

Universal dimmer insert with pressure/rotary switch 2

Order-No. : 1176 00

Auxiliary insert for universal dimming insert 2

Order-No. : 1177 00

Operating 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. The load is not electrically isolated from the mains even when the device is switched off.

Fire hazard. For operation with inductive transformers, each transformer must be fused on the primary side in accordance with the manufacturer's instructions. Only safety transformers according to EN 61558-2-6 may be used.

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

2 Device components

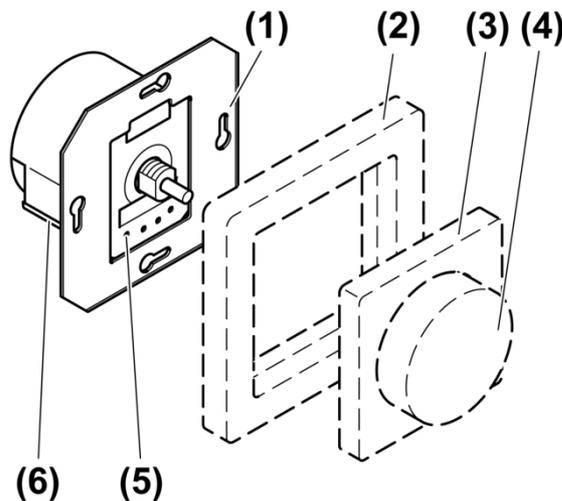


Figure 1: Device components

- (1) Dimmer
- (2) Frame
- (3) Central plate
- (4) Control button
- (5) Measuring points for voltage test
- (6) Release lever for plug terminal

3 Function

Intended use

- Switching and dimming of incandescent lamps, HV halogen lamps and dimmable inductive transformers or Tronic transformers with halogen lamps
 - Suitable for mixed operation up to the specified output (see chapter 6.1. Technical data)
 - Installation in appliance box to DIN 49073
- i** No mixed operation of Tronic and inductive transformers.

Product characteristics

- Connection of more than one dimmer is possible
- Electronic short-circuit protection with permanent switch-off after 7 seconds at the latest. No metallic separation of the operational current.
- Electronic over-temperature protection
- Bulb-preserving soft start
- Power extension through power boosters (see power booster instructions)
- Automatic setting of the dimming principle suitable for the load

Load type	Electrical behaviour	Dimming principle
Incandescent lamps	ohmic	Phase cut-off
HV halogen incandescent lamps	ohmic	Phase cut-off
Tronic transformers with halogen lamps	capacitive	Phase cut-off
dimmable inductive transformers with halogen lamps	inductive	Phase cut-on

- i** Flickering of the connected lamps due to undershoot of the minimum load or through centralised pulses from the power stations. Brief flickering upon load detection of ohmic loads. No operation is possible during load detection. These are not device faults.

4 Operation

Switch light

- Press the control button.
Light is switched on again with the last brightness level set or switched off.

Switching the light on with minimum brightness

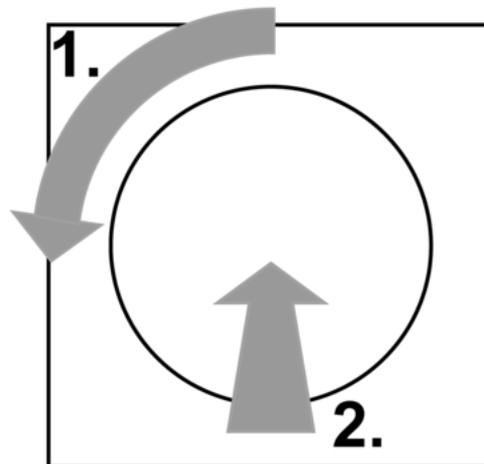


Figure 2: Minimum brightness

- Turn control button a quarter turn in the anti-clockwise direction and press control button (Figure 2).

Switching the light on with maximum brightness

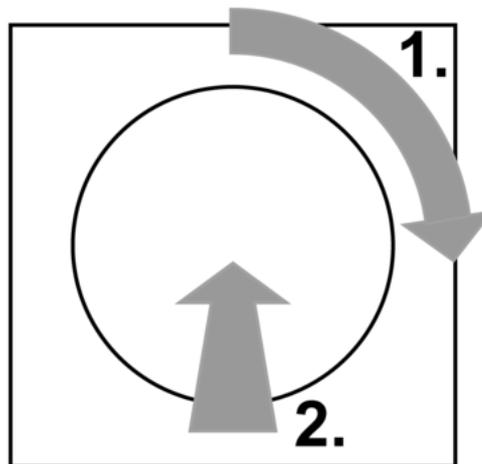


Figure 3: Maximum brightness

- Turn control button a quarter turn in the clockwise direction and press control button (Figure 3).

