3-Phase Supply Control Relays

TYPE:RSTB

ISO 9001 CE

This is designed to monitor 3-phase supplies and to protect motors and other loads against the faults listed below.

- Monitoring of rotational direction of phases
- Detection of complete failure of one or more of the phases
- Undervoltage detection (-10%)
- Overvoltage detection (+10%)
- Detection of phase asymmetry (imbalance) (± 10%)

The relay operates if any of the conditions occours.

The relay releases if any of the conditions fails.

There is a Time Delay between the relay action and the condition occours (except rotational direction of phases error) to avoid very short interruptions or other momentary failures.
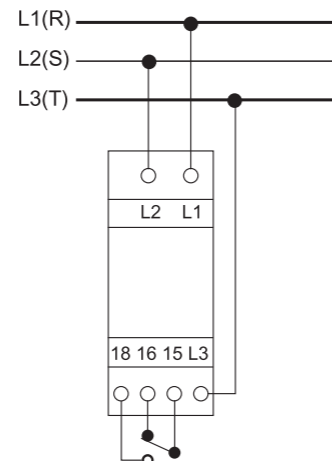
A selector switch allows selection of an adjustable time delay from 0.1 s to 10 s.

When the supply returns towards its rated value, the relay is re-energised according to the hysteresis value (5%)

■ Dimensions
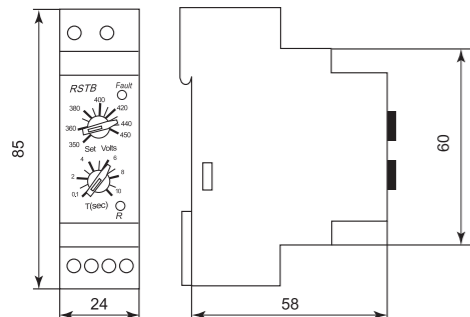
■ Connections

■ Technical data

- Output 1 FORM C(SPDT): 10A 250VAC 1/2HP
- Supply voltage :   3 Phase AC 50/60Hz 350V-450V can be setted
- Adjustalbe Time Delay : 0.1-10 sec
- Mechanical Life: 10,000,000 operations.
- Electrical Life :100,000 operations at rated load.
- Ambient Temperature: -10°C to +60°C
- Ambient Humidity: 45~85% RH
- Mounting Directly at DIN rail.
- Weight :Approx 100g
- Indications   Green LED: indicates relay state.
  Red LED: overvoltage fault.   undervoltage fault.   phase asymmetry.
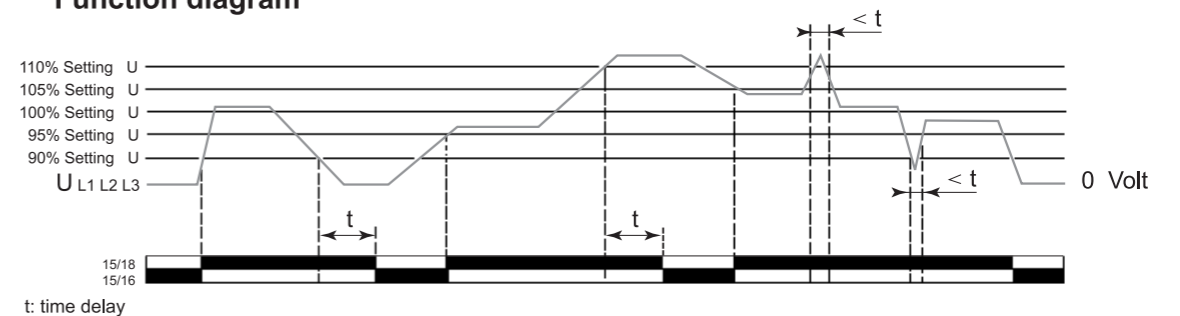 Phase failure or incorrect rotational direction of phases.

■ Timing

Example: asymmetry threshold at 10 %, mains supply voltage 400 V

- relay de-energisation threshold: 400V $*$ (1-10%) = 360 V.
- relay re-energisation threshold: 400V $*$ (1-5%) = 380 V.

Function diagram

t: time delay

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