Universal LED dimmer module
Operating instructions

Art. no. CCT99100

Accessories
Complete the universal LED dimmer module with:
• Mechanical retractive push-buttons in design series of free choice

For your safety

DANGER
Risk of serious damage to property and personal injury, e.g. from fire or electric shock, due to incorrect electrical installation.
Safe electrical installation can only be ensured if the person in question can prove basic knowledge in the following areas:
• Connecting to installation networks
• Connecting several electrical devices
• Laying electric cables
These skills and experience are normally only possessed by skilled professionals who are trained in the field of electrical installation technology. If these minimum requirements are not met or are disregarded in any way, you will be solely liable for any damage to property or personal injury.

DANGER
Risk of death from electric shock.
The outputs may carry an electrical current even when the device is switched off. Always disconnect the fuse in the incoming circuit from the supply before working on connected loads.

Getting to know the dimmer module
The universal LED dimmer module (referred to below as dimmer module) is suitable for installation in a deep installation box. The dimmer module is controlled with mechanical push-buttons in parallel operation. Ohmic, inductive or capacitive loads can be switched or dimmed with it:

Dimmable LED lamps
Inchandescent lamps (ohmic load)
230 V halogen lamps (ohmic load)
Low-voltage halogen lamps with dimmable wound transformer (inductive load)
Low-voltage halogen lamps with electronic transformer (capacitive load)

The dimmer module automatically recognises the connected load. It is overload-proof, short-circuit-proof, protected from overheating and it has a soft-start function.
The memory function allows the dimmer module to memorise the most recently set brightness value and retrieve it again.
You can set the dimming range and adjust the operating mode (from trailing edge phase to leading edge phase).

CAUTION
The dimmer may be damaged!
• Always operate the dimmer according to the technical data provided.
• Connected dimmers may be damaged if you connect a combination of loads (inductive and capacitive) at the same time.
• The dimmer is designed for sinusoidal mains voltages.
• If transformers are used, only connect dimmable transformers to the dimmer.
• Dimming socket outlets is prohibited. The risk of overload and connecting unsuitable dimmers is too high.
• If a terminal is used for looping, the insert must be protected with a 10 A circuit breaker.

Connections, displays and operating elements

Programming push-button
Status LED
Function potentiometer

Mounting the dimmer module
Do not connect more than three dimmer modules to one cable with 16 A fuse protection.

If you do not install the dimmer module in a single, standard flush mounting box, the maximum permissible load is reduced due to the restricted heat dissipation:

Load reduced by

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>In cavity walls*</td>
</tr>
<tr>
<td>30%</td>
<td>In 1-gang or 2-gang surface-mounted housing</td>
</tr>
<tr>
<td>50%</td>
<td>In 3-gang surface-mounted housing</td>
</tr>
</tbody>
</table>

* If more than one factor applies, add the load reductions together.

Wiring the dimmer module

Installing the dimmer module

Setting the dimming range
The dimming range of the dimmer module can be adjusted.

Depending on the dimming range of the lamp, malfunctions may occur for values near the maximum and minimum brightness. (Refer to the chapter "What should I do if there is a problem?")
### Setting the minimum and maximum brightness

1. Make sure that the connected load is turned off with the programming push-button.

2. Set the function potentiometer to MIN or MAX.

3. Press the programming push-button shortly 3 times.

4. The connected load is automatically switched off. The status LED lights up for 2 seconds.

The circuit breaker is switched on. **(Live working!)**

- Make sure that the connected load is turned off with the programming push-button.
- Press the programming push-button shortly 3 times.
- The circuit breaker is switched on. **(Live working!)**

### Switching the operating mode to RL LED mode

1. Make sure that the connected load is turned off with the programming push-button.

2. Set the function potentiometer to RL(LED).

3. Press the programming push-button for 3 seconds.

4. The load is dimmed to the minimum brightness.

The circuit breaker is switched on. **(Live working!)**

- Make sure that the connected load is turned off with the programming push-button.
- Press the programming push-button shortly 3 times.
- The circuit breaker is switched on. **(Live working!)**

### Connecting the mechanical push-button

**DANGER**

Risk of death from electric shock. However the device is turned off there might be full voltage at the output. Always turn the device in the status of voltage free before starting with work.