Adjusting the brightness

Light is switched on.

- Turn the control button in the clockwise direction.
The light gets brighter.
- Turn the control button in the anti-clockwise direction.
Light gets darker.

i The dimmer detects the turning speed: with quick turning there is 360° between minimum and maximum brightness, with slow turning 720°.

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 dimmer

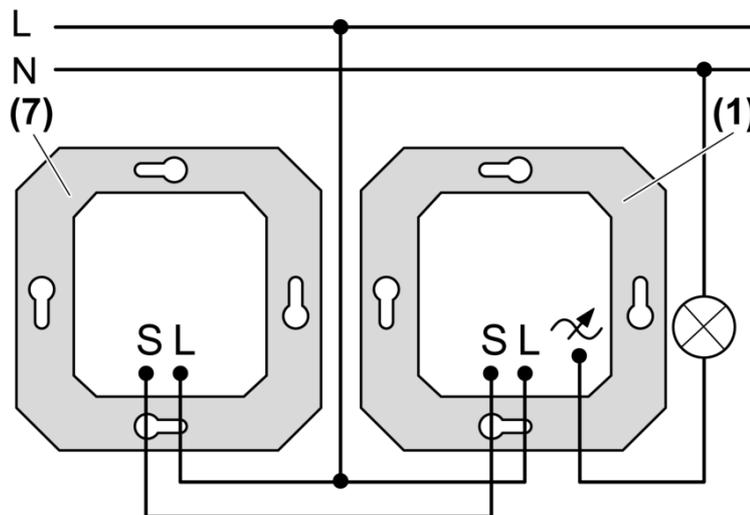


Figure 4: Connection diagram for dimmer with extension

- Remove approx. 15 mm of insulation from the connecting cables.
- Connect dimmer (1) and optionally an extension (7) according the connection diagram (Figure 4).
- 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.
- Install the device in the appliance box. Terminals must be at the bottom.
- Mount the frame and the central plate.
- Attach the control button.

Pull the connecting cable out of the push terminal.

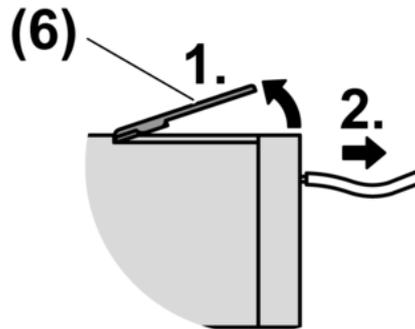


Figure 5: Releasing plug terminal

- Raise release lever (6) as described in illustration and pull out connecting wire (Figure 5).

6 Appendix

6.1 Technical data

Universal dimmer insert with pressure/rotary switch 2, Order-No. 1176 00

Rated voltage	AC 230 V ~
Mains frequency	50 / 60 Hz
Ambient temperature	+5 ... +25 °C

Connected load at 25 °C

- i** Power specifications including transformer power dissipation.
- i** Operate inductive transformers with at least 85% nominal load.
- i** For ohmic-inductive mixed load, maximum 50% proportion of ohmic load. Otherwise incorrect calibration of the dimmer may result.

Incandescent lamps	50 ... 420 W
HV halogen lamps	50 ... 420 W
Tronic transformers	50 ... 420 W
Inductive transformers	50 ... 420 VA
Ohmic-inductive	50 ... 420 VA
ohmic-capacitive	50 ... 420 W
capacitive-inductive	not permitted

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 %

Power boosters See power booster instructions

Connection	
Single stranded	1.0 ... 2.5 mm ²

Number of extension units	5
Total length of extension unit cable	max. 100 m
Total length power cable	max. 100 m

 The symbols used to label the dimmer load shows the load type that can be connected to a dimmer and the electric behaviour of a load:
R = ohmic, L = inductive, C = capacitive

Auxiliary insert for universal dimming insert 2, Order-No. 1177 00

Rated voltage	AC 230 V ~
Mains frequency	50 / 60 Hz
Ambient temperature	+5 ... +25 °C

Connection
Single stranded
Total length of extension unit cable

1.0 ... 2.5 mm²
max. 100 m

6.2 Troubleshooting

The device switches the load off and cannot be switched on again.

Cause: overheating protection has tripped.

Disconnect dimmer from mains, also switch associated off circuit breakers.

Let dimmer cool down for at least 15 minutes. Reduce the connected load. Check the installation situation.

Switch circuit breakers and dimmer on again.

6.3 Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade.

Please submit or send faulty devices postage paid together with an error description to your responsible salesperson (specialist trade/installation company/electrical specialist trade). They will forward the devices to the Gira Service Center.

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