



AC/DC current monitoring in 1-phase mains
 16.6 to 400Hz
 Supply voltage selectable via power modules
 2 change-over contacts
 Width 22.5mm
 Industrial design



Technical data

1. Functions

a.c./d.c. overcurrent monitoring in 1-phase mains with adjustable thresholds, tripping delay and adjustable hysteresis.

OVER Overcurrent monitoring

2. Time ranges

Tripping delay (Delay): Adjustment range
 0s - 5s

3. Indicators

Green LED U/t ON: indication of supply voltage
 Yellow LED R ON/OFF: indication of relay output
 Red LED U/t ON/OFF: indication of failure for max (A)
 Red LED U/t flashes: indication of tripping delay for failure max(A)

4. Mechanical design

Self-extinguishing plastic housing, IP rating IP40
 Mounted on DIN-Rail TS 35 according to EN 60715
 Mounting position: any
 Shockproof terminal connection according to VBG 4 (PZ1 required), IP rating IP20
 Tightening 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: terminals A1-A2
 12 to 400V a.c. selectable via power modules TR2
 Tolerance: according to specification of power module
 Rated frequency: according to specification of power module
 Rated consumption: 2VA (1.5W)
 Duration of operation: 100%
 Reset time: 100ms
 Residual ripple for d.c.: 10%
 Drop-out voltage: >30% of the supply voltage
 Overvoltage category: III (in accordance with IEC 60664-1)
 Rated surge voltage: 4kV

6. Output circuit

2 potential free change-over contacts
 Rated voltage: 250V a.c.
 Switching capacity: 750VA (3A / 250V a.c.)
 If the distance between the devices is less than 5mm.
 Switching capacity: 1250V (5A / 250V a.c.)
 If the distance between the devices is greater than 5mm.
 Fusing: 5A fast acting

Mechanical life: 20 x 10⁶ operations
 Electrical life: 2 x 10⁵ operations at 1000VA resistive load
 Switching frequency: max. 60/min at 100VA resistive load
 max. 6/min at 1000VA resistive load (in accordance with IEC 60947-5-1)
 Overvoltage category: III (in accordance with IEC 60664-1)
 Rated surge voltage: 4kV

7. Measuring circuit

Measuring variable: d.c. or a.c. Sinus (16.6 to 400Hz)
 Measuring input: terminals K-I (+)
 5A a.c./d.c.
 Overload capacity: 10A
 5A a.c./d.c.
 Input resistance: 10mΩ
 5A a.c./d.c.
 Switching threshold:
 Max 0.5A to 5A
 Min 10% to 90% of Max
 Overvoltage category: III (in accordance with IEC 60664-1)
 Rated surge voltage: 4kV

8. Accuracy

Base accuracy: ±5% of maximum scale value
 Frequency response: -10% to +5% (16.6 to 400Hz)
 Adjustment accuracy: ≤5% of maximum scale value
 Repetition accuracy: ≤2%
 Voltage influence: -
 Temperature influence: ≤0.1% / °C

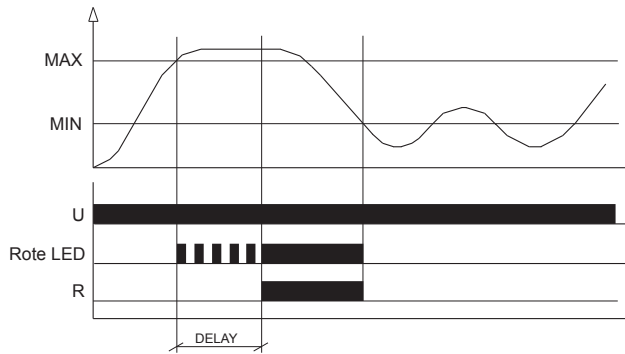
9. Ambient conditions

Ambient temperature: -25 to +55°C
 (in accordance with IEC 60068-1)
 Storage temperature: -25 to +70°C
 Transport temperature: -25 to +70°C
 Relative humidity: 15% to 85%
 (in accordance with IEC 60721-3-3 class 3K3)
 Pollution degree: 3 (in accordance with IEC 60664-1)
 Vibration resistance: 10 to 55 Hz 0.35mm
 (in accordance with IEC 60068-2-6)
 Shock resistance: 15g 11ms
 (in accordance with IEC 60068-2-27)

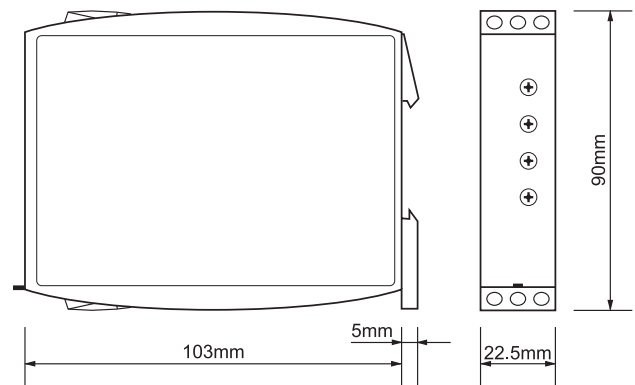
Functions

Overcurrent monitoring (OVER)

When the supply voltage U is applied, the output relay R is into off-position. When the measured current exceeds the value adjusted at the MAX-regulator, the set interval of tripping delay (DELAY) begins (red LED U/t flashes). After the interval has expired (red LED U/t illuminated), the output relay switches into on-position (yellow LED illuminated). The output relay switches into off-position (yellow LED not illuminated), when the measured current falls below the value adjusted at the MIN-regulator (red LED U/t not illuminated).



Dimensions



Connection

Range 5A with power module 230V AC

