



Series ENYA

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

| Time | Adjustment range                |
|------|---------------------------------|
|      | 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:           | 239V a.c.<br>terminals L - N         |
| Tolerance:                | -15% to +10%                         |
| Rated consumption:        | 2VA (1,0W)                           |
| Rated frequency:          | a.c. 48 to 63Hz                      |
| Duty cycle:               | 100%                                 |
| Reset time:               | 500ms                                |
| Hold-up time:             | -                                    |
| Residual ripple for d.c.: | -                                    |
| 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 a.c.              |
| 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)<br>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 a.c./d.c.                  |
| 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%<br>(in accordance with IEC 60721-3-3 class 3K3) |
| Pollution degree:      | 2 (in accordance with IEC 60664-1)                         |

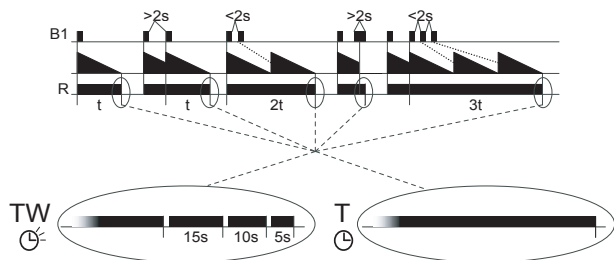
### 11. Weight

|                 |      |
|-----------------|------|
| Single packing: | 106g |
|-----------------|------|

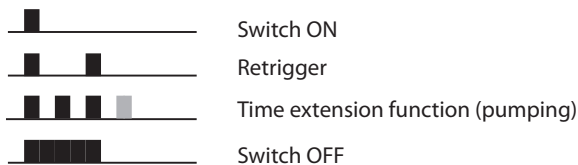
## Functions

### 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:

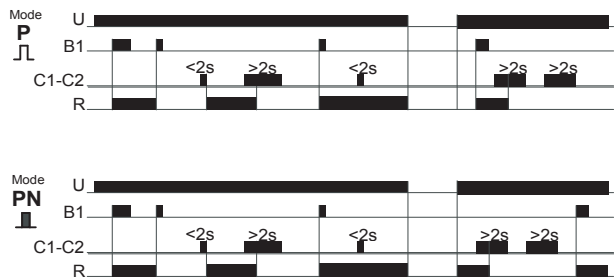


The additional control input C1-C2 can be used in the T and TW modes to control the staircase lighting timer with a voltage of 8 to 230V a.c. /d.c. . This input can be used to start and restart the cycle. It cannot be used for switch-off (energy saving function) or for programming long intervals (pumping).

### 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).

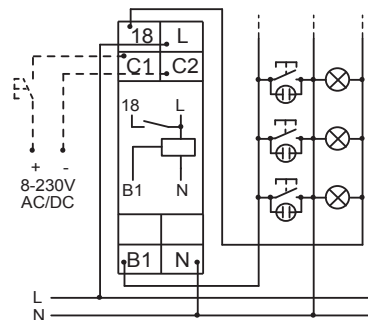


## Ordering information

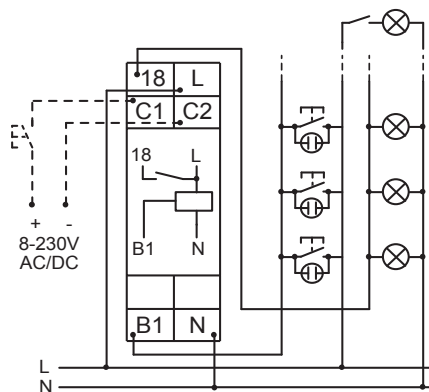
| Types           | Functions          | Additional control input | Supply voltage | Part. No. |
|-----------------|--------------------|--------------------------|----------------|-----------|
| E1ZTP 230V AC   | TW, 1, 0, P        | no                       | 230V a.c.      | 110301    |
| E1ZTPNC 230V AC | T, TW, 1, 0, P, PN | C1-C2                    | 230V a.c.      | 110300    |

## Connections

### 3-wire-circuit



### 4-wire-circuit with attic illumination



## Dimensions

