



**Safety instructions**

Electrical equipment may only be installed and assembled by a qualified electrician in accordance with the relevant installation standards, guidelines, regulations, directives, safety and accident prevention regulations of the country. Failure to comply with these instructions may result in damage to the device, fire or other hazards.

**Hazard due to electric shock. Do not operate the device without a cover.**

**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.**

**Do not connect any non-dimmable lamps, their transformers or operating devices. Observe manufacturer's data.**

**Hazard of fire. During operation with conventional transformers, fuse each transformer on the primary side according to manufacturer's data. Use safety transformers that comply with EN 61558-2-6 only.**

**These instructions are an integral component of the product and must be retained by the end user.**

**Design and layout of the device**

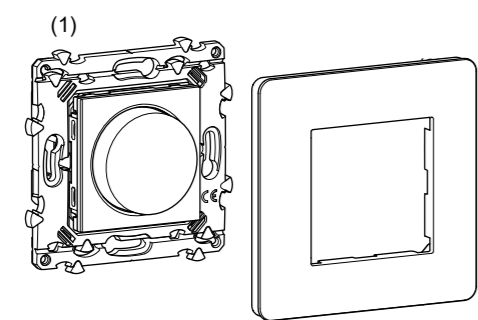


Figure 1: Rotary dimmer WE062

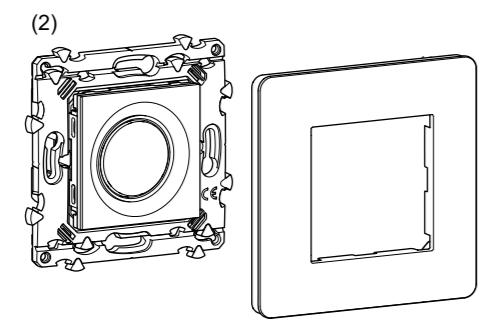


Figure 2: Touch dimmer WE063

- (1) Supporting + Touch dimmer/rotary dimmer module + cover
- (2) Frame WE4..., WE5.. (not within scope of delivery)

**Function**

**Correct use**

- Switching and dimming of incandescent lamps, HV halogen lamps, dimmable 230 V LED lamps, electronic and dual-mode transformers or conventional transformers with low voltage halogen lamps
- Only suitable for use in indoor areas with no drip and no spray water
- Installation in deep wall box (min. 40 mm)

**No mixed load operation of capacitive and inductive loads possible at the output.**

**Product characteristics**

- Automatic setting of load-dependent dimming principle and optional fine setting of minimum brightness via button/rotary knob, e.g. for 230 V LED lamps
- Automatic saving of switch-on brightness level
- Electronic short circuit protection
- Electronic overload and overheating protection
- Allows connection of extension units (push-button, NO contact)
- Soft start/stop for bulb protection

**Performance after mains breakdown**

When power returns, the light is restored to the last brightness level defined

**Dimming principle**

During commissioning, the dimmer performs automatic load detection and applies the correct dimming principle for the load connected (phase cut-on, phase cut-off).

Flickering of connected lamps possible due to the load falling below the specified minimum level, ripple control pulses (tariff signals) from power stations, or replacement of 230 V LED lamps.

Short term flickering during load detection possible. No operation is possible during load detection. These are not defects of the device.

If the dimming performance of 230 V LED lamps is unsatisfactory in factory setting, a load setting must be carried out (see Setting the load).

When circuiting several loads to one output (parallel circuiting) optimise dimming performance via load setting if necessary (see Setting the load).

After each replacement of the load (lamp) an automatic load detection has to be carried out (see Setting the load).

**Operation**

**Rotary dimmer operating concept**

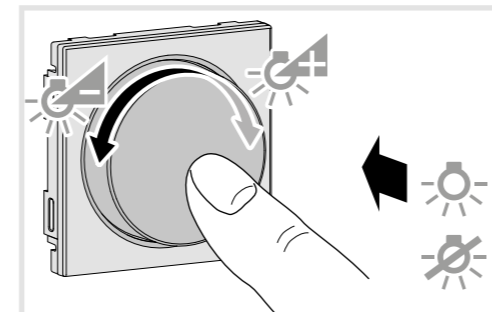


Figure 3: Switching and dimming

Load status	Action	Result
OFF	Short press of push-button (< 400 ms)	Switch <b>ON</b> with saved switch-on brightness level.
> 0%	Short press of push-button (< 400 ms)	Switch <b>OFF</b> and save brightness as switch-on brightness level.
OFF	Turn rotary knob to the left	Switch on to defined minimum brightness.
> 0%	Turn rotary knob to the left	Dim down the light.
OFF	Turn rotary knob to the right	Switch on to maximum brightness; the rotary dimmer is dimmed in the speed of rotation.
> 0%	Turn rotary knob to the right	Dim up the light.
OFF	Long press of push-button (> 10 s)	Select load type (see <b>Setting the load</b> )
OFF	Long press of push-button (> 15 s)	Fine setting of minimum brightness (see corresponding section)

