

# Installation Technique

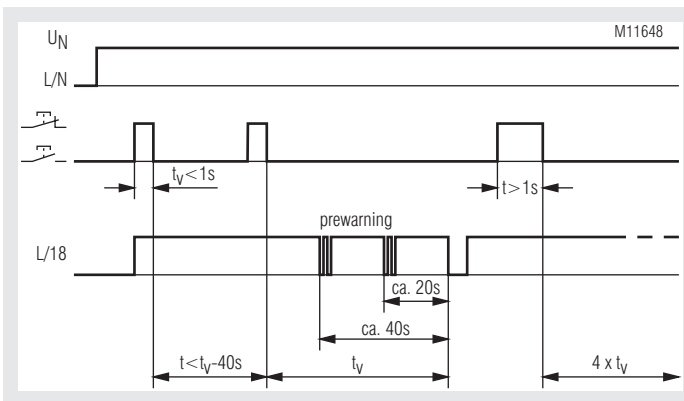
**MINITIMER**  
**Staircase Lighting Timer**  
**RK 8810/003**

Translation  
of the original instructions



- According to EN 60669-1, EN 60669-2-1
- Setting range: short pressing of button 0.5 ... 10 min  
long pressing of button 2 ... 40 min
- For 4-wire circuit L on push button and  
3-wire circuit N on push button
- Can be retriggered
- With pre-warning shortly before end of time delay
- Switch for continuous light on unit
- Contact: 16 A
- Width 17.5 mm

## Function Diagram



## Approvals and Markings



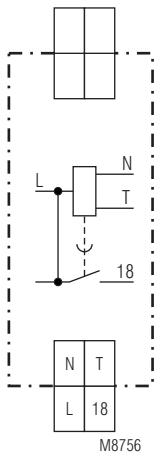
## Application

Time delayed switching off for lights

## Function

If the button is pressed longer than 1 s the adjusted time will be multiplied by 4, the timing is retriggerable i.e. if the pushbutton is pressed again during timing the adjusted delay time starts again without interruption. Approx. 30 s before end of timing the light flashes shortly to indicate that the light will go off.

## Circuit Diagram



RK 8810.41/003

## Connection Terminals

| Terminal designation | Signal description   |
|----------------------|----------------------|
| L, N                 | Auxiliary voltage AC |
| T, L or N            | Button               |
| L, 18                | Contact output       |

## Notes

Unit and push button have to be connected to the same phase (see connection diagram) The output contact is not volt free.

## Maintenance

Inspection test and maintenance intervals are to be performed annually.

## Technical Data

### Time Circuit

**Time range:** Pressing of button < 1 s: 0.5 ... 10 min  
pressing of button > 1 s: 2 ... 40 min

**Repeat accuracy:** < 1 % of setting value

### Input

**Nominal voltage  $U_N$ :** AC 230 V  
**Voltage range:** 0.9 ... 1.1  $U_N$   
**Nominal consumption:** Approx. 5 VA  
**Nominal frequency:** 50 / 60 Hz  
**Permitted residual current caused by glow lamps in the push buttons** Max. 50 glow lamps à 1 mA  
**Min. pulse duration:** 30 ms

## Technical Data

### Output

|   |  |                  |
|---|--|------------------|
| <b>Contacts:</b>                                | 1 NO contact, delay                              |                  |
| <b>Contact opening gap:</b>                     | > 3 mm   |                  |
| <b>Thermal current <math>I_{th}</math>:</b>     | 16 A   |                  |
| <b>Switching capacity with lamp load</b>        | Fluorescent lamp load                            |                  |
| Duo switching:                                  | (series compensated) 2 x 20 lamps with 58 W each |                  |
| Glow lamp load:                                 | 2000 W   |                  |
| <b>Short circuit current strength:</b>          | > 700 A  |                  |
| <b>Short circuit strength max. fuse rating:</b> | 16 A gG / gL                                     | IEC/EN 60947-5-1 |
| <b>Mechanical life:</b>                         | > 1 x 10 <sup>6</sup> switching cycles           |                  |

