Pt100-Temperature-Relay Type TR250
3 Sensors Pt 100 (RTD), Pt 1000, PTC or KTY, 3 Limits
NEW: Alarm counter and preset programs for use with PTC thermistors only

TR250

UK CA   c **RU** us

Part number:
T224190   AC/DC 24-240 V

Accessory: Installation frame ER4 for panel mount

T224384   ER4

The Pt100 thermostat TR250 monitors up to 3 sensors Pt100 (RTD), Pt1000, KTY83 KTY84 or thermistors (PTC) at the same time. Different types of sensors, e.g. Pt 100 and PTC can be monitored simultaneously.
The unit is especially suitable for monitoring motors, generators and transformers.

An other application is the use as a 2- or 3-step-controller with additional monitoring of over- or under-temperature. monitoring of differences in temperatures of 2 sensors or temperature controller for heat pumps.
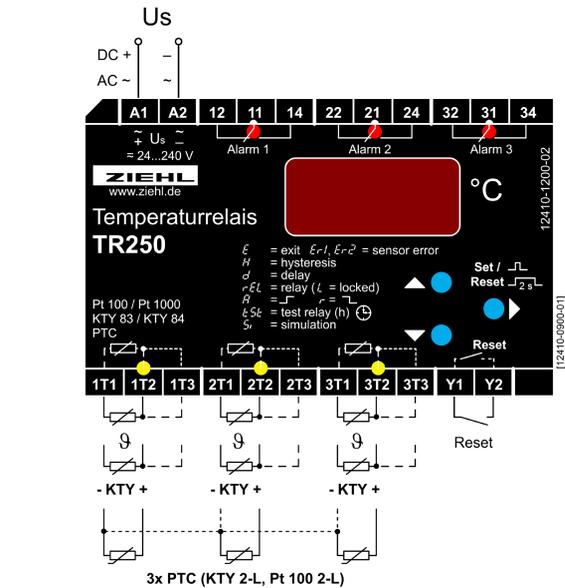
- Measuring and monitoring range - 199...+850°C
- resolution 0.1 °C selectable within range -19.9...99.9 °C
- 3 relay outputs K1 to K3 with change-over contacts
- Universal power supply AC/DC 24-240 V
- Easy setting
- Storing of values of MIN- and MAX- temperature
- Alarm counter for 3x99 alarms with display of sensor and elapsed time.
- Code-lock against manipulation of settings

3 Sensor-Inputs:
- Pt100/1000, 2- or 3-wire connection, KTY83, KTY84
- Thermistors (PTC) each 1...6 in series
- Monitoring of short-circuit and break

Displays:
- 3 digit 7-segment-display for temperature and programming
- 3 LEDs for sensors, for alarms/relays
- display °C or °F selectable, resolution 0.1 °C

Switching-Functions
- 3 relays
- warmest/coldest sensor switches relay
- prgrammable for every relay:
  - hysteresis
  - autoreset or electronic reclosing lock
  - delay-time for switching and switching back
  - operating- or closed current-mode
  - cyclic check of function
- monitoring of difference in temperature

6 preset programs:
- motor / generator with 3x Pt 100
- transformer with 3x Pt 100
- transformer with 2x PTC / 3x PTC
- transformer with 2x PTC and 1x Pt 100
- 3 x 1 alarm per sensor

Technical Data

Rated supply voltage Us	AC/DC 24-240 V (AC 20-264 V, DC 20-297 V)
Sensor connection	3 x Pt100 (DIN 43 760/IEC 751) (RTD) 3 x Pt1000, KTY83, KTY84 3 x 1...6 PTC (DIN 44080/44081)
Measuring accuracy	< 0,5 % of value ±1 K
Sensor-current	< 1 mA
Connection	3-wire, 2-wire, line-resistance max. 2 x 50 Ω
Measuring range	-199...+850 °C
Hysteresis	-99...+99 °C
Switching delay on/off	0...99 s / 0...999 s
Type of contact	**type 2** (see "general technical information") 3 x change-over / alarm
Test conditions	see "general technical information"
Rated ambient temp. range	-20°C...+65°C
Housing / Installation Frame	Design V4 / Front mounting kit type ER4
Dimensions (h x w x d)	90 x 70 x 58 [mm], mounting height 55 mm
Protection housing / terminals	P 30 / IP 20
Weight	app. 200 g
Attachment	on 35 mm DIN rail or with screws M4