

MINITIMER Lighting Timing Switch IK 8814

Translation
of the original instructions



- According to EN 60669-1, EN 60669-2-1
- Reswitching possible
- Operating times between 0.5 ... 60 min., as required
- With permanent light switch and LED indicator for contact position
- For installation in rows, width 17.5 mm

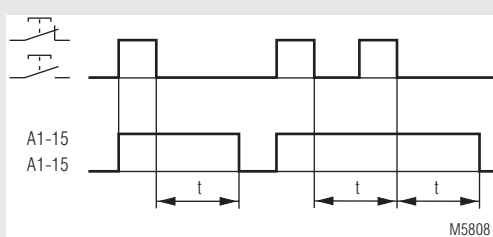
Product Description

The IK 8814 lighting timer has an adjustable running time and can be switched to continuous light by means of a slide switch.

Approvals and Markings



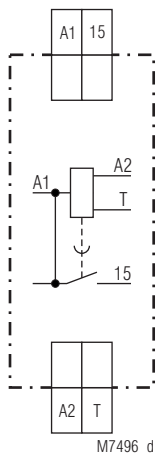
Function Diagram



Applications

- Automatic staircase light switch
- Delayed-release timing relay
- Time-lag switch

Circuit Diagram



Function

The IK 8814 unit, controlled by a static timer, can be used as a staircase lighting controller, as a off-delay time relay or as an overrun switch. The IK 8814 is designed for quick mounting on a top-hat rail. When used as a staircase lighting controller, control is via push-buttons using either a 3- or 4-wire connection. The push-button and the unit must be connected to the same phase. When a push-button is pressed, the contact goes into the active position and the set time runs out. The active position is indicated by an LED. During the time lapse, the lighting timer can be switched on at any time by pressing the button again, whereby the time delay starts again from the beginning without interruption (with 4-wire switching). The IK 8814 can be switched to permanent light with a slide switch on the front. The IK 8814 can also be used as an overrun relay for a second consumer (e. g. fan) if it is wired accordingly (see connection diagrams). When the first load (e. g. light) is switched on, the contacts go into the active position and the second load is switched on. After the first consumer is switched off, the contact remains in the active position for the duration of the set time delay.

IK 8814.41

Connection Terminals

Terminal designation	Signal description
A1	L
A2	N
T	Control input for buttons
15	Contact-output delayed

Indicators

LED: On, when the output relay is activated

Technical Data

Timing circuit

Timing ranges: 0.5 ... 10 min, 1 ... 20 min, 3 ... 60 min
Repeat accuracy: ± 2 % of the full scale value

Input

Nominal voltage U_N : AC 230 V
Voltage range: 0.8 ... 1.1 U_N
Nominal consumption
 Apparent power: 5 VA
 Actual power: 0.3 W
Nominal frequency: 50 / 60 Hz
Glow lamps parallel to the pushbutton: 40 mA

Output

Contacts
 IK 8814.41: 1 NO contact, delayed
Thermal current I_{th} : 10 A
Switching capacity with lamp load
 Fluorescent lamp load
 Duo-switching: 20 lamps with 58 W
 5 x 10⁴ switching cycles
 Glow lamp load: 1200 W
Short circuit strength max. fuse rating: 10 A gG / gL IEC/EN 60947-5-1
Mechanical life: > 10⁶ switching cycles

General Data

Operating mode: Continuous operation
Temperature range
 Operation: - 20 ... + 45 °C
 Storage: - 20 ... + 60 °C
Altitude: ≤ 2000 m
Clearance and creepage distances
 Rated impulse voltage / pollution degree: 4 kV / 2 IEC 60664-1
EMC
 Electrostatic discharge: 8 kV (air) IEC/EN 61000-4-2
 HF-irradiation: 10 V / m IEC/EN 61000-4-3
 Fast transients: 2 kV IEC/EN 61000-4-4
 Surge voltages between wires for power supply: 2 kV IEC/EN 61000-4-5
 Between wire and ground: 4 kV IEC/EN 61000-4-5
 Interference suppression: Limit value class B EN 55011
Degree of protection
 Housing: IP 40 IEC/EN 60529
 Terminals: IP 20 IEC/EN 60529
Vibration resistance: Amplitude 0.35 mm IEC/EN 60068-2-6
 frequency 10 ... 55 Hz
Climate resistance: 20 / 045 / 04 IEC/EN 60068-1
Housing: Thermoplastic with V0 behaviour according to UL subject 94
 DIN 46228-1/-2/-3/-4
Wire connection
 Cross section: 2 x 0.6 ... 2.5 mm² solid or 2 x 0.28 ... 1.5 mm² stranded wire with and without ferrules
 Stripping length: 10 mm
Wire fixing: Plus-Minus-terminal screws M3,5 with self-lifting clamping piece IEC/EN 60999-1
Fixing torque: 0.8 Nm
Mounting: DIN rail IEC/EN 60715
Weight 70 g

