- Industrial design
- Width 22.5mm
- Temperature monitoring of the motor winding (max. 6 PTC)
- 1 normally closed contact

Technical data

1. Functions

Temperature monitoring of the motor winding (max. 6 PTC) for temperature probes in accordance with DIN 44081
Short circuit monitoring of PTC - circuit

2. Time ranges

	Adjustment range
Start-up suppression time:	-
Tripping delay:	-

3. Indicators

Green LED ON:	indication of supply voltage
Red LED ON/OFF:	indication of fault

4. Mechanical design

Self-extinguishing plastic housing, IP rating IP40
Mounted on DIN-Rail TS 35 according to EN 50022
Mounting position: any
Shockproof terminal connection according to VBG 4 (PZ1 required), IP rating IP20
Initial torque: max. 1Nm
Terminal capacity:
1 x 0.5 to 2.5mm² with/without multicore cable end
1 x 4mm² without multicore cable end
2 x 0.5 to 1.5mm² with/without multicore cable end
2 x 2.5mm² flexible without multicore cable end

5. Input circuit

Supply voltage:

24V AC	terminals A1-A2	(TT2X 24V AC)
110V AC	terminals A1-A2	(TT2X 110V AC)
230V AC	terminals A1-A2	(TT2X 230V AC)

Tolerance:

24V AC	-15% to +10%	(TT2X 24V AC)
110V AC	-15% to +10%	(TT2X 110V AC)
230V AC	-15% to +10%	(TT2X 230V AC)

Rated frequency: 48 to 63 Hz
Rated consumption:

24V AC	2VA (1.5W)	(TT2X 24V AC)
110V AC	2VA (1.5W)	(TT2X 110V AC)
230V AC	2VA (1.5W)	(TT2X 230V AC)

Duration of operation: 100%
Reset time: 300ms
Residual ripple for DC: -
Drop-out voltage: >30% of the supply voltage

6. Output circuit

1 potential free change over contact
Switching capacity (distance < 5mm): 750VA (3A / 250V AC)
Switching capacity (distance > 5mm): 1250VA (5A / 250V AC)
Fusing: 5A fast acting
Mechanical life: 20 x 10^6 operations
Electrical life: 1 x 10^5 operations at 1000VA resistive load
Switching frequency: max. 60/min at 100VA resistive load
max. 6/min at 1000VA resistive load (according to IEC 947-5-1)
Insulation voltage: 250V AC (according to IEC 664-1)
Surge voltage: 4kV, overvoltage category III (according to IEC 664-1)

7. Measuring circuit

Input:	thermistor	terminals T1-T2
Initial resistance:		<1.5kΩ
Response value (relay in off-position):		≥3.3kΩ
Release value (relay in on-position):		≤1.8kΩ
Disconnection (short circuit thermistor):		<15Ω
Terminal voltage T1-T2:		max. 12V DC

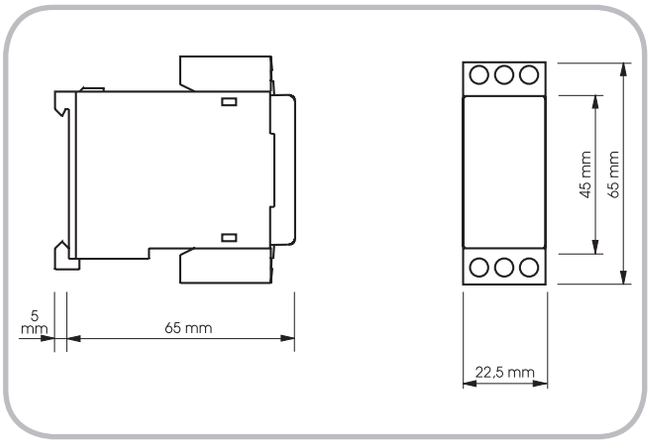
8. Accuracy

Base accuracy:	±10%
Adjustment accuracy:	-
Repetition accuracy:	<1%
Voltage influence:	≤1% / V
Temperature influence:	≤1% / °C

9. Ambient conditions

Ambient temperature:	-25 to +55°C (according to IEC 68-1)
Storage temperature:	-25 to +70°C
Transport temperature:	-25 to +70°C
Relative humidity:	15% to 85% (according to IEC 721-3-3 class 3K3)
Pollution degree:	3 (according to IEC 664-1)

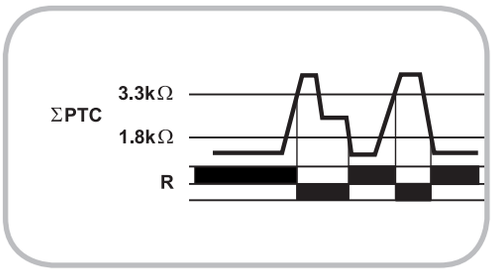
10. Dimensions



Functions

Temperature monitoring of the motor winding (max. 6 PTC) for temperature probes in accordance with DIN 44081
Short circuit monitoring of PTC - circuit

Temperature monitoring of the motor winding
If the supply voltage is applied (green LED illuminated) and the cumulative resistance of the PTC-circuit is less than 1.8kΩ (standard temperature of the motor), the output relay R switches into on-position. When the cumulative resistance of the PTC-circuit exceeds 3.3kΩ (at least one of the PTCs has reached the cut-off temperature), the output relay switches into off-position (red LED illuminated). The output relay again switches into on-position (red LED not illuminated), if the cumulative resistance drops below 1.8kΩ by cooling down of the PTC.
The output relay switches into off-position (red LED illuminated) in case of a line break or a short circuit of the probe line (cumulative resistance less than 15Ω).



Connections