Installation Technique

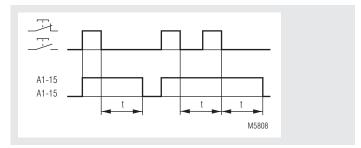
MINITIMER Light Timing Switch IK 8814 / OA 8824



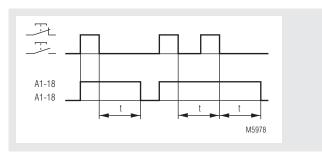


- · According to IEC/EN 60 669
- Reswitching possible
- Operating times between 0.5 ... 60 min., as required
- IK 8814 with permanent light switch and LED indicator for contact position
- IK 8814 for installation in rows, width 17.5 mm
 OA 8824 for installation in flush-mounted boxes

Function Diagrams

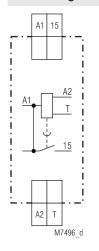


IK 8814

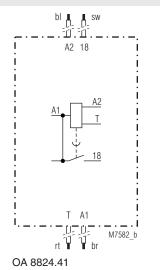


OA 8824

Circuit Diagrams



IK 8814.41



Approvals and Marking



Applications

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

Function

IK 8814 and OA 8824 - that are controlled by a static timing element - can be used as automatic staircase light switches, as delayed-release timing relays or as time-lag switches. While IK 8814 is designed to be mounted on a top hat rail, OA 8824 is suitable for installation in flush-mounted boxes (diameter 60 mm, depth 40 mm).

The operating time can be set using a screwdriver.

When the unit is being used as an automatic staircase light switch, it is activated via a 3- or 4-wire connection by pressing a pushbutton (only a 4-wire connection in the case of OA 8824). The pushbutton and the equipment concerned have to be connected to the same phase in this context.

When a pushbutton is pressed, the contact moves to its active position and the set time starts. The active position is indicated by an LED on IK 8814. The light timing switch can be reswitched at any time during the operating period by pressing the pushbutton again. If this is done, the time delay starts again from the beginning without any interruption (in the case of 4-wire circuits).

IK 8814 can be switched to permanent lighting by moving a slide switch that is located on the front of the unit.

If they are wired appropriately (see the connection diagrams), IK 8814 and OA 8824 can also be used as a time-lag relay for a second consumer (e.g. ventilator). When the first consumer (e.g. a light) is switched on, the contacts move to their active position, as a result of which the second consumer is switched on as well.

When the first consumer has been switched off, the contact remains in its active position for the duration of the set time delay.

Indicators

IK 8814 LED:

on, when the output relay is activated

Notes

Switch connection boxes (60 cm deep) are suitable for installing OA 8824 can be purchased, for example, from Messrs Kaiser, D - 5885 Schalksmühle / Germany (order no. 1055-02). OA 8824 is also available on request complete with installation pushbutton and installation frame for switch connection boxes (diameter 60 mm, depth 40 mm).

Technical Data

Timing circuit

Timing ranges: 0.5 ... 10 min, 1 ... 20 min, 3 ... 60 min

Repeat accuracy: \pm 2 % of the full scale value

Input

Nominal voltage U_N: Voltage range: AC 230 V 0.8 ... 1.1 U_N

Nominal consumption:

apparent power: IK 8814: 5 VA OA 8824: 3 VA

actual power: 0.3 W Nominal frequency: 50 / 60 Hz

Glow lamps

parallel to the pushbutton

IK 8814: 40 mA OA 8824: 10 mA

Output

Contacts

IK 8814.41: 1 NO contact, delayed OA 8824.41: 1 NO contact, delayed

Thermal current I_{th}

IK 8814: " 10 A OA 8824: 4 A

Switching capacity with lamp load Fluorescent lamp load

Duo-switching
IK 8814:

5 x 10⁴ switching cycles
OA 8824: 6 lamps with 58 W each
5 x 10⁴ switching cycles

Glow lamp load

IK 8814: 1200 W OA 8824: 600 W

Short circuit strength max. fuse rating

IK 8814: 10 AgL IEC/EN 60 947-5-1 OA 8824: 4 AgL IEC/EN 60 947-5-1

20 lamps with 58 W

Mechanical life: > 10⁶ switching cycles

General Data

Operating mode: Continuous operation Temperature range: - 20 ... + 45°C

Clearance and creepage distances

rated impuls voltage /

pollution degree: 4 kV / 2 IEC 60 664-1

 EMC
 IEC/EN 61 000-4-2

 Electrostatic discharge:
 2 kV (air)
 IEC/EN 61 000-4-2

 HF-irradiation:
 10 V / m
 IEC/EN 61 000-4-3

 Fast transients:
 4 kV
 IEC/EN 61 000-4-4

Surge voltages between

wires for power supply: 2 kV IEC/EN 61 000-4-5 between wire and ground: 4 kV IEC/EN 61 000-4-5 Interference suppression: Limit value class B EN 55 011

