

Temperature Guard TG50



Output	: relay SPDT
Alarm A1-A4	: < 250 V AC < 250 VA < 2 A cos Phi ≥ 0.3 < 300 V DC < 40 W < 2 A
Analog	: 0/4..20 mA burden ≤500 Ω 0/2..10 V burden >500 Ω isolated, automatic output changing (burden dependent)
- Accuracy	: 0.2 %; TK 0.01 %/K
Fault indication	: for broken line or short circuit detection → analog output (programmable) 0 mA, < 3.6 mA or >21.5 mA → Alarm relays min. or max. function programmable
Case	: Polyamide (PA) 6.6 , UL94V-0 TS35 acc. to DIN EN 60715:2001-09
Weight	: approx. 450 g
Connection	: screw terminals 0.14..2.5 mm ² AWG 26..AWG14
Protection class	: case IP30, terminals IP20 acc. to BGV A3

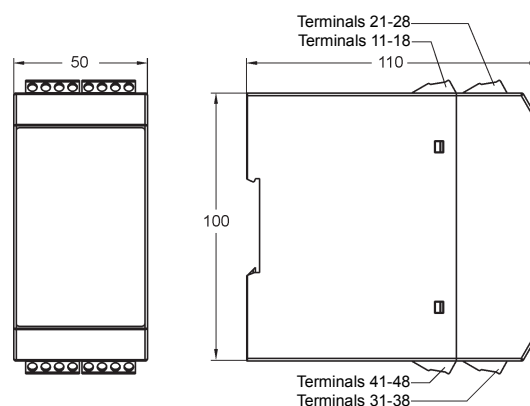
Characteristics

The Temperature-Guard TG50 has inputs for temperature probes RTD (Pt100/Pt1000) and thermocouple J, K, N and S. Simple programming, up to 4 alarm outputs (SPDT) and an available fully isolated free programmable analog output 0/4..20 mA; 0/2..10 V DC offers a lot of solutions for temperature monitoring. Peak value indication for minimum and maximum measured temperature are stored in the background and can be read out from the display at any time.

Technical data

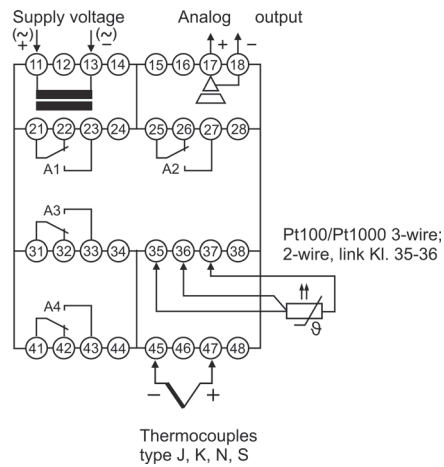
Power supply	
Supply voltage	: 230 V AC ±10 % 115 V AC ±10 % 24 V DC ±15 % : < 5 VA
Operating temperature	: -10..+55 °C
CE-conformity	: EN 61326-1:2013 EN 60664-1:2007
Input	
Fault function	: break of wire (RTD Pt100/1000, Thermocouple) and short-circuit (only Pt100/1000)
RTD	: Pt100 (3-wire) -100.0..+600.0 °C Pt1000 (3-wire) -100.0..+300.0 °C : Thermocouple (TC) type J -100.0..+800.0 °C type K -150..+1200 °C type N -150..+1200 °C type S -50..+1600 °C cold junction compensation integrated
Accuracy	: <0.1 %, ±1 Digit
Display	: Graphic LCD-Display, 128 x 64 Pixel, with white back-lite

Dimensions



Continue next page.

Connection diagram



Ordering code

1. 2. 3. 4. 5. 6.
 TG50 - - - - - -

1. Device type/input

- 3 RTD Pt100, 3-wire, -100.0..+600.0 °C
 RTD Pt1000, 3-wire, -100.0..+300.0 °C
 Thermocouple
 J (Fe-CuNi), -100.0..+800.0 °C
 K (NiCr-Ni), -150..+1200 °C
 N (NiCrSi-NiSi), -150..+1200 °C
 S (Pt10Rh-Pt), -50..+1600 °C

2. Alarm output A1, A2

- 2R 2 relay SPDT

3. Alarm output A3, A4

- 00 not installed
 2R 2 relay SPDT

4. Analog output

- 00 not installed
 AO 0/4..20 mA, 0/2..10 V DC, isolated

5. Supply voltage

- 0 230 V AC, ± 10 % 50-60 Hz
 1 115 V AC, ± 10 % 50-60 Hz
 5 24 V DC, ± 15 %

6. Options

- 00 without option