# Monitoring relays - Clip series

# CIH10AAC3X

- Installation design
- Width 35mm
- AC current monitoring in 1-phase mains
- 1 change over contact



# Technical data

#### ■ 1. Functions

AC overcurrent monitoring in 1-phase mains with adjustable threshold and fixed hysteresis

# 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 4mm<sup>2</sup> without multicore cable end

2 x 0.5 to 1.5mm<sup>2</sup> with/without multicore cable end 2 x 2.5mm<sup>2</sup> flexible without multicore cable end

## **▶** 5. Input circuit

Supply voltage:

24V AC/DC terminals A1-A2 110V AC terminals A1-A2 (CIH10AAC3X 110VAC) 230V AC terminals A1-A2 (CIH10AAC3X 230VAC)

Tolerance:

24V AC/DC -15% to +10%

110V AC (CIH10AAC3X 110VAC) -20% to +15% 230V AC -20% to +15% (CIH10AAC3X 230VAC)

Rated frequency: 45 to 65Hz

Rated consumption:

24V AC/DC 1VA 110V AC 4VA (CIH10AAC3X 110VAC) (CIH10AAC3X 230VAC) 230V AC 8VA

Duration of operation: 100% Reset time:

Residual ripple for DC:

Drop-out voltage: >30% of the supply voltage

### **▶** 6. Output circuit

1 potential free change over contact

1250VA (5A / 250V AC) Switching capacity:

Fusing:

20 x 10<sup>6</sup> operations Mechanical life: Electrical life: 2 x 10<sup>5</sup> operations at 1000VA resistive load Switching frequency:

Insulation voltage:

Surge voltage:

max. 60/min at 100VA resistive load 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)

7. Measuring circuit

10A AC terminals k-I(+) Input:

Overload capacity: 15A Input resistance: <5Ω

Switching threshold I<sub>max</sub>: 1 to 10A AC Hysteresis: fixed, approx. 10% Terminal voltage k,l: max. 250V AC

8. Accuracy

Base accuracy: +5% (of maximum scale value) ≤5% (of maximum scale value) Adjustment accuracy:

Repetition accuracy: ≤2% Voltage influence:

Temperature influence: ≤0.1% / °C

#### 9. Ambient conditions

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

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

(according to IEC 721-3-3 class 3K3)

Pollution degree: 2, if built-in 3

(according to IEC 664-1)

## **▶** 10. Dimensions



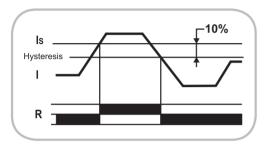
# Functions

AC overcurrent monitoring in 1-phase mains with adjustable threshold and fixed hysteresis

#### Overcurrent 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 value adjusted at the I<sub>s</sub>-regulator. The output relay switches into off-position (yellow LED not illuminated) when the measured value for the current falls below the set value by more than the fixed hysteresis.



# Connections

