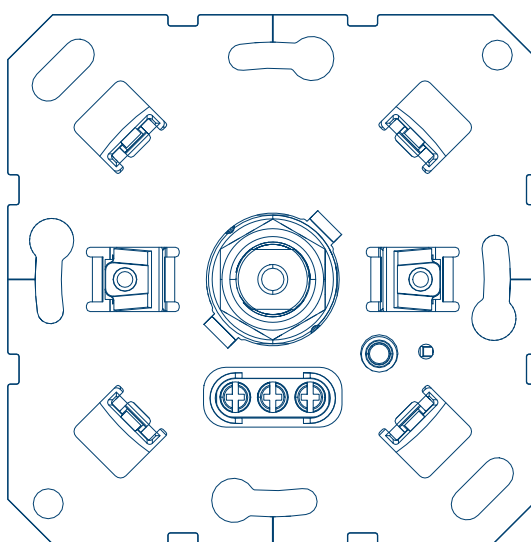


Switch ranges

Light control



Rotary dimmer (R, LED)

WDN4020



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1 Safety instructions

Electrical devices must only be installed and assembled by a qualified electrician in accordance with the relevant installation standards, guidelines, regulations, directives, safety and accident prevention directives of the country.

Failure to comply with these installation instructions may result in damage to the device, fire or other hazards.

Danger due to electric shock. Disconnect mains supply before working on the device or load. Take into account all circuit protection devices that supply dangerous voltages to the device or load.

Danger due to electric shock. Do not operate the device without application module.

Hazard due to electric shock. The device is not suited for safe disconnection of the mains supply. Even when the device is switched off, the load is not galvanically separated from the mains supply.

