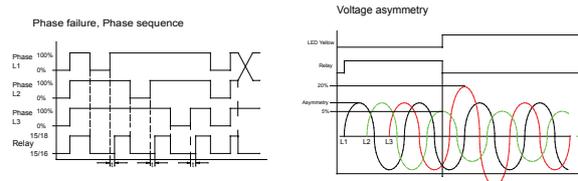
Dimensions & weight

- Width: 62 mm
- Height: 65 mm
- Depth (excl. DIN-profile): 72 mm
- Weight: 219 gram

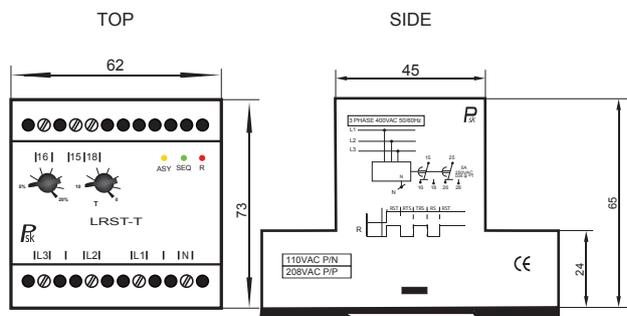
Connections



Function



Dimensions



Ordering information

LRST-T — V

3x 120VAC Ph/N
3x 208VAC Ph/Ph