theben

DIMAXDIMAX 532 532 0 000

Installation and operating instructions
Universal dimmer













DIMAX 532



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Basic safety instructions







Danger of death through electric shock or fire!

- ➤ Installation should only be carried out by a qualified electrician!
- The dimmer is designed for installation on DIN top hat rails (in accordance with EN 60715)

Designated use

- The universal dimmer corresponds to IEC/EN 60669-2-1; it switches and dims the brightness of
 various light sources such as bulbs, halogen lamps, HV and LV halogen lamps (conventional or
 with electronic transformer) or dimmable compact fluorescent tubes (energy-saving lamps) or
 dimmable LED lamps for 230 V. The brightness can be adjusted using the push button attached to
 the dimmer; for use in enclosed spaces
- The universal dimmer has a lamp-friendly "soft" on and off system, automatic detection of the load type (not in the case of energy-saving lamps), overheating protection against overload as well as a short-circuit protection

Disposal

Dispose of the dimmer in an environmentally sound manner (electronic waste)

Connection/installation



⚠ WARNING

Warning, danger of death through electric shock!

- Must be installed by qualified electrician!
- ➤ Disconnect power source!
- Cover or shield any adjacent live components.
- Ensure device cannot be switched on!
- Check power supply is disconnected!
- ➤ Earth and bypass!
- ➤ Mount the dimmer in the lower part of the distributor to avoid an excessively high temperature during use.
- ➤ In the case of a service line of >300 W keep an 8 mm distance to the right and left of the device.

Connection/installation

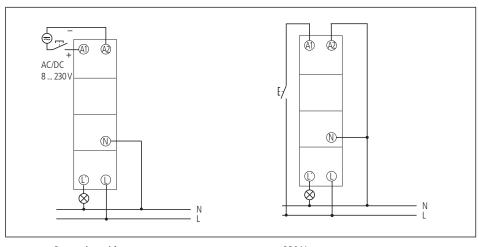




- ➤ Electronic and conventional transformers must always be operated at the minimum load specified by the manufacturer.
- ➤ Only use dimmable energy-saving lamps, normal energy-saving lamps could be irreparably damaged.
- ➤ Disconnect the dimmer before changing the load.
- ➤ When replacing lamps, switch off the voltage supply (at the fuse box) to ensure that the automatic load detection can be reactivated.
- > Do not connect dimmer load connections (L') in parallel.
- > Do not bypass or short-circuit the dimmer.
- ➤ Do not install an isolating transformer or an adjustable transformer ahead of the dimmer.
- ➤ Dimmable lighting with electrical isolation (e.g. in the bathroom): Work with 12 V halogen lamps. Transformers for 12 V halogen lamps have sufficient electrical isolation.
- > Do not mix wound and electronic transformers in the installation.
- > Do not mix wound transformers and energy-saving lamps/LEDs in the installation.
- ➤ Do not connect push button with glow lamp.
- ➤ Correct, automatic load detection is only possible with a connected load.



➤ Only use transformers approved by the manufacturer for dimmer operation.

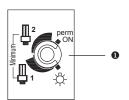


Connection with 8 ... 230 V

230 V connection

Control elements





Rotary switch for setting 4 functions

General functional description

Dimmer is OFF (Input A1/A2)

-1 x short keystroke (< 1 s)

switch on with saved switch-on brightness

-1 x long keystroke

switch on with minimum brightness and dim up until the push button is released or the max. brightness is obtained

(> 1 s)

(dimming switch-on function)

-1 x short keystroke switch off (< 1 s)

−1 x long keystroke

Dimmer dims up/down

(> 1 s)

- Dimming stops at the minimum/maximum value

– When pushing the push button again the dimming direction is

changed

Description of functions

Dimming switch-on function

 The dimmer switches on with minimum brightness and dims until the push button is released or the max. brightness is obtained.

Switch-on brightness

The dimmer starts with the taught in switch-on brightness (factory set 100 %).



- Learning switch-on brightness
 - > Adjusting the desired switch-on brightness.
 - > Press push button A1/A2 until the minimum/maximum value is obtained.
 - Press the push button for another 10 s; the value is taught in. The previous dimming value is saved as switch-on brightness (confirmed by the difference in brightness). Following this, adjustments are made according to the saved switch-on brightness.

Minimum brightness

- With the standard function, the minimum brightness is set in such a way that the lamps still light up.
- In the case of dimmable energy-saving lamps (1 and 2) the minimum brightness can be set directly at the rotary switch.

Reason: If there is a drop below a specific brightness value, the energy-saving lamps go out and cease to light up.

Tip: Switch on energy-saving lamp for 5 min and then set minimum brightness.





Standard function with automatic load detection

- with adjustable switch-on brightness
- with dimming switch-on function
- minimum brightness permanently saved in the device



Function for dimmable energy-saving lamps (ESL) 1

with automatic load detection (ideal for manufacturers Megaman, Philips)

- with minimum brightness (can be adjusted using potentiometer)
- with switch-on brightness
- with dimming switch-on function



Function for dimmable energy-saving lamps (ESL) 2 no automatic load detection (always with phase control)

(ideal for manufacturers Osram, Philips)

- with minimum brightness
- with switch-on brightness
- with dimming switch-on function

With some energy-saving lamps there may be radio interference voltages when dimming with phase control. In this case use position 1 (phase control).

perm ON

Function **perm ON**: Dimmer is always on



Technical data

• Operating voltage: 230 V~, +10 % / -15 %

• Frequency: 50 Hz

Power consumption: typically 0.3 W

Standby: typically 0.2 W

• Incandescent lamp load: 500 W*

• Halogen lamp load: 500 W*

Inductive transformer (L): 500 W*

• Electronic transformer (C): 500 W*

Dimmable energy-saving lamps (ESL): 100 W

• Cable length: max. 100 m

Minimum load: none

Permissible ambient temperature:

-30 °C ... +50 °C

• Protection class: II subject to correct

installation

Protection rating: IP 20 in accordance with

EN 60529

* In the case of a load of >300 W keep an 8 mm ventilation distance to the right and left.

Service address/Hotline

Service address

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