Monitoring relays - TREND series

TIF30/300mAAC4X

- Industrial design
- Width 45mm
- ► AC current monitoring in 1-phase mains
- 2 change over contacts



Technical data

1. Functions

Consumer failure detection for AC-current in 1-phase mains with 2 fixed thresholds (selectable via bridge x1-x2)

2. Time ranges

Adjustment range

Start-up suppression time: Tripping delay:

3. Indicators

Green LED ON: indication of supply voltage Yellow LED ON/OFF: indication of relay output

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: 230V AC terminals A1-A2

-15% to +10% Toleránce: 48 to 63Hz 8VA (1.3W) 100% Rated frequency: Rated consumption: Duration of operation: Reset time: 500ms

Residual ripple for DC: Drop-out voltage: >30% of the supply voltage

6. Output circuit

2 potential free change over contacts Switching capacity: 1250VA (5A / 250V AC)

5A fast acting 20 x 10⁶ operations Fusing: Mechanical life: 1 x 10⁵ operations at 1000VA resistive load max. 60/min at 100VA resistive load Electrical life:

Switching frequency: max. 6/min at 1000VA resistive load

(according to IEC 947-5-1)
250V AC (according to IEC 664-1)
4kV, overvoltage category III
(according to IEC 664-1) Insulation voltage: Surge voltage:

7. Measuring circuit

30mA terminals k - I Input: 300mA terminals k - I (X1-X2 bridged)

Overload capacity: 30mA 15A 300mA 15A Input resistance: 30mA 5mO 300mA $5m\Omega$ Switching threshold

fixed, 30mA (X1-X2 bridged)

Hysteresis: fixed, approx. 5%

8. Accuracy

Base accuracy: ±20% (of maximum scale value)

Adjustment accuracy: Repetition accuracy:

≤0.02% / 1% supply voltage change Voltage influence:

Temperature influence: ≤0.05% / °C

9. Ambient conditions

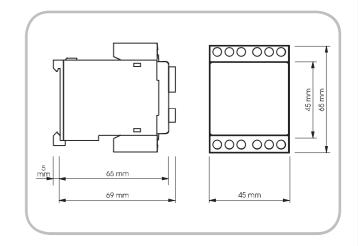
Ambient temperature: Storage temperature: -25 to +55°C (according to IEC 68-1)

-25 to +70°C -25 to +70°C Transport temperature: Relative humidity: 15% to 85%

(according to IEC 721-3-3 class 3K3) Pollution degree:

3 (according to IEC 664-1)

▶ 10. Dimensions

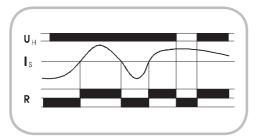


TIF30/300mAAC4X

Functions

Consumer failure detection for AC-current in 1-phase mains with 2 fixed thresholds (selectable via bridge x1-x2)

Undercurrent monitoring
The supply voltage U must be constantly applied to the device (green LED illuminated).
The output relay R switches into on-position (yellow LED illuminated), when the measured current exceeds the fixed threshold. When the measured value for the current falls below the set value the output relay switches into off-position (yellow LED not illuminated).



Connections

