

1 - 10 V rotary potentiometer

1 - 10 V rotary potentiometer

Order-No. : 2891 10

1 - 10 V push-button rotary potentiometer, NO contact

Order-No. : 2896 10

1 - 10 V rotary potentiometer with frame

Order-No. : 9 2891 ..

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. Device is not suitable for disconnection from supply voltage.

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.

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

2 Device components

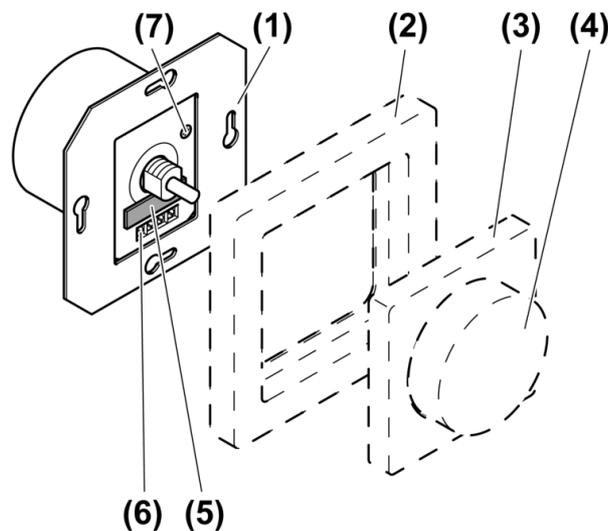


Figure 1: Device components

- (1) Electronic potentiometer
- (2) Frame
- (3) Central plate
- (4) Control button
- (5) Fuse holder
- (6) Screw terminals
- (7) Adjuster

3 Function

Intended use

- Switching and brightness adjustment for lamps with operating devices with 1-10 V interface
- Installation in appliance box to DIN 49073

Product characteristics

- Potentiometer with switching function for direct switching of ohmic or inductive loads
- Potentiometer with push-button function only in connection with pulse relays
- Basic brightness adjustable
- For potentiometers with a push-button function, switching via extensions is possible
- Protection of the 1-10 V interface in case of incorrect connection by means of integrated fine-wire fuse

4 Operation

Switching electronic ballasts on or off

- Press the control button.

 For electronic potentiometers with a push-button function, pressing the control button sends a pulse to the pulse relay and switches the electronic ballasts on and off.

Adjust the brightness

Light is switched on.

- Turn the control button in the clockwise direction.
The light gets brighter up to maximum brightness.
- Turn the control button in the anti-clockwise direction
Light gets darker to minimum brightness.

5 Information for qualified electricians

5.1 Installation 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 device

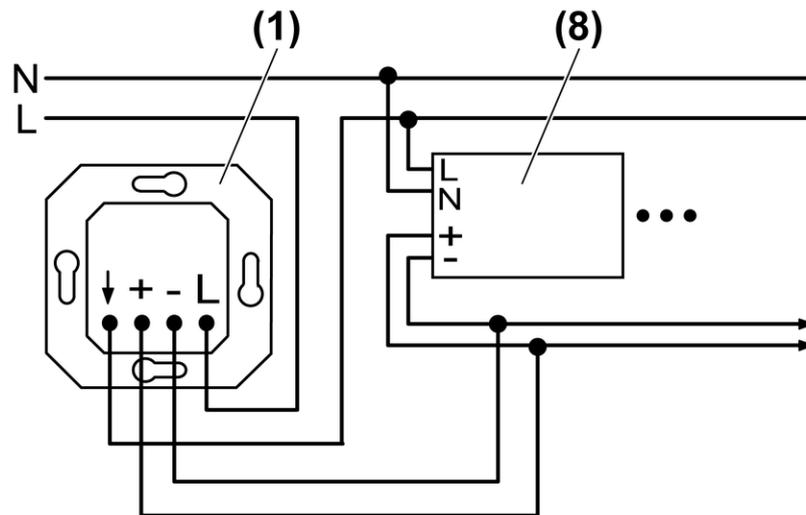


Figure 2: Connection diagram for potentiometer with switching function

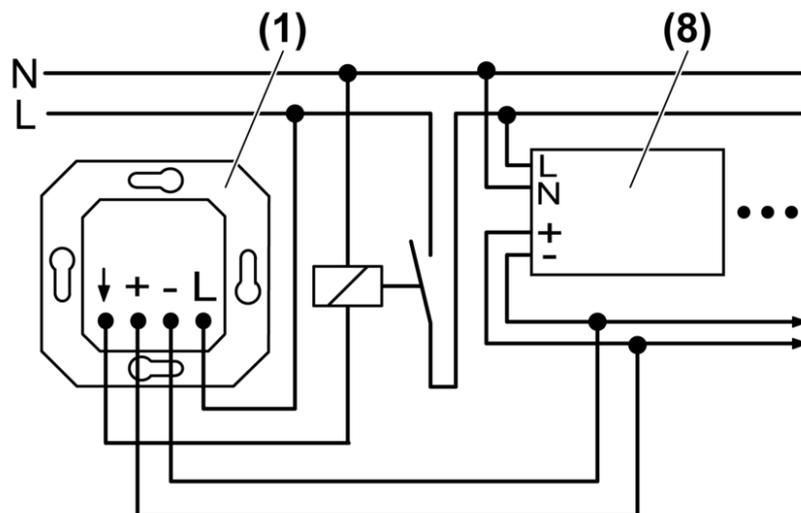


Figure 3: Connection diagram for potentiometer with switching function and contactor