Table 1: Rotary dimmer operation

**Touch dimmer operating concept**

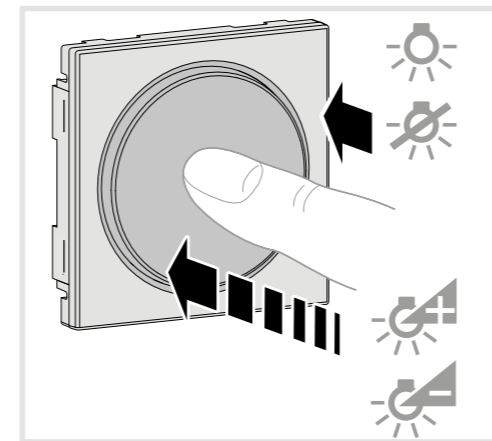


Figure 4: Switching and dimming

Load status	Action	Result
OFF	Short press of push-button (< 400 ms)	Switch <b>ON</b> with saved switch-on brightness level.
> 0%	Short press of push-button (< 400 ms)	Switch <b>OFF</b> and save brightness as switch-on brightness level.
> 0%	Long press of push-button (> 400 ms)	Dim alternately down and up each time the push-button is pressed.
OFF	Long press of push-button (> 10 s)	Select load type (see <b>Setting the load</b> )
OFF	Long press of push-button (> 15 s)	Fine setting of minimum brightness (see corresponding section)

Table 2: Touch dimmer operation

**Setting the load**

If the dimming and switching performance of loads is unsatisfactory, especially when circuited to energy-saving lamps and 230 V LED lamps, a load setting must be carried out when dimming.

- Switch off load.
- Press the rotary knob/button for more than 10 but less than 15 seconds. The connected load flashes once. The device is now in setting mode.

If no further actions are performed within the next 10 seconds, the dimmer switches to normal operation.

- Briefly press the rotary knob/button repeatedly to activate the desired mode (Table 3). The load setting is executed.

Briefly press button/rotary knob	Setting mode
1x	Automatic load detection
2x	LED phase cut-on
3x	Only for rotary dimmer: fan mode

Table 3: Setting the load type

**Fine setting of minimum brightness**

To prevent poor switch-on behaviour or flickering of the load in the lower dimming range, the dimming angle for minimum brightness (phase cut-on/cut-off) can be set individually for each load type.

- Switch off load.
- Hold the rotary knob/button down for more than 15 seconds. The connected load will flash once after 10 s and again after 15 s. The device is now in fine-setting mode for the minimum brightness.

If no further actions are performed within the next 10 seconds, the dimmer switches to normal operation.

- Briefly press rotary knob/button. The device will switch repeatedly between the various predefined dimming angles (brightness levels).
- When the optimal setting is reached, hold the rotary knob/button down (> 5 s). This saves the selected dimming angle for the minimum brightness. The load is then switched off.

**Information for electricians**

**Installation and electrical connection**

**! DANGER!**  
Touching live parts can result in an electric shock!  
An electric shock can be lethal!  
Disconnect the connecting cables before working on the device and cover all live parts in the area!

**Connection diagram**

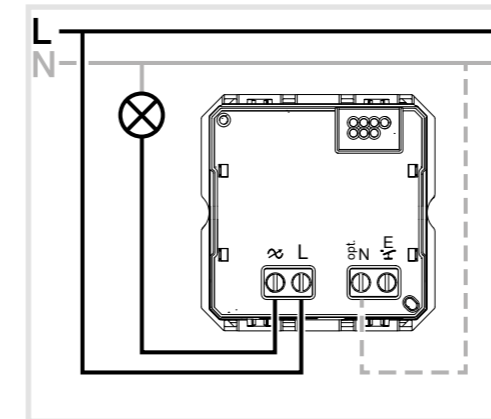


Figure 5: Connecting diagram (basic circuit)

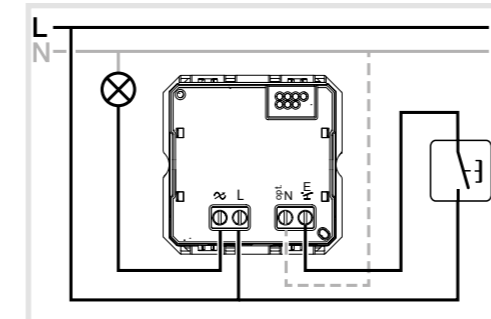


Figure 6: Connection diagram with push-button, NO contact as extension unit

Install a miniature circuit breaker of max. 16 A as device protection.

