



AC/DC voltage monitoring in 1-phase mains

Monitoring relays - ENYA series

Multifunction

1 change over contact

Width 17.5 mm

Installation design



Technical data

1. Functions

AC/DC voltage monitoring in 1-phase mains with adjustable threshold

and hysteresis.

UNDER Undervoltage monitoring WIN Monitoring the window between

Min and Max

2. Time ranges

Adjustment range

Start-up suppression time (Start): Tripping delay (Delay):

3. Indicators

Green LED ON/OFF: indication of supply voltage Red LED ON/OFF: indication of failure of the corresponding threshold

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 60715

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

(= measuring voltage) Supply voltage:

Terminals: 230V a.c. 24V a.c. 24V d.c. E-F1(+)

Rated voltage U_N: see table ordering information or

printing on the unit -25% to +20% of U

Tolerance: Rated consumption:

230V a.c. 10VA (0.6W) 1.3VA (0.8W) 24V a.c. 24V d.c. 0.6W Rated frequency: a.c. 48 to 63Hz Duration of operation: 100% Reset time: 500ms

Wave form: Hold-up time:

Drop-out voltage: determined by undervoltage detection

d.c., a.c. Sinus

(see measured circuit)

III (in accordance with IEC 60664-1) Overvoltage category:

Rated surge voltage:

6. Output circuit

1 potential free change over contact 250V a.c. Rated voltage: 1250VA (5A / 250V) Switching capacity:

Fusing: 5A fast acting Mechanical life: 20 x 106 operations

Electrical life: 2 x 105 operations at 1000VA resistive load max. 6/min at 1000VA resistive load Switching frequency: (in accordance with IEC 60947-5-1)

Overvoltage category: III (in accordance with IEC 60664-1)

Rated surge voltage:

7. Measuring circuit

Measuring variable: d.c. or a.c. Sinus, 48 to 63Hz

Measuring input: (= supply voltage)

Terminals:

230V a.c. E-F3 E-F2 24V a.c.

The distance between the devices

must be greater than 5mm.

24V d.c. 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

III (in accordance with IEC 60664-1) Overvoltage category:

Rated surge voltage:

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 temperature: -25 to +55°C (in accordance with IEC 60068-1)

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

(in accordance with IEC 60721-3-3 class 3K3)

Pollution degree: 2 (in accordance with IEC 60664-1)

10. Weight

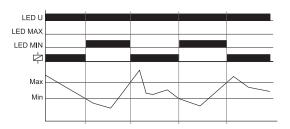
Single packing:

Package of 10pcs: 684g per package

Functions

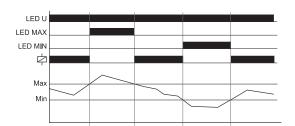
Undervoltage monitoring (UNDER)

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

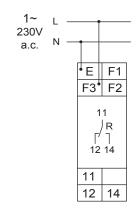


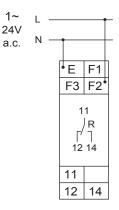
Window function (WIN)

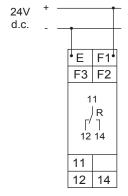
When the supply voltage U is applied, the output relay R switches into on-position, if the measured voltage is within the adjusted window. When the measured voltage left the window between Min and Max, the output relay R switches into off-position. The output relay R switches into on-position again, if the voltage re-enter the adjusted window.



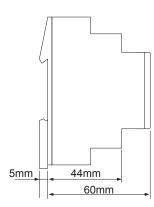
Connections

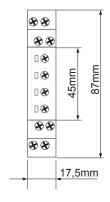






Dimensions





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Subject to alterations and errors