GIRA

Operating instructions

LED rotary dimming insert Basic RC
Art. no. 2457 00

Product image non-binding

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1 Safety instructions

To avoid potential damage, read and follow the following instructions:

Installation only by persons with relevant knowledge and experience in the following areas:

- Five safety regulations and standards for the installation of electrical systems
- Selection of suitable tools, measuring devices, installation materials and, if necessary, personal protective equipment
- Installation of the installation material
- Connection of devices to the building installation under consideration of local connection conditions

Improper installation will endanger your own life and the lives of people using the electrical system, and there will be a risk of serious damage to property, e. g. through fire. You will be at risk of personal liability for personal injury and damage to property. **Consult an electrically skilled person.**

The instructions are part of the product, so keep them in a safe place.

2 Intended use

- Switching and dimming of lighting in he trailing edge phase control
- Operation with suitable cover
- Mounting in appliance box with dimensions according to DIN 49073

3 Product characteristics

- The device works according to the trailing edge phase control principle
- It is switched by a bulb-preserving soft start
- The maximum and minimum brightness can be set and saved permanently
- Electronic short circuit protection
- Electronic over-temperature protection

4 Operation

Switching the light

- Press the control button.

Setting the brightness

- Turn the control button.

5 Mounting and electrical connection

DANGER!

Electric shock when live parts are touched.

Electric shocks can be fatal.

Always disconnect before carrying out work on the device or load. To do so, switch off all corresponding circuit breakers, secure them against being switched on again and check that there is no voltage. Cover up any adjacent live parts.