- Connect rotary dimmer/touch dimmer (1), and extension units is desired, according to the connection diagram.
- Mount the dimmer in a wall box. The connecting terminals must be at the bottom.

- Attach decor plate (2), design cover (3) and button/rotary knob (4) (see Design and layout of the device).

Use a deep wall box for the dimmer (min. 40 mm).

Illuminated mechanical push-buttons must be equipped with a separate N-terminal.

Connecting the optional N-conductor has advantages for the switching/dimming performance in the case of LED loads and transformers.

**Appendix**

**Technical data**

Operating voltage	230 V~ +10 / -15 %
Frequency	50 Hz
MCB	max. 16 A
Degree of protection	IP21 with frame and cover
Protection class	IK03
Power consumption in idle state	< 0.2 W
230 V incandescent and halogen lamps	20 ... 250 W
dimmable conventional transformers	20 ... 250 VA
dimmable electronic and dual-mode transformers	20 ... 250 VA
dimmable 230 V LED lamps	3 ... 50 W
Dimming speed	0 ... 100 %, ca. 4 s*
Fan motors	max. 70 W
Extension unit cable length	max. 50 m
Load cable length	max. 100 m
Operating temperature	-5 ... 45 °C
Storage temperature	-20 ... 60 °C
Relative humidity (without condensation)	10 ... 95 %
Connecting terminals conductor cross-sections - rigid	1 x 1.5 ... 2.5 mm <sup>2</sup> 2 x 1.5 mm <sup>2</sup>
- flexible	1 x 1.5 ... 2.5 mm <sup>2</sup>

\* Only valid for touch dimmer

**Operating conditions**

Loadtype	Curve	Maximum output power in Watt (W)		
		25°C	35°C	45°C
Ohmic loads	A)	250	225	200
Transformers	B)	250	250	200
LED lamps	C)	50	45	40

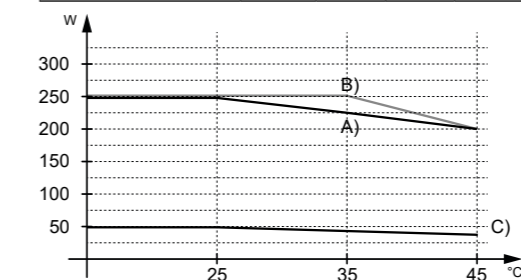


Diagram 1: Maximum output power depending on the ambient temperature

When connecting conventional transformers, connect the optional N-conductor to obtain a stable dimming performance. Conventional transformers should be operated with at least 50 % nominal load. Nonetheless, 75% is recommended because in individual cases, depending on the transformer, unstable dimming performance may occur.

Carry out loading of conventional, electronic and dual-mode transformers according to manufacturer's instructions.

Do not use non-dimmable 230 V LED lamps.

In the case of 230 V LED lamps, the power supply to the dimmer can cause the lamp to glow slightly even when it is switched off.

**Troubleshooting**

**After some time the load dims down of its own accord.**

- The electronic overload protection has tripped. Execute load detection
- Reduce total load.
- Use another lamp.

**The lamp cannot be dimmed down sufficiently.**

- The dimming angle is set too high. Decrease the value in fine-setting of the minimum brightness.

**The lamp switches off while being dimmed down.**

- The dimming angle is set too low. Increase the value in fine-setting of the minimum brightness.
- Use another lamp.

**The load does not switch on.**

- The dimming angle and brightness value are set too low. Increase the value in fine-setting of the minimum brightness.

The electronic short-circuit protection has tripped repeatedly. Check electrical installation and disconnect dimmer briefly from mains.

**LED lamp does not switch on.**

- Load setting mode not correct. Start automatic load detection or set LED phase cut-on mode.

**The load generates noise.**

- The load type is set incorrectly. Set the load type to automatic load detection. If the error persists, replace the lamp.

**Dimmer switches off of its own accord.**

- The electronic overload protection has tripped. Check the load connected (maximum output power).
- The electronic short-circuit protection has tripped. Check electrical installation and disconnect dimmer briefly from mains.

**Load flickers while switched off.**

- LED load too low. Increase LED load at output or use compensation module LED.

**The connected load cannot be dimmed.**

- Be sure always to use dimmable loads.

**Dimming and switching performance is unsatisfactory.**

- Start automatic load detection. Set dimmer to LED phase cut-on.
- Connect neutral conductor or compensation module LED and start automatic load detection again