2 Scope of delivery

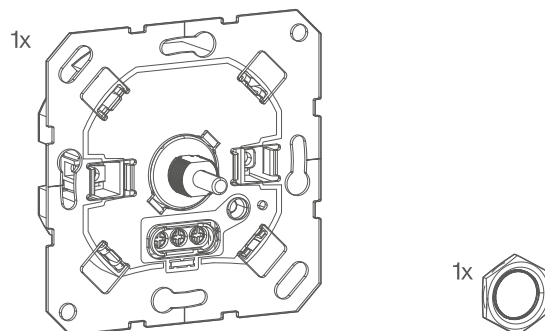


Fig. 1: Scope of delivery

Dimensions

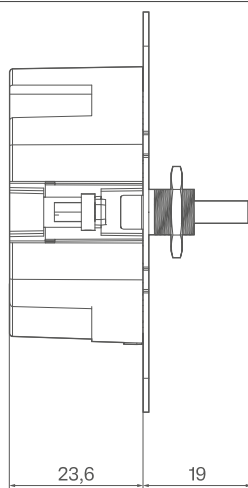


Fig. 2: Dimensions

3 Design and layout of the device

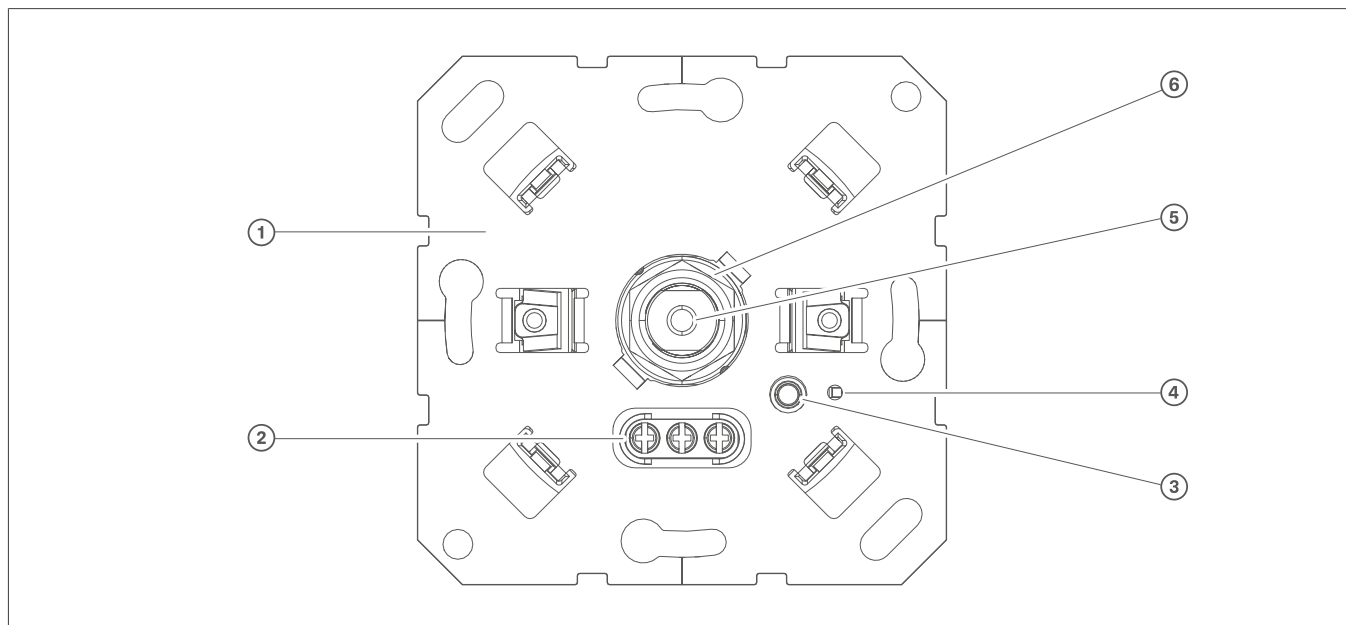


Fig. 3: Design and layout of the device

- ① Supporting plate
- ② Screw terminal connection
- ③ **Prog** button
- ④ Status LED
- ⑤ Rotary potentiometer for setting knob
- ⑥ Fastening nut for centre piece

4 Function

4.1 Intended use

- Switch and dim lighting
- Installation into wall box according to DIN 49073
- Only suitable for use in indoor areas with no drip and no spray of water
- Operation with appropriate cover

4.2 Product characteristics

- The device works in accordance with the phase cut-off principle
- Switch on using bulb-preserving soft start
- Maximum and minimum brightness can be adjusted and permanently stored
- Electronic short circuit protection
- Electronic overheating protection

5 Operation

Switch light

- Press the setting knob.
The dimmer switches on at the latest set brightness.



Note

After a mains voltage failure and subsequent restoration of the power supply, the device returns to its previous status.

Set brightness

- Turn the setting knob.

6 Information for qualified electricians

6.1 Installation and electrical connection



Danger

Electric shock when live parts are touched!

An electric shock can lead to death!

- Disconnect all connection cables before working on the device and cover any live parts in the area!

Connection and installation of the device

- 1 Connect the dimmer (7) in accordance with the connection diagram (Fig. 4).
- 2 Optional connection with change-over switch (Fig. 5).

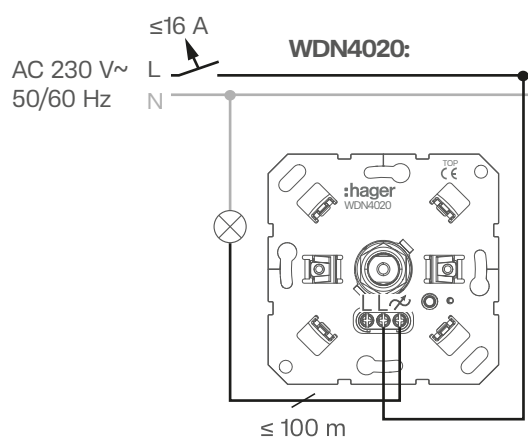


Fig. 4: Connection diagram

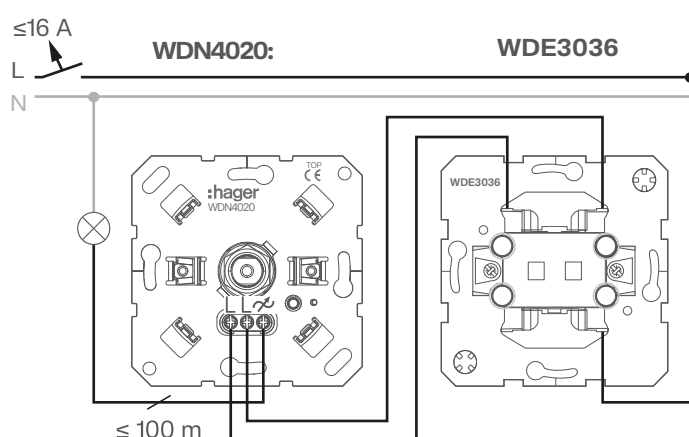


Fig. 5: Connection diagram with change-over switch (optional)

- 3 Insert the dimmer into the wall box (A) and secure it (B) with screws (Fig. 6).

