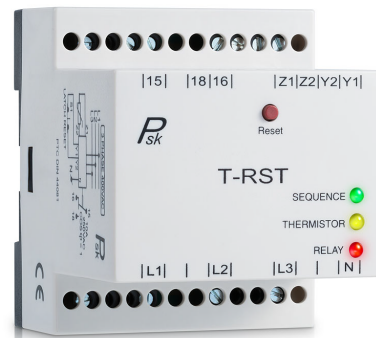


T-RST

Phase control relay with thermistor motor protection

- Detects phase failure, phase sequence, and thermistor motor protection.
- Monitors its own supply voltage.
- Does not detect phase failure with regenerated voltage present (back EMF).
- Measuring voltage with / without neutral.
- LED indicates for: relay status, thermistor failure and sequence.
- Remote reset available.
- Up to 6 PTC sensors in series.



T-RST is control relay for phase failure and thermistor protection, T-RST monitors phase sequence, phase failure and is used with PTC sensor to provide over temperature protection for motors and other equipment's. When the phase sequence is correct, all phases are detected and the resistance of the PTC sensors on the input between (Z1) - (Z2) is within the correct range, the output relay is energizes.

At a loss of one phase (>40% under nominal voltage) or the wrong sequence detection or when the resistance of the sensors exceeds the triggering threshold (resistance above 3100 Ohm) or detection of shorted PTC (resistance below 10 Ohm) the output relay immediately de-energizes. Reset latching is enabled when terminals (Y1) and (Y2) are shortened. Remote reset is available by connecting external switch between (Y1) and (Y2) terminals. When mains returns and the PTC resistance fails below the reset threshold (1650 Ohm) the control relay energizes immediately.

General specifications

- Casing: 60mm
- 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: 1x4mm² without multicore cable end
1x0.5 to 2.5mm² with/without multicore cable end

Incoming supply circuit

- Voltage Failure in one phase detects <100Vac
- Symmetry voltage drop in 3 phase detects <140Vac
- Frequency: 50 / 60 Hz
- Power consumption: 1.8 VA in ~
- Duty cycle: 100%
- Max resistance: 1500 Ohm (6 sensors)
- Triggering threshold: 3100 Ohm
- Reset threshold: 1650 Ohm
- Short circuit detection: 0 – 10 Ohm

Output circuit & Display

- Relay: 1 C/O
- Rated voltage: 250 Vac
- Switching capacity ac: 2000 VA (8A / 250V) COS Φ = 1
- Switching capacity dc: 3 A 30 Vdc
- Max switching capacity ac: 8 A
- Mechanical life: 1 x 10⁶ operations
- Electrical life at 1000 VA COS Φ =1: 200.000 operations

Environmental conditions

- Permissible ambient temperature: -20°C....+50°C
- Storage temperature: -25°C....+70°C
- Transport temperature: -25°C....+70°C
- Relative humidity (acc. IEC 721-3-3 CLASS 3K3): 15% to 85%
- Vibration resistance (acc. IEC 68-2-6): 10 TO 55 Hz

Ordering information

T-RST - V 3 x 400 VAC 50/60 Hz

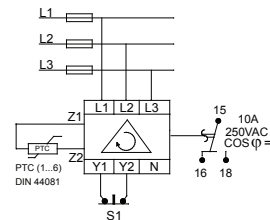
Display

- Red LED- relay status (red LED On – relay energizes)
- Yellow LED - thermistor detection
- Green LED - Sequence (green LED On – phase sequence wrong)

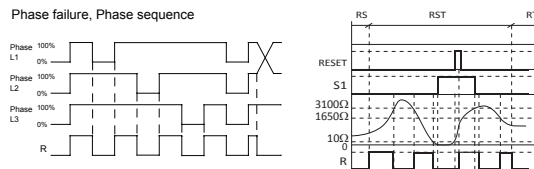
Dimensions & weight

- Width: 62 mm
- Height: 65 mm
- Depth (excl. DIN-profile): 72 mm
- Weight: 227gram

Connections



Function



Dimensions