### Connecting the mechanical push-button

1. Short press: switching on or off

2. Long press: dimming up or down

### Operating the dimmer module

- The circuit breaks off when the circuit breaker is switched on.

### Displaying the operating mode

- The circuit breaker is switched on. **(Live working!)**

1. Make sure that the connected load is turned off with the programming push-button.

2. Set the function potentiometer to MIN or MAX.

3. Press the programming push-button shortly 3 times.

4. The status LED lights up for 2 seconds.

### What should I do if there is a problem?

The dimmer dims down regularly during operation and cannot be dimmed up again.

- **Allow** the dimmer to cool down and reduce the connected load.
- The load cannot be switched back on.

The load is dimmed to the minimum brightness.

- **Switch** operating mode to “leading edge phase for LED lamps” (RL LED mode).

The load flickers at minimum brightness.

- **Rectify** any possible short circuits.
- The load can only be dimmed slightly.

- **Alternatively, reset** operating mode to default.

The load flickers continuously.

Incorrupt operating mode set.

- **Switch** operating mode to “leading edge phase for LED lamps” (RL LED mode).
- **Alternatively, reset** operating mode to default.

The load cannot be dimmed up again.

- **Renew** defective loads.
- **Increase** minimum brightness value (set dimming range again).

- **Alternatively, reset** operating mode to default.

The load cannot be dimmed up again.

- **Set** dimming range.

The load can only be dimmed slightly.

- **Switch** operating mode to “leading edge phase for LED lamps” (RL LED mode).
- **Alternatively, reset** operating mode to default.

The load cannot be dimmed up again.

- **Set** dimming range.

The load can only be dimmed slightly.

- **Switch** operating mode to “leading edge phase for LED lamps” (RL LED mode).
- **Alternatively, reset** operating mode to default.

The load cannot be dimmed up again.

- **Set** dimming range.

The load can only be dimmed slightly.

- **Switch** operating mode to “leading edge phase for LED lamps” (RL LED mode).
- **Alternatively, reset** operating mode to default.

The load cannot be dimmed up again.

- **Set** dimming range.

The load can only be dimmed slightly.

- **Switch** operating mode to “leading edge phase for LED lamps” (RL LED mode).
- **Alternatively, reset** operating mode to default.

The load cannot be dimmed up again.

- **Set** dimming range.
Dimmer tool

Schneider Electric has tested numerous dimmable LED and energy saving lamps. The dimmer tool provides information on dimmable lamps and the minimum and maximum number of individual lamp models.

http://schneider-electric.dimmer-test.com

Dispose of the device separately from household waste at an official collection point. Professional recycling protects people and the environment against potential negative effects.

Schneider Electric Industries SAS

If you have technical questions, please contact the Customer Care Centre in your country.
schneider-electric.com/contact

Technical data

Nominal voltage: AC 230 V ~, 50 Hz

Switching capacity:

LED lamps (RC mode): 4-100 VA

LED lamps (RL LED mode): 4-20 VA

Incandescent lamps: 5-200 W

230 V halogen lamps: 5-150 W

LV halogen lamps with dimmable wound transformer: 5-200 VA

LV halogen lamps with electronic transformer: 5-200 VA

Neutral conductor: not required

Connecting terminals: screw terminals for max. 2.5 mm²

Extension connection: mechanical push-buttons

Total cable sections: max. 20 m for 3-wire NYM cable

Fuse protection: 16 A circuit breaker

Dimensions (HxWxD): 44.5 x 39.5 x 20 mm

Properties:
- Short-circuit-proof
- Overload-proof
- Soft start
- Resistant to overheating
- Automatic load detection