

- ▶ Industrial design
- ▶ Width 45mm
- ▶ AC/DC voltage monitoring in 1-phase mains
- ▶ 2 change over contacts



Technical data

1. Functions

AC/DC overvoltage monitoring in 1-phase mains with adjustable threshold, timing for start-up suppression and tripping delay separately adjustable and adjustable hysteresis

2. Time ranges

| | Adjustment range | |
|----------------------------|------------------|----|
| Start-up suppression time: | 0.5s | 5s |
| Tripping delay: | 0.5s | 5s |

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: | 12 to 440V AC | terminals A1-A2 (galvanically separated) selectable via transformer modules TR3 |
| Tolerance: | | -15% to +10% |
| Rated frequency: | | 48 to 63Hz |
| Rated consumption: | | 4VA (3W) |
| Duration of operation: | | 100% |
| 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: | 1500VA (6A / 250V) |
| Fusing: | 6A fast acting |
| Mechanical life: | 20 x 10 ⁶ operations |
| Electrical life: | 2 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: | 50V AC/DC | terminals e-f | (UH50V4X) |
| | 450V AC/DC | terminals e-f | (UH450V4X) |
| Overload capacity: | 50V AC/DC | 250V | (UH50V4X) |
| | 450V AC/DC | 600V | (UH450V4X) |
| Input resistance | 50V AC/DC | 300kΩ | (UH50V4X) |
| | 450V AC/DC | 3MΩ | (UH450V4X) |
| Switching threshold U _{max} : | 50V AC/DC | 5 to 50V AC/DC | (UH50V4X) |
| | 450V AC/DC | 50 to 450V AC/DC | (UH450V4X) |
| Hysteresis U _{min} : | | 10% to 90% | |

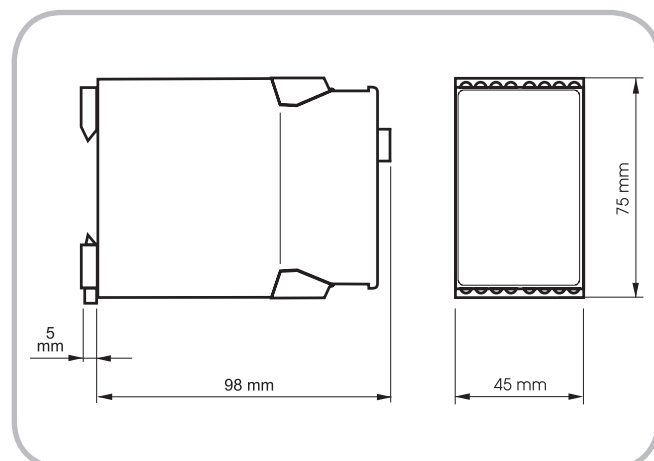
8. Accuracy

| | |
|------------------------|------------------------------|
| Base accuracy: | - |
| Adjustment accuracy: | ≤5% (of maximum scale value) |
| Repetition accuracy: | ≤1% |
| Voltage influence: | ≤0.5% |
| Temperature influence: | ≤0.01% / °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



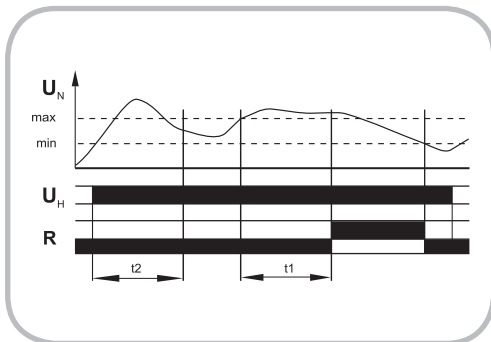
Functions

AC/DC overvoltage monitoring in 1-phase mains with adjustable threshold, timing for start-up suppression and tripping delay separately adjustable and adjustable hysteresis

When the supply voltage U is applied (green LED illuminated), the set interval of the start-up suppression (t_2) begins. Changes of the measured voltage during this period do not affect the state of the output relay.

Overvoltage monitoring

When the measured voltage exceeds the value adjusted at the MAX-regulator the set interval of the tripping delay (t_1) begins. After the interval has expired, the output relay R switches into on-position (yellow LED illuminated). When the measured voltage falls below the value adjusted at the MAX-regulator by more than the value adjusted at the MIN-regulator, the output relay switches into off-position (yellow LED not illuminated).



Connections