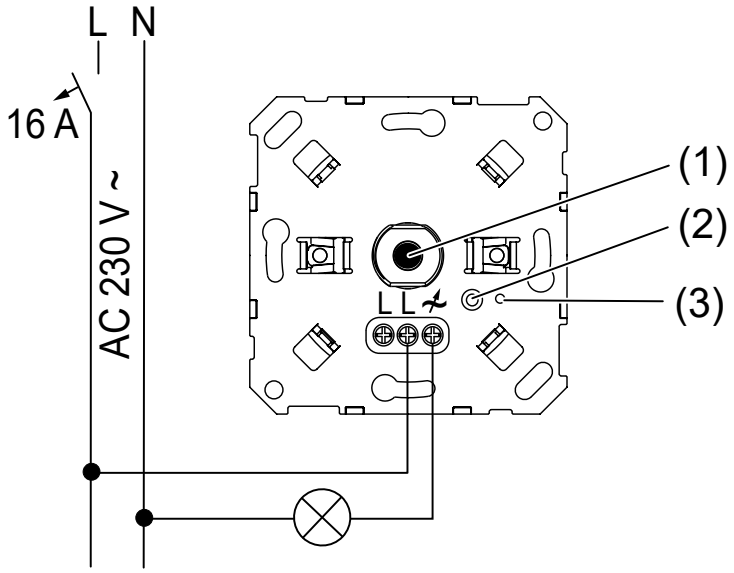


Figure 1: Connection diagram

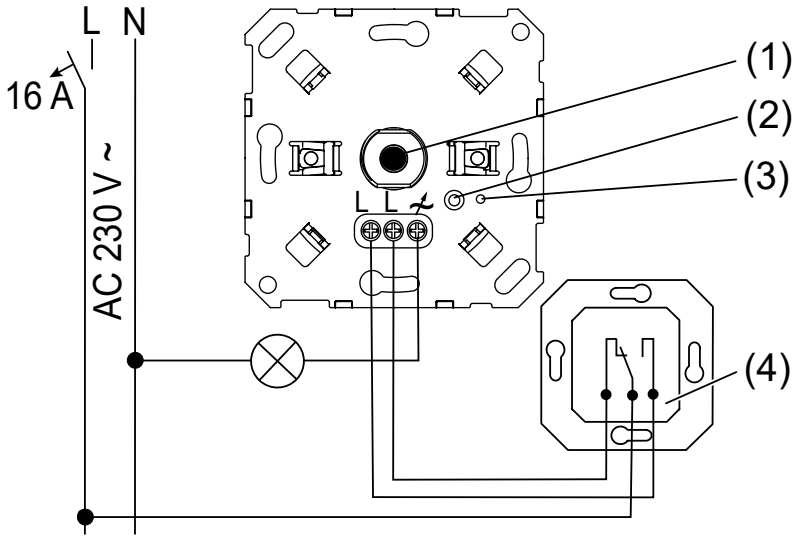


Figure 2: Connection in changeover circuit

(1) Rotary axle
(2) Prog. button
(3) Status LED
(4) Changeover switch

Connect a maximum of 600 W LED lamps for each 16 A circuit breaker. Observe the manufacturer's instructions when connecting LED ballasts.

The dimmer takes into account the different electronic characteristics of most dimmable LED lamps on the market. However, it cannot be ruled out that, in individual cases, the desired results may not be achieved.

- Connect the dimmer as shown in the connection diagram (see figure 1).
- Optional connection with changeover switch (4) (see figure 2)
- Insert the dimmer into the appliance box and secure it with screws.

Fixing claws can be retrofitted as an option (see accessories)

Resetting the short-circuit protection

Switch off the mains voltage, eliminate the short circuit, switch the mains voltage back on and switch the dimmer off and on again.

Resetting the overheating protection

Switch off the mains voltage, allow the dimmer to cool down, switch on the mains voltage again and switch the dimmer off and on again.

Setting the minimum brightness

Set the minimum brightness so that the lamp lights up visibly in the lowest dimming position and when switched on at minimum brightness.

Prerequisite: Dimmer was switched on with rotary axle (1).

- Press the button **Prog.** (2) briefly.
  The status LED (3) is lit up.

  Light is switched off (the lamp may light up minimally).
- Press and hold down the button **Prog.** (2).
  The status LED (3) flashes after about 4 s.

  The light switches to half brightness and slowly dims.
- Release the button **Prog** (2) once the desired brightness is reached.
  The status LED (3) is lit up.
- If necessary, repeat the procedure and press and hold down the button **Prog.** (2) again.
- Press the button **Prog.** (2) briefly or wait 30 seconds.
  The minimum brightness is saved and the process is ended. The status LED (3) goes out and the light flashes briefly.

Setting the maximum brightness

- Prerequisite: Dimmer was switched on with rotary axle (1).

- Press and hold down the button **Prog.** (2).
  The status LED (3) flashes after about 4 s.

  The light switches to maximum brightness and slowly dims.
- Release the button **Prog** (2) once the desired brightness is reached.
- The status LED (3) is lit up.
- If necessary, repeat the procedure and press and hold down the button **Prog.** (2) again.
- Press the button **Prog.** (2) briefly or wait 30 seconds.
  The maximum brightness is saved and the process is ended. The status LED (3) goes out and the light flashes briefly.

Mounting the fixing claws

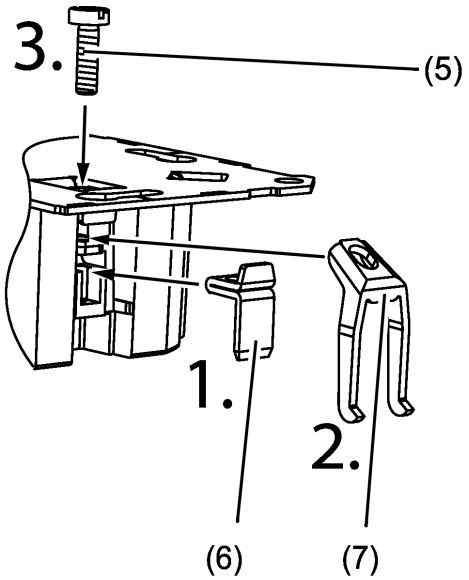


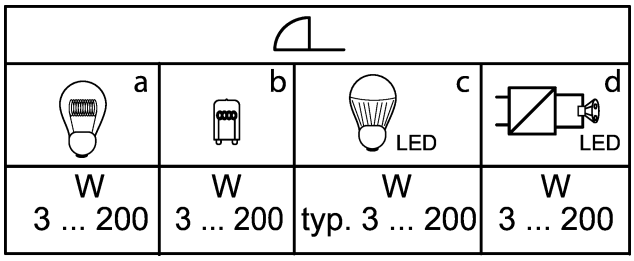
Figure 3: Mounting the fixing claws

- Insert the threaded bracket (6).
- Insert the fixing claw (7).
- Screw in the screw (5).

