

BLC 1 - 10 V push-button control unit
Order-No. : 2903

**Operation- and
Assembly Instructions**

1 Safety instructions

Electrical equipment may only be installed and fitted by electrically skilled persons.

Failure to observe the instructions may cause damage to the device and result in fire and other hazards.

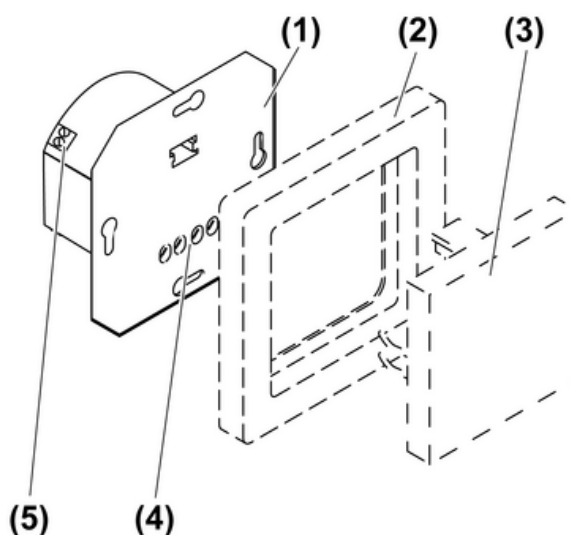
Danger of electric shock. Always disconnect before carrying out work on the device or load. At the same time, take into account all circuit breakers that supply dangerous voltage to the device or load.

Danger of electric shock. Device is not suitable for disconnection from supply voltage.

Danger of electric shock. Do not operate the insert without a cover.

These instructions are an integral part of the product, and must remain with the end customer.

2 Device components



picture 1

- (1) Up insert
- (2) Frame
- (3) Pushbutton cover
- (4) Connection terminals for mains voltage and load
- (5) Connection terminals for 1-10 V interface

3 Function

Intended use


- Switching and brightness setting for luminaires with 1-10 V interface
- Installation in appliance box to DIN 49073
- Operation with suitable cover

Product characteristics

- The light bulb is switched on and off via the load cable and dimmed via the 1-10 V interface.
- Switch-on brightness can be saved permanently
- Basic brightness can be saved permanently
- Connection of extensions possible
- The 1-10 V interface is short-circuit proof for the control current

4 Operation

These instructions describe operation with a pushbutton cover (see Accessories). Operation with a different cover is described in the instructions for the cover in question. Operation on the main device or 2-wire extension is identical.

-  Extension operation is only possible if there is a cover fitted on the main device.


Switch light

- Press button for less than 0,4 seconds.

Adjust the brightness

Light is switched on.

- Press button at top for longer than 0.4 seconds.
The light gets brighter up to maximum brightness.
- Press button at bottom for longer than 0.4 seconds.
Light gets darker to minimum brightness.


-  Installation button: the light becomes brighter up to maximum brightness, remains there briefly and becomes dimmer down to minimum brightness, remains there briefly and becomes brighter again. This process repeats for as long as the push-button remains pressed.

Switch light on with minimum brightness

- Press button at bottom for longer than 0.4 seconds.

Save switch-on brightness

- Set light to the required brightness.
- Press button over entire surface for longer than 3 seconds.
Switch-on brightness is saved. For confirmation the lighting switches off briefly and then on again to the saved switch-on brightness.

-  An installation button cannot be used to save the switch-on brightness.

5 Information for electrically skilled persons

5.1 Fitting and electrical connection



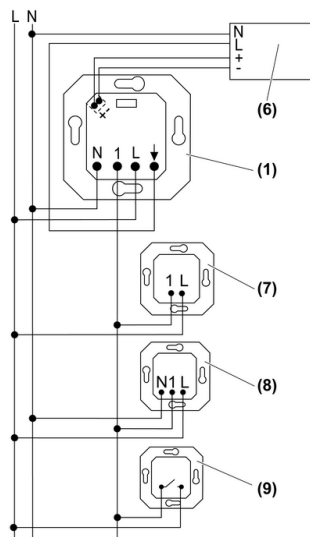
DANGER!

Electrical shock when live parts are touched.