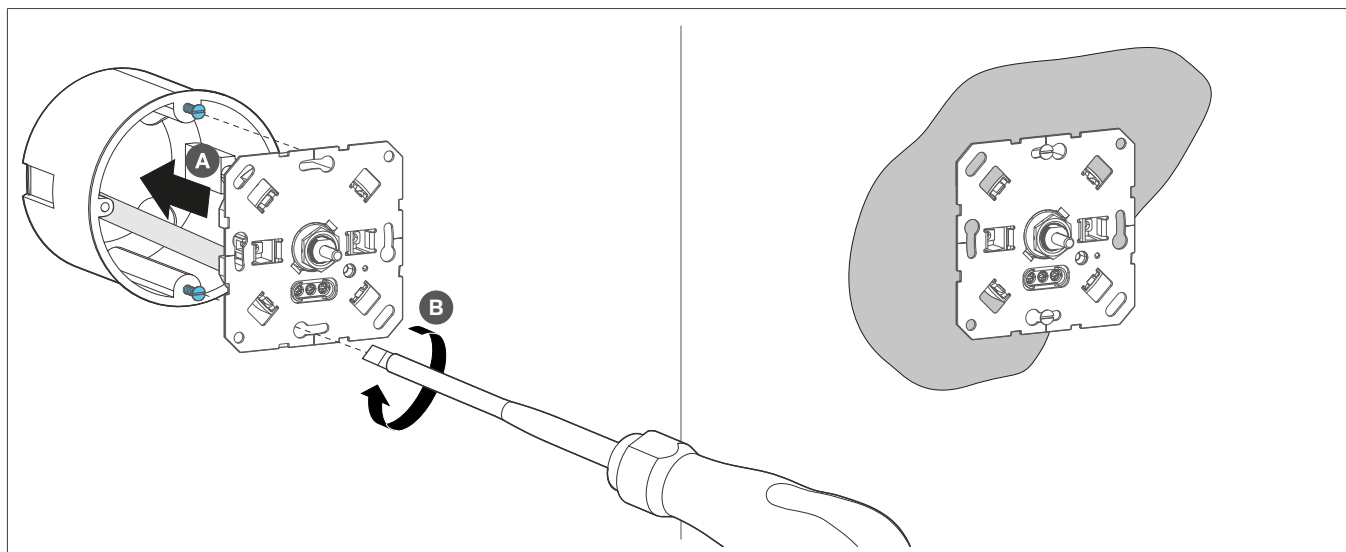


Fig. 6: Inserting and securing the dimmer

- ④ Place the frame (8) and centre piece (9) on the rotary dimmer.
- ⑤ Secure the centre piece with the supplied fastening nut (6).
- ⑥ Attach the setting knob (10) to the rotary potentiometer (5).

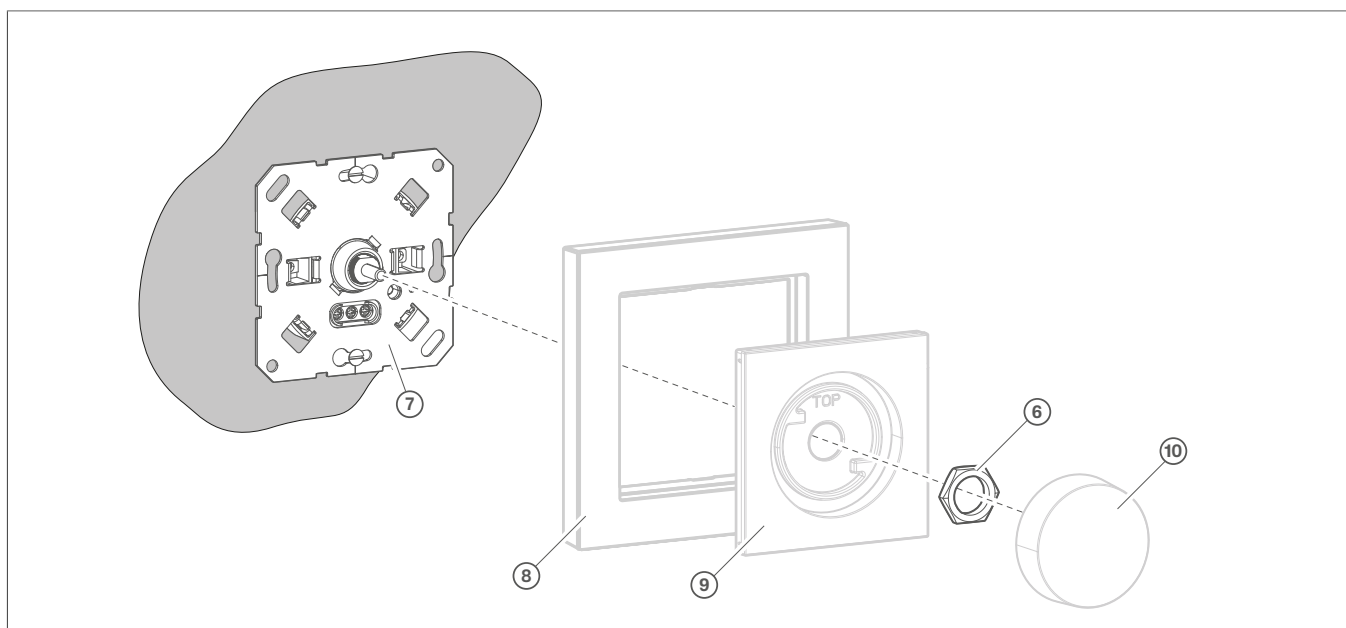


Fig. 7: Attaching the dimmer cover

- ⑥ Fastening nut for centre piece
- ⑦ Rotary dimmer insert
- ⑧ Frame^[1]
- ⑨ Centre piece for rotary dimmer^[1]
- ⑩ Setting knob^[1]

^[1] Not included in the scope of delivery!



