



ENYA series

Switch-off warning

Retrigger, time extension function programmable

Energy saving function

Impulse switch mode selectable

Low switching noise

High switching capacity, 80A peak inrush current

Automatic 3/4 - wire detection

Push-button glow lamp load up to 100mA

Width 17.5 mm

Installation design



## Technical data

### 1. Functions

Electronic staircase lighting timer with switch-off warning. The control input allows the connection of pushbuttons with a total glow lamp load up to 100mA and enables the application in 3- or 4-wire circuits. The unit can be retriggered via the connected pushbuttons. A long keypress will switch off the light (energy saving function). A fast sequence of pushes (pumping) will extend the period to a multiple of the selected value. Depending upon distinct type, the following operating methods can be selected by the controls on the unit:

- TW Automatic timer with switch-off warning
- T Automatic timer without switch-off warning
- 1 Steady light (ON)
- 0 Switch-off
- P Impulse switch mode without time function (only types with option P)
- PN Impulse switch mode power fail latch (only types with option PN)

Function sets on distinct types are according to table ordering information or printing on the unit.

### 2. Time range

Adjustment range

Time 0,5 - 12min (in function T, TW)

### 3. Indicators

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

### 4. Mechanical design

Self-extinguishing plastic housing, IP rating IP 40  
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 2.5mm<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: terminals L - N  
Nominal voltage: see table ordering information or printing on the unit  
Tolerance: -15% to +10%  
Rated consumption: 2VA (1,0W)  
Rated frequency: AC 48 to 63Hz  
Duty cycle: 100%  
Reset time: 500ms  
Hold-up time: -  
Residual ripple for DC: -  
Drop out voltage: >30%  
Overvoltage category: III (in accordance with IEC 60664-1)  
Rated surge voltage: 4kV

### 6. Output

1 normally open contact terminals L - 18  
Rated voltage: 250V AC  
Switching capacity: 10A continuous current  
If the distance between the devices is less than 5mm!

Switching capacity: 16A continuous current  
If the distance between the devices is greater than 5mm!

Start-up peak (20ms): 80A  
Mechanical life: 30 x 10<sup>6</sup> operations

Electrical life  
Resistive load: 10<sup>5</sup> operations at 16A 250V  
Lamp load: 80.000 operations at 1000W 250V

### 7. Control input B1

Connection not potential free: pushbutton B1-N (3-conductor circuit)  
pushbutton B1-L (4-conductor circuit)  
Glow lamp load: max. 100mA parallel to the pushbuttons  
Overload protection: yes, electronic

### 8. Additional control input (only types with option C)

Connection: control voltage on terminals C1(+)-C2  
Voltage range: 8 ... 230V AC/DC  
Galvanic isolation: yes, basic isolation  
Overvoltage category: III (in accordance with IEC 60664-1)  
Rated surge voltage: 4kV

### 9. Accuracy

Base accuracy: ±5% of maximum scale value  
Adjustment accuracy: <15% of maximum scale value  
Repetition accuracy: <2%  
Voltage influence: -  
Temperature influence: ≤1%

### 10. Ambient conditions

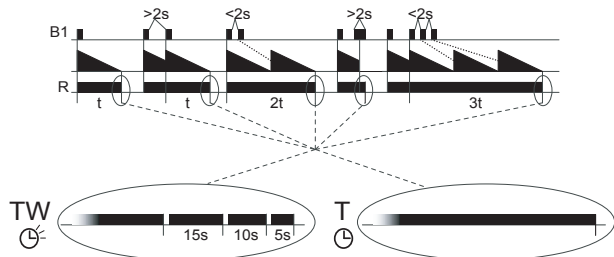
Ambient temperature: -25 to +55°C  
Storage temperature: -25 to +70°C  
Transport temperature: -25 to +70°C  
Relative humidity: 15% to 85%  
(in accordance with IEC 60721-3-3 class 3K3)  
Pollution degree: 2, if built-in 3  
(in accordance with IEC 60664-1)

