Universal dimmer rotary
Extension unit 6592 U-500
1 Safety

**Warning**

**Electric voltage!**
Risk of death and fire due to electrical voltage of 230 V.
- Work on the 230V supply system may only be performed by authorised electricians!
- Disconnect the mains power supply prior to installation and/or disassembly!

2 Intended use

The device is to be used exclusively with the components that are supplied and licensed as described in chapter "Setup and function".

3 Environment

**Consider the protection of the environment!**

Used electric and electronic devices must not be disposed of with domestic waste.
- The device contains valuable raw materials which can be recycled. Therefore, dispose of the device at the appropriate collecting depot.

All packaging materials and devices bear the markings and test seals for proper disposal. Always dispose of the packaging material and electric devices and their components via the authorized collecting depots and disposal companies.

The products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.

(EU REACH ordinance and law for the implementation of the ordinance (EC) No.1907/2006)
4 Operation

The operation of the extension unit is identical with the operation of universal dimmer 6591 U-500

![Dimmer control element](image)

**Fig. 1: Dimmer control element**

<table>
<thead>
<tr>
<th>Function</th>
<th>Operating step</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activation with the last brightness value set</td>
<td>Actuate the rotary knob when the dimmer is switched off.</td>
</tr>
<tr>
<td>Turn-on with minimum brightness</td>
<td>Turn the rotary knob first to the left and then depress it.</td>
</tr>
<tr>
<td>Turn-on with maximum brightness</td>
<td>Turn the rotary knob first to the right and then depress it.</td>
</tr>
<tr>
<td>Increase the brightness</td>
<td>With the dimmer being on, turn the rotary knob to the right.</td>
</tr>
<tr>
<td>Reduce the brightness</td>
<td>With the dimmer being on, turn the rotary knob to the left.</td>
</tr>
<tr>
<td>Deactivation</td>
<td>With the dimmer being on, press the rotary knob.</td>
</tr>
</tbody>
</table>

**Note**
The rotary knob does not have a limit stop.

5 Technical data

**General**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage</td>
<td>230 V AC ± 10%, 50/60 Hz</td>
</tr>
<tr>
<td>A maximum number of extension units which can be connected to dimmer 6591 U-...</td>
<td>5</td>
</tr>
<tr>
<td>Maximum cable length</td>
<td>100 m</td>
</tr>
<tr>
<td>Protection type</td>
<td>IP 20</td>
</tr>
<tr>
<td>Ambient temperature range</td>
<td>0 ...35 °C</td>
</tr>
</tbody>
</table>
6 Setup and function

The device is intended for the activation of the following types of loads:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="230 V incandescent lamps" /></td>
<td>230 V incandescent lamps</td>
</tr>
<tr>
<td><img src="image" alt="230 V halogen lamps" /></td>
<td>230 V halogen lamps</td>
</tr>
<tr>
<td><img src="image" alt="Low-voltage halogen lamps with conventional transformers" /></td>
<td>Low-voltage halogen lamps with conventional transformers</td>
</tr>
<tr>
<td><img src="image" alt="Low-voltage halogen lamps with electronic transformers" /></td>
<td>Low-voltage halogen lamps with electronic transformers</td>
</tr>
</tbody>
</table>

6.1 Features of function and equipment

- With incremental encoder and soft-click notches
- A maximum of 5 extension units can be connected to Universal rotary dimmer 6591 U-500
- Without cover plate

6.2 Possible combinations

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="6592 U" /></td>
<td>6592 U</td>
</tr>
<tr>
<td><img src="image" alt="3855" /></td>
<td>3855 X</td>
</tr>
<tr>
<td><img src="image" alt="2115-21..." /></td>
<td>2115-21... X</td>
</tr>
<tr>
<td><img src="image" alt="6540-..." /></td>
<td>6540-... X</td>
</tr>
</tbody>
</table>
7 Installation and electrical connection

Warning
Electric voltage!
Risk of death due to electrical voltage of 230 V during short-circuit in the low-voltage line.
– Low-voltage and 230 V lines must not be installed together in a flush-mounted socket!

7.1 Requirements for the electrician

Warning
Electric voltage!
Install the device only if you have the necessary electrical engineering knowledge and experience.
• Incorrect installation endangers your life and that of the user of the electrical system.
• Incorrect installation can cause serious damage to property, e.g. due to fire.

The minimum necessary expert knowledge and requirements for the installation are as follows:
• Apply the “five safety rules” (DIN VDE 0105, EN 50110):
  1. Disconnect from power;
  2. Secure against being re-connected;
  3. Ensure there is no voltage;
  4. Connect to earth and short-circuit;
  5. Cover or barricade adjacent live parts.
• Use suitable personal protective clothing.
• Use only suitable tools and measuring devices.
• Check the supply network type (TN system, IT system, TT system) to secure the following power supply conditions (classic connection to ground, protective earthing, necessary additional measures, etc.).
7.2 Mounting

**Warning**

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- Work on the 230V supply system may only be performed by authorised electricians!
- Disconnect the mains power supply prior to installation and/or disassembly!

The flush-mounted insert must only be installed in flush-mounted wall boxes according to DIN 49073-1, Part 1, or suitable surface-mounted housings.

7.3 Electrical connection

![Diagram of electrical connection](image)

Fig. 2: Extension unit operation with Busch universal rotary dimmer 6591 U ...

**Note**
The N-connection is required only for illuminated extension units.
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