6 Technical data

Rated voltage	AC 230 V ~
Mains frequency	50 / 60 Hz
Standby power	None
Power loss	Max. 2 W
Ambient temperature	0 ... +35 °C
Connected load at 35 °C	See table 1
Power reduction	
Per 5 °C in excess of 35 °C	-10%

when installed in wooden or dry construction walls	-15%
when installed in multiple combinations	-20%
Connection	
Clampable conductor cross-section	(see figure 4)
Loosening torque	Max. 0.5 Nm
Total length of power cable	Max. 100 m
Installation depth	24 mm



a Incandescent lamps
b HV halogen lamps
c HV-LED lamps
d Electronic LED ballast with LED lamps
Dimming principle, trailing edge phase control

Table 1: Lamp loads

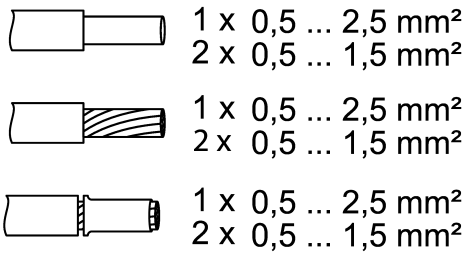


Figure 4: Clampable conductor cross-section

7 Troubleshooting

Connected LED lamps switch off in lowest dimming position or flicker

Cause: The set minimum brightness is too low.

– Increase the minimum brightness.

Connected LED lamps do not switch on in the lowest dimming position or only after a delay

Cause: The set minimum brightness is too low.

– Increase the minimum brightness.

Connected LED lamps flicker, proper dimming not possible

Cause 1: Lamps are not dimmable.

– Exchange lamps for another type.

Cause 2: Dimming principle and lamps do not match optimally.

– Exchange lamps for another type.

Dimming range too small

Cause 1: The set minimum brightness is too high.

– Reduce the minimum brightness.

Cause 2: Set maximum brightness is too low.

– Increase the maximum brightness.

Cause 3: Dimming principle does not optimally match the connected LED lamps.

– Exchange LED lamps for another type.

Dimmer has switched off and cannot be switched on again

Cause 1: Overheating protection has tripped.

– Disconnect the dimmer from the mains by switching off the circuit breaker.
– Reduce the number of lamps. Exchange lamps for another type.
– Let the dimmer cool down for at least 15 minutes.
– Switch the circuit breaker and dimmer back on again.

Cause 2: Short-circuit protection has tripped.

– Disconnect the dimmer from the mains by switching off the circuit breaker.
– Rectify the short-circuit.
– Switch the circuit breaker and dimmer back on again.

Short-circuit protection is not based on conventional fuse protection, no metallic separation of the operational current.

Cause 4: load failure.

– Check the load and replace the lamp.

Cause 5: Device defect.

– The dimmer has been permanently disconnected from the mains by an internal fuse and must be replaced.

LED lamp is dimly lit when dimmer is switched off

Cause: LED lamp is not optimally suited to this dimmer.

– Use a compensation module, see accessories.
– Use another type of LED lamp or an LED lamp of another manufacturer.

8 Accessories

Compensation module LED	Art. no. 2375 00
Set of mounting claws for System 3000 flush-mounted inserts	Art. no. 3993 00

9 Warranty

The warranty is provided by the specialist trade in accordance with statutory requirements. Please submit or send faulty devices postage paid together with a fault 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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