### General Data

|   |   |          |
|---|---|----------|
| <b>Nominal operating mode:</b>          | Impulse operation / continuous operation  |          |
| <b>Temperature range</b>                | Operation: - 20 ... + 50°C  |          |
| Storage:                                | - 40 ... + 70°C   |          |
| <b>Clearance and creepage distances</b> | Rated impulse voltage / pollution degree: 4 kV / 2 IEC 60664-1  |          |
| <b>EMC</b>                              | Electrostatic discharge (ESD): 8 kV (air) IEC/EN 61000-4-2  |          |
| HF irradiation                          | 80 MHz ... 1 GHz: 10 V / m IEC/EN 61000-4-3   |          |
| 1 GHz ... 2.7 GHz:                      | 10 V / m IEC/EN 61000-4-3   |          |
| Fast transients:                        | 2 kV IEC/EN 61000-4-4   |          |
| Surge voltages between                  | wires for power supply: 1 kV IEC/EN 61000-4-5   |          |
| wires for power supply:                 | between wire and ground: 2 kV IEC/EN 61000-4-5  |          |
| HF wire guided                          | 0.15 ... 80 MHz: 10 V IEC/EN 61000-4-6  |          |
| Interference suppression:               | Limit value class B   | EN 55011 |
| <b>Degree of protection:</b>            | Housing: IP 40 IEC/EN 60529   |          |
| Terminals:                              | IP 20 IEC/EN 60529  |          |
| <b>Enclosure:</b>                       | Thermoplast with V0-behaviour according to UL subj. 94  |          |
| <b>Vibration resistance</b>             | Amplitude 0,35 mm frequency 10 ... 55 Hz IEC/EN 60068-2-6   |          |
| <b>Climate resistance:</b>              | 20 / 050 / 04 IEC/EN 60068-1  |          |
| <b>Terminal designation:</b>            | EN 50005  |          |
| <b>Wire connection:</b>                 | DIN 46228-1/-2/-3/-4  |          |
| <b>Fixed screw terminals</b>            | Cross section: 0.5 ... 10 mm <sup>2</sup> (AWG 20 - 8) solid or 0.5 ... 6 mm <sup>2</sup> (AWG 20 - 10) stranded wire with and without ferrules |          |
| Stripping length:                       | 10 mm   |          |
| <b>Fixing torque:</b>                   | 0.8 Nm  |          |
| <b>Wire fixing:</b>                     | Cross-head screw / M3.5 box terminals   |          |
| <b>Mounting:</b>                        | DIN rail IEC/EN 60715   |          |
| <b>Weight:</b>                          | Approx. 80 g  |          |

### Dimensions

**Width x Height x Depth:** 17.5 x 90 x 66 mm

## Standard Type

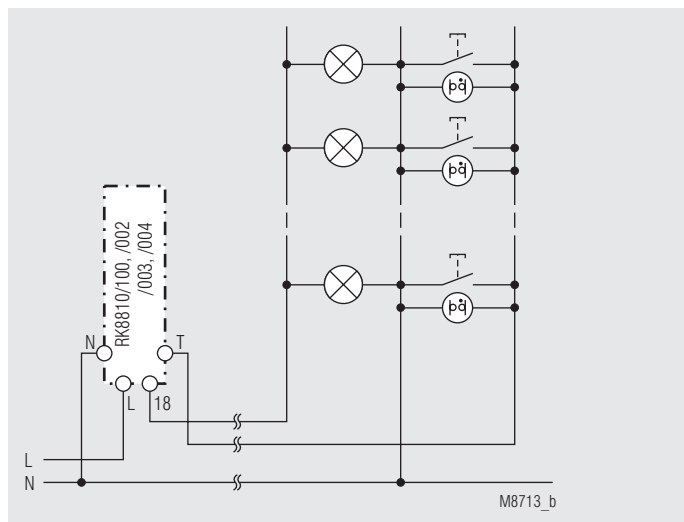
|                           |                               |            |                               |
|---------------------------|-------------------------------|------------|-------------------------------|
| RK 8810.41/003            | AC 230 V                      | 50 / 60 Hz | 0.5 ... 10 min / 2 ... 40 min |
| Article number:           | 0058994                       |            |                               |
| • Output:                 | 1 NO contact, delay           |            |                               |
| • Nominal voltage $U_N$ : | AC 230 V                      |            |                               |
| • Timer range:            | 0.5 ... 10 min / 2 ... 40 min |            |                               |
| • Width:                  | 17,5 mm                       |            |                               |

## Ordering Example

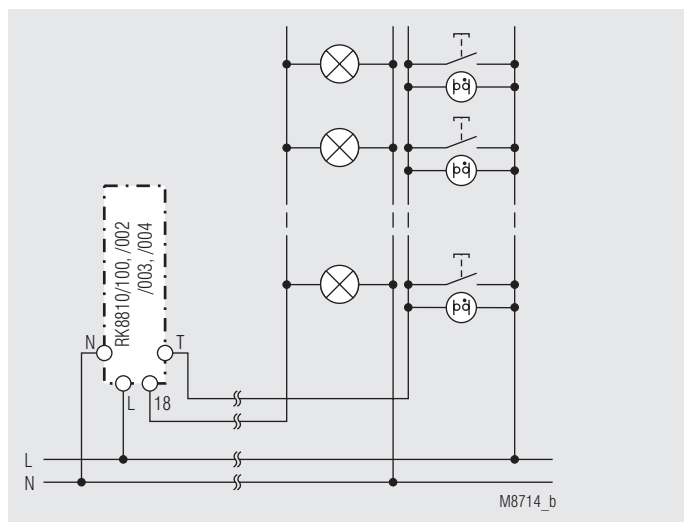
|         |     |      |          |            |                               |
|---------|-----|------|----------|------------|-------------------------------|
| RK 8810 | .41 | /003 | AC 230 V | 50 / 60 Hz | 0.5 ... 10 min / 2 ... 40 min |
|---------|-----|------|----------|------------|-------------------------------|

— Time range  
 — Nominal frequency  
 — Nominal voltage  
 — Contacts  
 — Type

## Application Examples



3-wire circuit N on push button



4-wire circuit L on push button