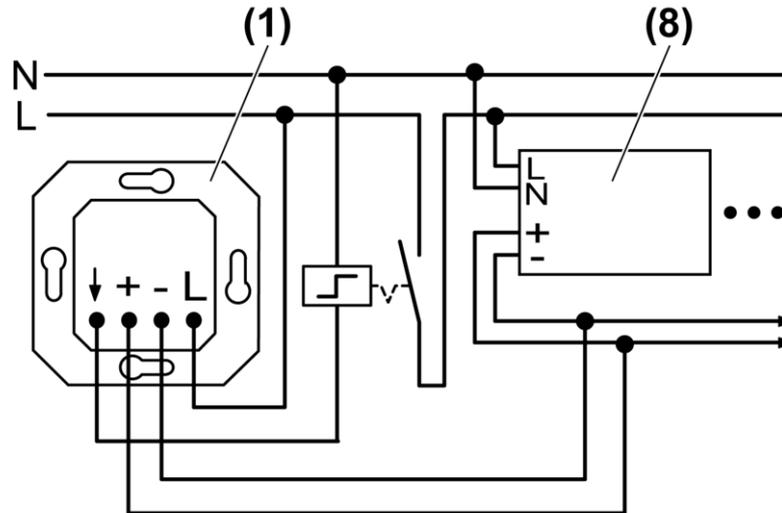


Figure 4: Connection diagram for potentiometer with push-button function

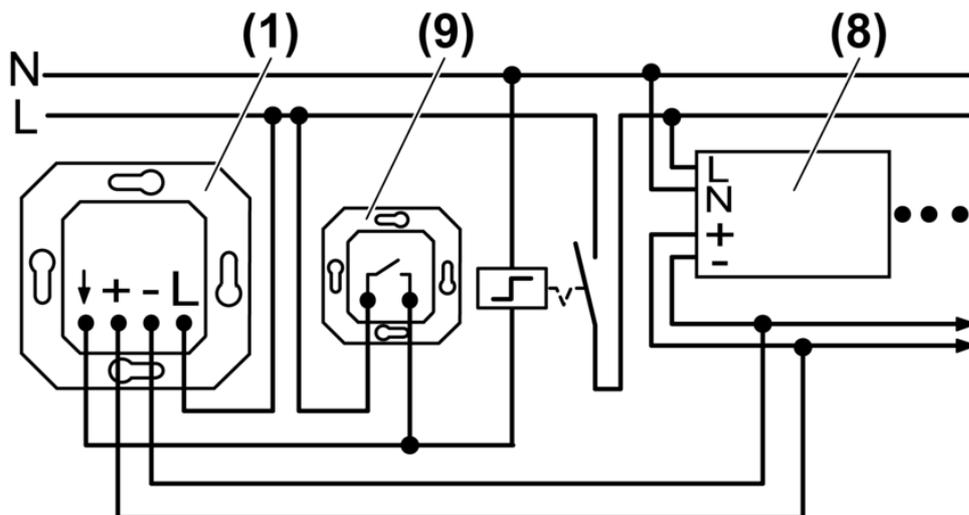


Figure 5: Connection diagram for potentiometer with push-button function and extension

- (1) Electronic potentiometer
- (8) Lamp operating device with 1-10 interface, electronic ballast
- (9) Extension, installation button

- i** Control cable: type, cross-section and routing according to VDE requirements for 250 V cable, control voltage with basic insulation. Control cable and load cable may be routed in a common cable, e.g. NYM J 5 x 1.5.
- i** Connect lamp operating devices and electronic ballasts with protective earth conductor according to manufacturer specifications. The sum of the control voltages must not exceed 50 mA; see manufacturer specifications for the lamp operating devices.
- i** Use only lamp operating devices and fluorescent lamps of the same type and power rating, and from the same manufacturer. Otherwise differences in the brightness of the individual lamps may occur.
- Connect electronic potentiometer with switching function according to connection diagram (Figure 2) or .
Connect electronic potentiometer with push-button function according to connection diagram (Figure 3) or (Figure 4).

1 - 10 V rotary potentiometer

- 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 disconnection.
- Fit device in appliance box; terminals must be at the bottom.
- Adjusting basic brightness (Figure 5).
- Mount the frame and the central plate.
- Attach the control button.

5.2 Commissioning

Adjusting basic brightness

If necessary, the basic brightness can be set by an electrically skilled person.

Device is connected and installed in appliance box as described above. The frame, central plate and control button are not fitted.



DANGER!

Electrical shock when live parts are touched.

Electrical shocks can be fatal.

Use only insulated tools to set the basic brightness. Cover up live parts in the working environment.

- Switch on mains voltage.
- Press the rotary axle to switch on the lighting and turn it left to the minimum brightness.
- Set basic brightness by turning the adjuster (7) (Figure 1). The basic brightness must be set in such a way that the connected lamps are still visibly lit when the control button is turned all the way to the left.

6 Appendix

6.1 Technical data

Ambient temperature	+5 ... +25 °C
Control voltage	0.7 V ... 12 V
Control current	max. 50 mA
Switching current for AC 230/240V~ Ohmic	
Order-No. 2891 10	6 A
Order-No. 2896 10	2 A
Order-No. 9 2891 ..	6 A
Switching current for AC230/240V~ capacitive	
Order-No. 2891 10	6 A (70µF)
Order-No. 2896 10	—
Order-No. 9 2891 ..	6 A (70µF)
Connection	
Single stranded	max. 4 mm ²
Fine-wire fuse	F 500 H 250

6.2 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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