



Monitoring relays - ENYA series

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

Adjustment range

Tripping delay (Delay): -

### 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 2.5mm<sup>2</sup> 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: 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 10<sup>6</sup> operations

Electrical life: 2 x 10<sup>5</sup> 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: 500mAAC

Terminals: Li, Lk

Overload capacity: 2.2A (ex 1.6A - distance > 5mm)

Starting current:

1s

3s

Input resistance:

Switching threshold Is:

Hysteresis H:

Overvoltage category:

Rated surge voltage: III (according to IEC 60664-1)

4kV

### 8. Accuracy

Base accuracy:  $\leq 5\%$  of nominal value

Adjustment accuracy:  $\pm 5\%$  of nominal value

Repetition accuracy:  $\leq 2\%$  of nominal value

Voltage influence: -

Temperature influence:  $\leq 0.1\% / ^\circ C$

### 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

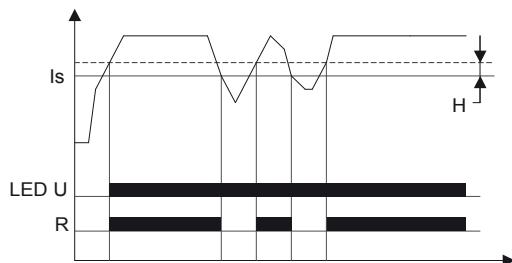
Single packing: 70g

Package of 10pcs: 660g per package

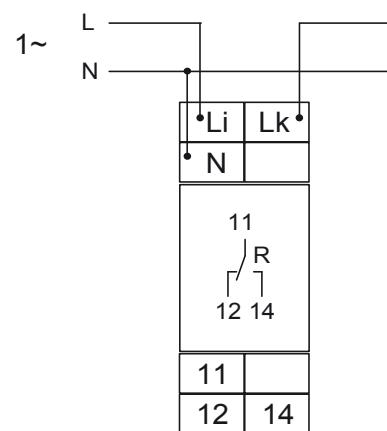
## Functions

### Undercurrent monitoring (UNDER)

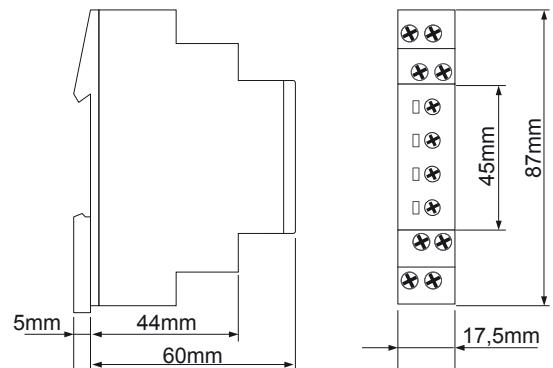
When the measured current falls below the value adjusted at the Min-regulator, the output relay R switches into off-position (yellow LED not illuminated). When the measured current exceeds the value adjusted at the Min-regulator plus the hysteresis, the output relay R switches into on-position again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



## Connections



## Dimensions



## Ordering information

Types	Rated voltage $U_N$	Functions	Switching threshold $U_s$	Delay	Hysteresis	Part. No.
E1IU500mAAC01	230V	U	Max - Min 10% to 110% of $I_N$	-	fixed 10%	1340204