Note

Connect a maximum of 600-W LED lamps per 16-A miniature circuit breaker. When connecting LED ballasts, observe the manufacturer's specifications.

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

6.2 Commissioning

Adjust minimum brightness



Note

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

☑ The dimmer is switched on with a rotary potentiometer (5).

- ① Briefly press the **Prog** (3) button.
Status LED (4) lights up. The light is off (the lamp may light up minimally).
- ② Press and hold the **Prog** button.
After approx. 4 s, the status LED flashes. Light switches to the medium brightness and slowly darkens.
- ③ When the desired minimum brightness is reached, release the **Prog** button.
Status LED lights up.

If necessary, repeat the procedure by pressing and holding the **Prog** button again.

- ④ Press the **Prog** button briefly or wait 30 seconds.
Minimum brightness is saved and the procedure is terminated. Status LED goes out and the light flashes briefly.

Adjust maximum brightness

☑ The dimmer is switched on with a rotary potentiometer (5).

- ① Press and hold the **Prog** (3) button.
After approx. 4 s, the status LED (4) flashes. Light switches to the maximum brightness and slowly darkens.
- ② When the desired minimum brightness is reached, release the **Prog** button.
Status LED lights up.

If necessary, repeat the procedure by pressing and holding the **Prog** button again.

- ③ Press the **Prog** button briefly or wait 30 seconds.
Maximum brightness is saved and the procedure is terminated. Status LED goes out and the light flashes briefly.

7 Appendix

7.1 Technical data

Nominal 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	
Incandescent lamps and HV halogen lamps	3 ... 200 W
HV LED lamps	Type 3 ... 200 W
Electronic LED ballast with LED lamps	3 ... 200 W
Performance reduction	
per 5 °C exceeding 35 °C	-10 %
if built into wood or drywall	-15 %
if built into a multiple combination	-20 %
Connecting terminals	
 (rigid)	1 x 0.5 to 2.5 mm ² or 2 x 0.5 to 1.5 mm ²
 (flexible)	1 x 0.5 to 2.5 mm ² or 2 x 0.5 to 1.5 mm ²
 (flexible, with conductor sleeve)	1 x 0.5 to 2.5 mm ² or 2 x 0.5 to 1.5 mm ²
Breakaway torque	Max. 0.5 Nm
Total length of load cable	Max. 100 m
Built-in depth	24 mm

7.2 Troubleshooting

Connected LED lamps switch off or flicker in the lowest dimming position.

Cause: The set minimum brightness is too low.

💡 Increase the minimum brightness.

Connected LED lamps do not switch on or switch on late in the lowest dimming position.

Cause: The set minimum brightness is too low.

💡 Increase the minimum brightness.

Connected LED lamps flicker, no correct dimming possible.

Cause 1: Lamps are not dimmable.

💡 Replace the lamps with a dimmable type.

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

💡 Replace the lamps with another type.

Use the LED compensation module, see Accessories.

Dimming range is too small.

Cause 1: The set minimum brightness is too high.

💡 Reduce minimum brightness.

Cause 2: The set maximum brightness is too low.

💡 Increase maximum brightness.

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

💡 Replace the LED lamps with another type.

The 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. Replace the lamps with another type.
- 💡 Let the dimmer cool down for at least 15 minutes.
- 💡 Switch on the circuit breaker and dimmer again.

Cause 2: Short circuit protection has tripped.

- 💡 Disconnect the dimmer from the mains by switching off the circuit breaker.
- 💡 Repair short circuit.
- 💡 Switch on the circuit breaker and dimmer again.

Cause 3: Load failure.

- 💡 Check the load, replace the lamp.

Cause 4: Device defect.

- 💡 The dimmer has been permanently disconnected from the mains due to an internal defect and must be replaced.

7.3 Disposal note



Correct disposal of this product (electrical waste).

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its documentation indicates that it should not be disposed of with other household waste at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this device from other types of waste. Recycle the device responsibly to promote the sustainable reuse of material resources.

Household users should contact either the dealer where they purchased this product, or their local government office, for details of where and how they can take this device for environmentally safe disposal.

Commercial users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial waste for disposal.



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