

- ▶ AC current monitoring in 1-phase mains
- ▶ Undercurrent monitoring
- ▶ 1 change over contact
- ▶ Width 17.5 mm
- ▶ Installation design



Technical data

1. Functions

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

UNDER Undercurrent monitoring

2. Time ranges

Tripping delay (Delay): Adjustment range -

3. Indicators

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

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
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: 230V AC
Terminals: Li-N
Tolerance: -15% to +15% of Un
Rated voltage: 5VA (0.8W)
Rated frequency: AC 48 to 63Hz
Duration of operation: 100%
Reset time: 500ms
Wave form: Sinus
Hold-up time: -
Drop-out voltage: >20% of rated voltage
Overvoltage category: III (according to IEC 60664-1)
Rated surge voltage: 4kV

6. Output circuit

1 potential free change over contact
Rated voltage: 250V AC
Switching capacity: 1250VA (5A / 250V)
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
(according to IEC 947-5-1)
Overvoltage category: III. (according to IEC 60664-1)
Rated surge voltage: 4kV

7. Measuring circuit

Measuring variable: AC sinus, 48 to 63Hz
Measuring input: 5AAC
Terminals: Li, Lk
Overload capacity: 7A (ex 5A - distance > 5mm)
Starting current:
1s 40A
3s 20A
Input resistance: 10mΩ
Switching threshold Is: see table ordering information or printing on the unit
Hysteresis H: see table ordering information or printing on the unit
Overvoltage category: III (according to IEC 60664-1)
Rated surge voltage: 4kV

8. Accuracy

Base accuracy: ±5% of nominal value
Adjustment accuracy: ±5% of nominal value
Repetition accuracy: ≤2% of nominal value
Voltage influence: -
Temperature influence: 0,05% / °C

9. Ambient conditions

Ambient conditions: -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: 2, if built-in 3
(according to IEC 664-1)
Vibration resistance: 10 to 55 Hz 0.35mm
(according to IEC 68-2-6)
Shock resistance: 15g 11ms
(according to IEC 68-2-27)

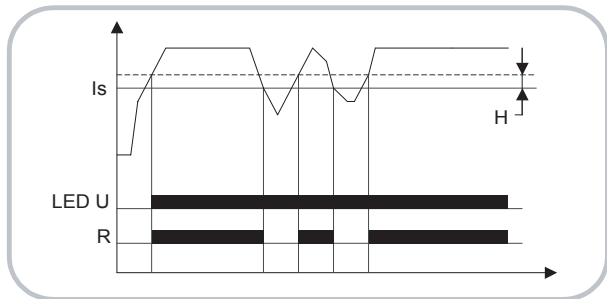
10. Weight

Single packing: 70g
Package of 10pcs: 660g per package

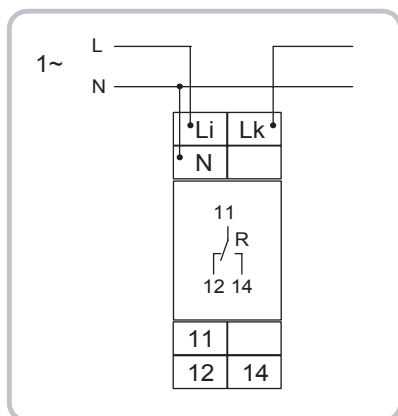
Functions

Undercurrent monitoring (UNDER)

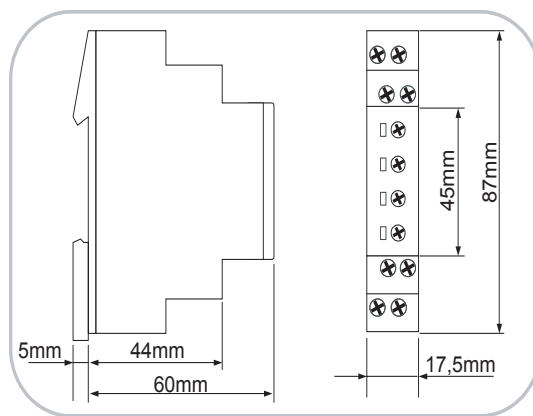
When the measured current falls below the value adjusted at the Min-regulator, the output relay R switches into off-position (yellow LED not illuminated). When the measured current exceeds the value adjusted at the Min-regulator plus the hysteresis, the output relay R switches into on-position again (yellow LED illuminated),



Connections



Dimensions



Ordering informations

Type	Rated voltage U_n	Functions	Switching threshold I_s	Tripping delay	Hysteresis	Part. Nr. (PQ 1)
E1IU5AAC01	230VAC	U	Max: - Min: 10% to 100% of I_n	-	fixed 10%	1340201