



Monitoring relays - ENYA series

Undervoltage monitoring

1 change over contact

Width 17.5 mm

Installation design



Technical data

1. Functions

AC/DC undervoltage monitoring in 1-phase mains with adjustable threshold and fixed hysteresis.

UNDER Undervoltage 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 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
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: (= measuring voltage)
Terminals:

230V AC E-F3
24V AC E-F2 (distance > 5mm)
24V DC E-F1(+)

Rated voltage U_n : see table ordering information or printing on the unit

Tolerance: -25% to +20% of U_n

Rated consumption:

230V AC 10VA (0.6W)
24V AC 1.3VA (0.8W)
24V DC 0.6W

Rated frequency: AC 48 to 63Hz

Duration of operation: 100%

Reset time: 500ms

Wave form: DC, AC Sinus

Hold-up time: -

Drop-out voltage: >60% of supply 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: DC or AC Sinus, 48 to 63Hz

Measuring input: (= supply voltage)

Terminals:

230V AC E-F3

24V AC E-F2

24V DC E-F1(+)

Overload capacity: 120% of U_n

Input resistance: -

Switching threshold U_s : 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: $\leq 5\%$ of nominal value

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

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

Voltage influence: -

Temperature influence: $\leq 0,05\%$ / °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: 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

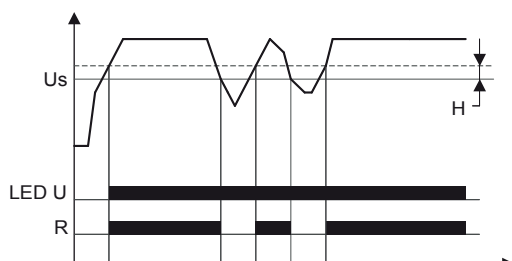
Single packing: 74g

Package of 10pcs: 676g per Package

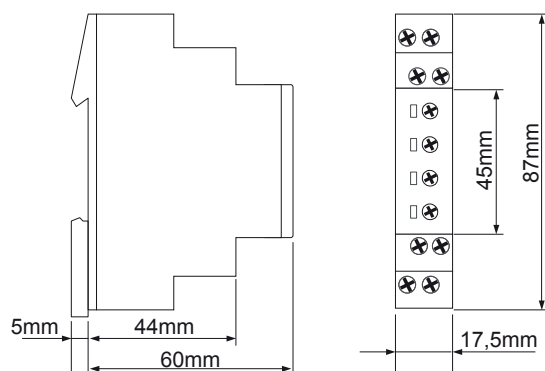
Functions

Undervoltage monitoring (UNDER)

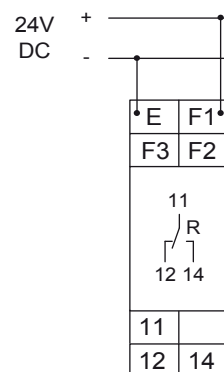
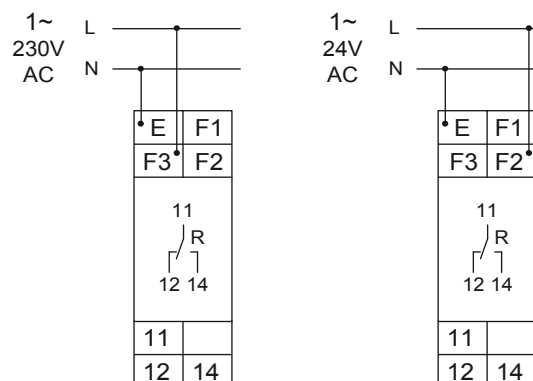
When the supply voltage U is applied, the output relay R switches into on-position, if the measured voltage is beyond the adjusted value. When the measured voltage falls below the adjusted value, the output relay R switches into off-position. The output relay R switches into on-position again, if the voltage exceeds the adjusted value plus the hysteresis.



Dimensions



Connections



Ordering information

| Types | Rated voltage U_N | Functions | Switching threshold U_s | Delay | Hysteresis | Part. No. |
|------------|---------------------|-----------|---------------------------|-------|------------|-----------|
| E1UU230V01 | 24V AC/DC 230V | U | Min 5% to 115% of U_N | - | fixed 5% | 1340102 |

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Subject to alterations and errors