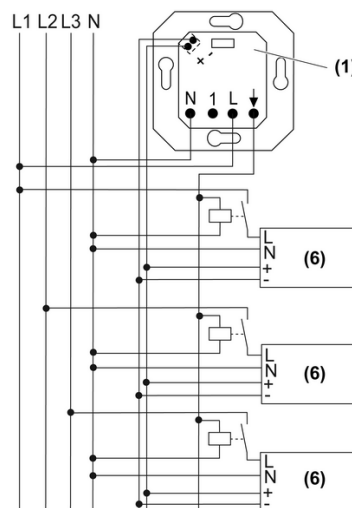
Electrical shocks can be fatal.

Before carrying out work on the device or load, disengage all the corresponding circuit breakers. Cover up live parts in the working environment.

Connecting and mounting the 1-10 V insert



picture 2: Connection diagram with optional extensions



picture 3: Connection diagram with various line conductors

- (1) 1-10 V insert
- (6) Lamp operating device with 1-10 V interface
- (7) Extension insert, 2-wire
- (8) Extension insert, 3-wire
- (9) Installation button, NO contact

- i** The load output is not protected internally. For device protection, connect a 10 A miniature circuit breaker upstream.
- i** Control cable: appropriate type, cross-section and routing for the VDE specifications for 250 V cables, control voltage has basic insulation. The control cable and load cable can be run in a shared cable, e.g. NYM J 5 x 1,5. Connect lamp operating device and electronic ballast with earth conductor in accordance with the manufacturer's instructions.
- i** The number of lamp operating devices that can be controlled is the sum of the control currents. For information about the control current of the lamp operating devices, see the information provided by the manufacturer.

- i** Only use lamp operating devices and lamps that are of the same type, the same power level, and from the same manufacturer. Otherwise there may be differences in brightness between the individual lamps.



CAUTION!

Device defect when mains voltage is connected to the 1-10 V interface.

The device will be destroyed.

Do not connect 1-10 V interface to mains voltage.

- Connect 1-10 V insert according to connection diagram (picture 2) or (picture 3).
- i** For extension units use the electric circuit of the main device.
- i** Illuminated installation buttons may only be connected if they have a separate N terminal.
 - Connect the extensions, optional.
 - Install 1-10 V insert in appliance box, terminals must be at the bottom.
 - If multiple miniature circuit breakers supply dangerous voltages to the device or load, couple the miniature circuit breakers or label them with a warning, to ensure release is guaranteed.
 - Attach the frame and the push-button cover.
 - Switch on mains voltage.

5.2 Commissioning

Saving a basic brightness

The basic brightness can only be set on the 1-10 V insert. Set the basic brightness so that the connected lamps still light up visibly at minimum brightness and do not flicker.

There is a pushbutton cover (see Accessories) fitted on the 1-10 V insert.

Light is switched off.

- Press button over entire surface and keep pressed.
 - The light switches on at minimum brightness and becomes brighter up to maximum brightness.
 - After about 20 seconds the light is set to half brightness. The 1-10V insert is in programming mode.
- Release button.
- Press button at bottom until the desired basic brightness is reached.
- Release button.
 - After about 20 seconds the set basic brightness is saved and the light is switched off.

6 Appendix

6.1 Technical data

Rated voltage	AC 230 V ~
Mains frequency	50 / 60 Hz
Ambient temperature	+5 ... +25 °C
Circuit breaker	max. 10 A
Contact type	μ contact
Switching current at 25 °C	
Ohmic	10 A
Switch-on current max. 4 s at 10% switch-on time	15 A
Minimum switching current AC	100 mA
Connected load at 25 °C	
Ohmic load	700 W
Lamp operating devices	Type-dependent
Power reduction per 5°C in excess of 25°C	-10 %

when installed in wooden or dry construction walls	-15 %
when installed in multiple combinations	-20 %
1-10 V interface	
Control voltage	0.5 ... 10 V
Control current	max. 50 mA
Mains connection and power cable	
Single stranded	max. 4 mm ²
finely stranded without conductor sleeve	max. 4 mm ²
finely stranded with conductor sleeve	max. 2.5 mm ²
1-10 V interface connection	
Single stranded	1.5 mm ²
finely stranded without conductor sleeve	max. 1 mm ²
finely stranded with conductor sleeve	max. 1 mm ²
Number of extension units	
Extension insert, 2-wire	unlimited
Extension insert, 3-wire	10
Non-illuminated installation buttons	unlimited
Total length of extension unit cable	max. 100 m
Total length power cable	max. 100 m

6.2 Accessories

BLC button Order-No. 1761..

For presence-dependent control, a motion detector, ceiling motion detector or presence detector of the BLC system can be fitted on the BLC insert.

The insert can also be integrated into a radio bus installation with a BLC radio button.

6.3 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.

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