Degree of protection

IK 8814:

Housing: IP 40 IEC/EN 60 529
Terminals: IP 20 IEC/EN 60 529

OA 8824:

Housing: IP 40 IEC/EN 60 529

Vibration resistance: Amplitude 0.35 mm IEC/EN 60 068-2-6

frequency 10 ... 55 Hz

Climate resistance: 20 / 045 / 04 IEC/EN 60 068-1 Housing: Thermoplastic with V0 behaviour

according to UL subject 94

Wire connection

IK 8814: 2 x 2.5 mm² solid or

2 x 1.5 mm² stranded ferruled

DIN 46 228-1/-2/-3/-4

Technical Data

Wire fixing

IK 8814: Flat terminals with self-lifting

clamping piece IEC/EN 60 999-1

IEC/EN 60 715

stock item

Mounting IK 8814: DIN rail

 Weight

 IK 8814:
 70 g

 OA 8824:
 31 g

Dimensions

Width x height x depth

IK 8814: 17.5 x 89 x 58 mm OA 8824: 40 x 58.5 x 18 mm

Standard Type

IK 8814.41 AC 230 V 50 / 60 Hz 1 ... 20 min.

Article number: 0029189

Output:
 1 NO contact, delayed

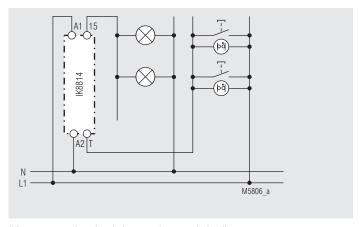
Nominal voltage U_N: AC 230 V
 Time range: 1 ... 20 min
 Width: 17.5 mm

Ordering Example

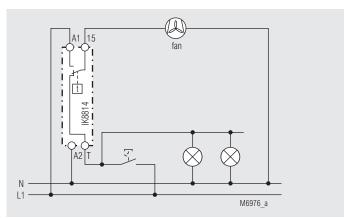


Application Examples At 15 Big 15 At 2 T M5805_b

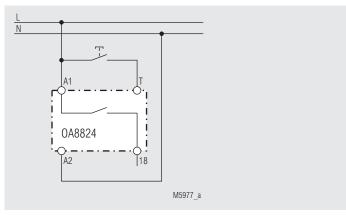
IK 8814 3-wire circuit (cannot be reswitched)



IK 8814 4-wire circuit (cannot be reswitched)

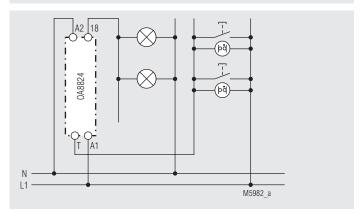


IK 8814 Time-lag circuit

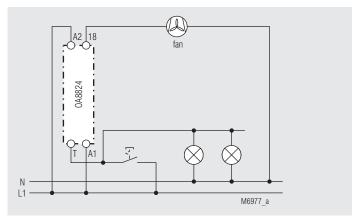


OA 8824

Application Examples



OA 8824 4-wire circuit (cannot be reswitched)



OA 8824 Time-lag circuit

Specifictaion for tender for IK 8814

Light timing switch according to IEC/EN 60 669 to be built in consumer units. Operating time 0.5 \dots 10 min., reswitching with permanent light switch and LED indicator. 1 NO contact.

Width 17.5 mm

Type IK 8814

Manufactured by E. DOLD & SÖHNE KG

Light timing switch according to IEC/EN 60 669 to be built in consumer units. Operating time 1 \dots 20 min., reswitching with permanent light switch and LED indicator. 1 NO contact.

Width 17.5 mm

Type IK 8814

Manufactured by E. DOLD & SÖHNE KG

Light timing switch according to IEC/EN 60 669 to be built in consumer units. Operating time $3\dots 60$ min., reswitching with permanent light switch and LED indicator. 1 NO contact.

Width 17.5 mm

Type IK 8814

Manufactured by E. DOLD & SÖHNE KG

E. DOLD & SÖHNE KG • D-78114 Furtwangen •	PO Box 1251 • Telephone (+49) 77 23 / 654-0 • Telefax (+49) 77 23 / 654-356