Relay insert
Order no.: $8512120 x$

## Operating instructions

## 1. Safety instructions

Electrical equipment may only be installed and assembled by a qualified electrician in accordance with the relevant installation standards, guidelines, regulations, directives, safety and accident prevention regulations of the country.
Failure to comply with these instructions may result in damage to the device, fire or other hazards.

Hazard due to electric shock. Do not operate device without application module.
Hazard of fire. During operation with inductive transformers, protect each transformer on the primary side according to manufacturer's data. Use safety transformers that comply with EN 61558-2-6 (VDE 0570 Part 2-6) only.

These instructions are an integral component of the product and must be retained by the end user.

## 2. Design and layout of the device



Figure 1: Switch insert
(1) Switch insert
(2) Frames
(3) Application module
(4) Screw for dismantling protection (not R.1/R.3)
(5) Button design cover
(6) Connecting terminals

## 3. Function

## Correct use

- Only suitable for use in indoor areas with no drip and no spray water.
- Switching of incandescent lamps, HV halogen lamps, fluorescent lamps, compact fluorescent lamps, dimmable energy-saving lamps, 230 V LED lamps and electronic or inductive transformers with low voltage halogen lamps
- Installation into wall box according to DIN 49073
- Operate with suitable application module (see Chapter 6.3, "Accessories")
- Connection of extension unit push-button (NO contact), and motion detector extension unit
i No mixed load operation of capacitive and inductive loads at the output.


## 4. Operation

These instructions describe the installation of the switch insert. The operation and function of the application modules are described in the instructions of the respective application module.
i The operation of extension units is only possible if a cover is attached to the main unit.

## 5. Information for electricians

### 5.1 Installation and electrical connection

DANGER!
Touching live parts can result in an electric shock.
An electric shock can be lethal.
Disconnect the connecting cables before working on the device and cover all live parts in the area!

Circuiting and mounting the switch insert


Figure 2: Basic circuit


Figure 3: Circuiting diagram with extension unit
A MCB max. 10 A has been installed as device protection.

- Circuit switch insert and optional extension units according to the circuiting diagram (Figure 3 or 4).
- Mount the switch insert into a wall box. The connecting terminals must be at the bottom.
- Attach frame and application module (see instructions for application module).
i Illuminated mechanical push-buttons must be equipped with a separate N -terminal.


## 6. Appendix

### 6.1 Technical data

Rated voltage
Mains frequency
MCB
Standby power consumption
Degree of protection
Relative humidity
Operating temperature
Storage/transport temperature
Number of extension units and motion detector extension units
Extension unit cable length
Load cable length
Connecting terminal cross section
Mounting orientation
Housing installation depth
Claw guide installation depth
Incandescent lamps 2300 W
HV halogen lamps
LV halogen lamps with electronic transformers or dual-mode transformers
LV halogen lamps with conventional transformers
Fluorescent lamps with lead-lag circuit
Uncompensated fluorescent lamps
Parallel compensated fluorescent lamps
Fluorescent lamps with electronic ballast
Compact fluorescent lamps with electronic ballast
Dimmable energy-saving lamps
230 V LED lamps (retrofit LED)
Mixed loads possible to lowest maximum load
Type of contact

IP20
0 ... 65 \% (no condensation) $-5^{\circ} \mathrm{C} \ldots+45^{\circ} \mathrm{C}$ $-20^{\circ} \mathrm{C} \ldots+60^{\circ} \mathrm{C}$ unlimited max. 50 m max. 100 m
$1 \times 4 \mathrm{~mm}^{2}$ or $2 \times 2.5 \mathrm{~mm}^{2}$ connecting terminals downwards

Berker
Contact minimum load approx. 15 W
Standby current consumption
< 0.3 W
i Carry out loading of conventional and electronic transformers according to manufacturer's instructions.
(i) The performance data including transformer power dissipation are $20 \%$ for inductive transformers and $10 \%$ for electronic transformers.

### 6.2 Troubleshooting

## Device switches on and can no more be switched off.

Relay contact is stuck.
Reduce connected load.
Check the installation situation and if necessary, install an inrush current limiter.

## Device can no longer be switched on.

Relay contact is oxidised.
Increase connected load; observe contact minimum load.

### 6.3 Accessories

1gang button order no. 851411 xx

1 gang radio button quicklink
order no. 851451 xx
4gang radio button quicklink
order no. 856481 xx
Radio timer quicklink
order no. 857452 xx
Motion detector, IR and radio motion detector quicklink

### 6.4 Warranty

We reserve the right to make technical and formal changes to the product in the interest of technical progress.
Our products are under guarantee within the scope of the statutory provisions.
If you have a warranty claim, please contact the point of sale or ship the device postage free with a description of the fault to the appropriate regional representative.