### 11. Weight

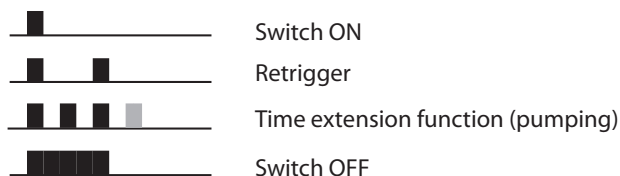
Single packing: 106g

## Functions

**Function automatic timer (T, TW):** After the pushbutton at B1 has been pressed, the output relay R closes (terminals L-18) and the set interval  $t$  begins. If the pushbutton is pressed again before the interval  $t$  has expired, the interval begins again (restart function complies with EN 60669-2-3). Rapid, multiple pressing of the pushbutton (pumping) adds 2, 3 or more time intervals to extend the time up to 60min. Prolonged pressure on the button ( $>2s$ ) aborts the interval running and switches the relay off (energy saving function). In the TW mode the device provides a switch-off warning (in accordance with DIN 180-158-2) by generating short pulses (flashing) at 30s, 15s and 5s prior to switch-off.

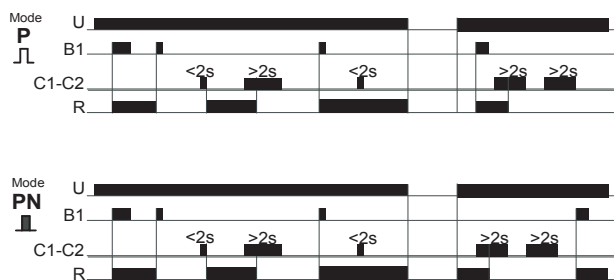


### Operating possibilities at B1 in mode T and TW:



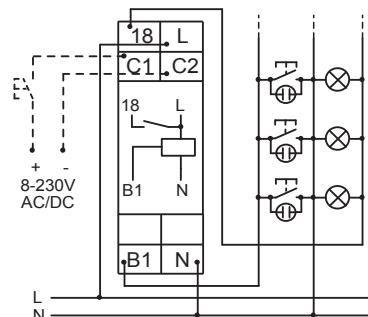
The additional control input C1-C2 can be used in the T and TW modes to control the staircase lighting timer with a voltage of 8 to 230V AC/DC. This input can be used to start and restart the cycle. It cannot be used for switch-off (energy saving function) or for programming long intervals (pumping).

**Impulse switch mode (P), (PN):** In this mode, every keypress toggles the output relay R (flip-flop). In function P, the output relay R remains in off-position, whenever the supply voltage is applied. In function PN, the output relay R switches into on-position after applying the supply voltage U, if the output relay R was in on-position last before power failure. The output relay R switches into on-position, if a short voltage impulse ( $<2s$ ) is applied to the additional control input (C1-C2). (central ON) A longer voltage impulse ( $>2s$ ) opens the output relay R. (central OFF)

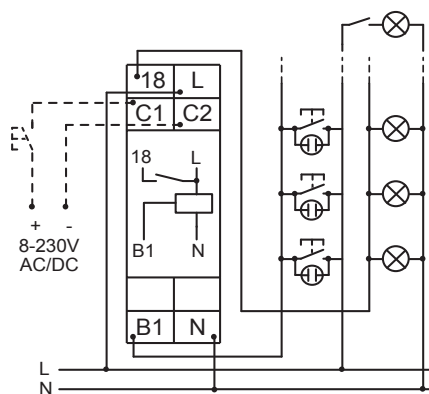


## Connections

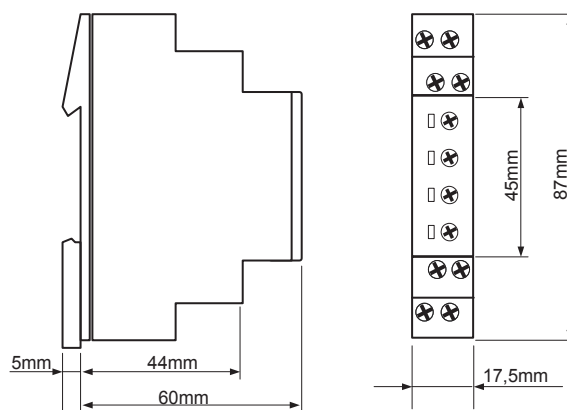
### 3-wire-circuit



### 4-wire-circuit with attic illumination



## Dimensions



## Ordering Informations

| Types           | Functiones         | Supply Voltage | Part. No. |
|-----------------|--------------------|----------------|-----------|
| E1ZTP 230V AC   | TW, 1, 0, P        | 230V AC        | 110301    |
| E1ZTPNC 230V AC | T, TW, 1, 0, P, PN | 230V AC        | 110300    |

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Subject to alterations and errors