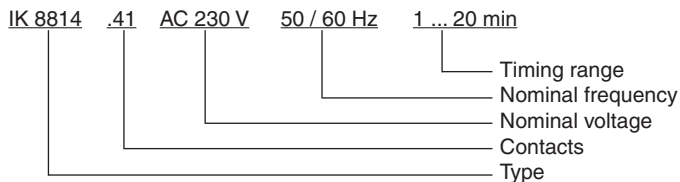
Dimensions

Width x height x depth: 17.5 x 89 x 58 mm

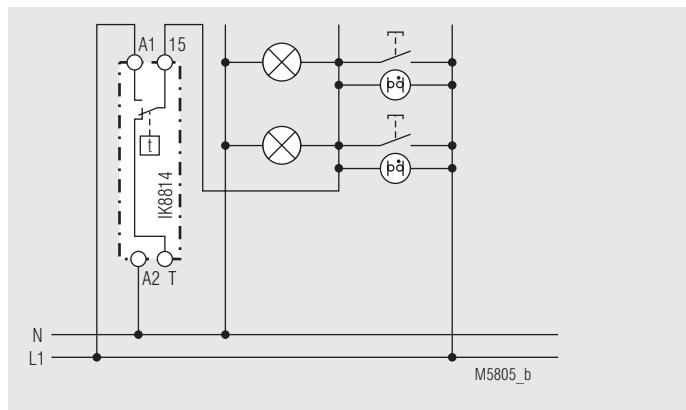
Standard Type

IK 8814.41 AC 230 V 50 / 60 Hz 1 ... 20 min
 Article number: 0029189
 • Output: 1 NO contact, delayed
 • Nominal voltage U_N : AC 230 V
 • Time range: 1 ... 20 min
 • Width: 17.5 mm

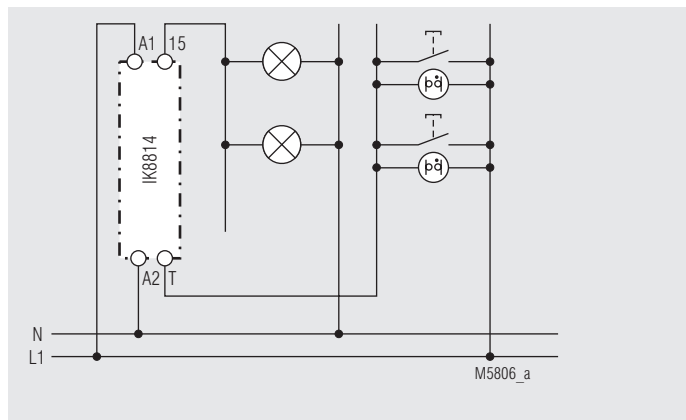
Ordering Example



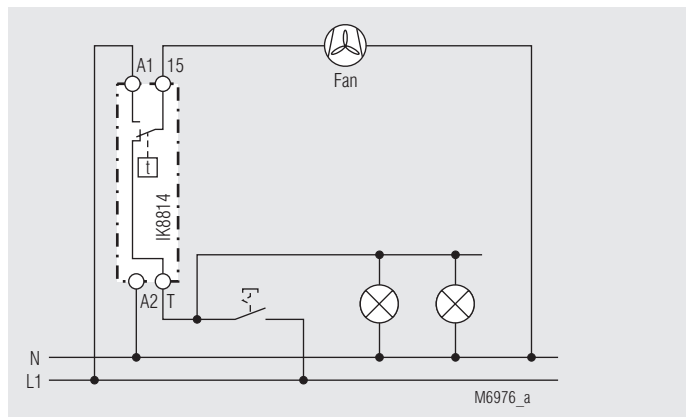
Application Examples



3-wire circuit (cannot be reswitched)



4-wire circuit (cannot be reswitched)



Time-lag circuit