

**Universal-dimmer-insert**  
**with pushbutton/rotary switch**  
**Extension unit insert for universal dimmer**  
**insert**

Order no.: 0310 00

Order no.: 0322 00

## Function

Universal dimmer insert for switching and dimming of:

- 230 V incandescent lamps
- 230 V halogen lamps
- Low-voltage halogen lamps in conjunction with Gira Tronic transformers or
- Low-voltage halogen lamps in conjunction with conventional transformers suitable for dimming

Switching and dimming is effected by depressing and turning the control knob of the dimmer and the extension unit.

Depressing the control knob:      ON - OFF  
Turning the control knob:        dimming

The extension unit insert is secondary to the dimmer.

The lamps are switched on in the lamp-saving soft-start mode.



### Safety instructions

**Attention: Electrical equipment must be installed and fitted by qualified electricians only. Not suitable for safety disconnection.**

**Shutting off does not disconnect the load electrically from the mains.**

**Non-observance of the installation instructions may cause fire or other hazards.**

## Short-circuit protection

The dimmer is switched off automatically by an electronic protection circuitry after load short-circuits or after overloading.

For this reason, there is no electrical separation of the load circuit. If the fault condition persists for less than seven seconds (phase cut-off) or 100 ms (phase cut-on), the dimmer restarts automatically. In all other cases, the dimmer is switched off permanently and must be restarted by depressing the control knob.

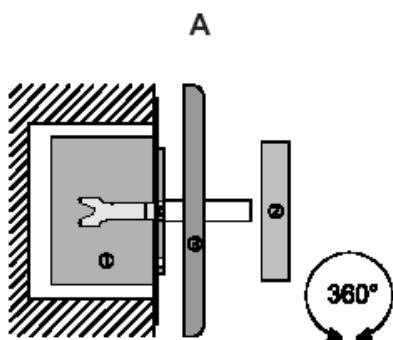
## Overtemperature protection

The dimmer shuts off in the event of too high ambient temperatures. After cooling, the device must be restarted by depressing the control knob.

## Installation instructions

The Universal dimmer insert ① is completed by the control knob ② and the covering ③ (frame and centerpiece) (see fig A).

The Universal dimmer insert is installed in a mounting box as per DIN 49073 (fig A) with the connecting terminals pointing downwards.



After first installation and cutout of the mains supply the dimmer performs an automatic load detection and selects the dimming mode required for the load connected. The brightness value stored then corresponds to maximum brightness. After each subsequent switch-on, the on value is the same as the off value.

With resistive loads (incandescent lamps, HV halogen lamps), the load detection phase is accompanied by a short flickering of the lamps and lasts between 1 and 10 seconds depending on mains conditions.

During this time, no commands will be accepted. In the event of a short circuit during the load detection phase, the detection is repeated after elimination of the short circuit.

Mains failures of more than 0.7 seconds result in shutdown of the dimmer and loss of the stored brightness value.

Do **not** connect capacitive loads (e.g. Gira Tronic transformers) and inductive loads (e.g. conventional transformers) to the same rotary dimmer.



The overall power rating of the consumers connected must not exceed the maximum load specified in the technical data.

Depending on the type of installation, the maximum rating must be reduced by:

- 10 % per 5 °C exceeding of the ambient temperature of 25°C.
- 15 % for installation in wooden, gypsum plaster or hollow walls.
- 20 % for installation in multiple combinations.
- Housing for surface-mounting max. power 400 W/VA

## Connection

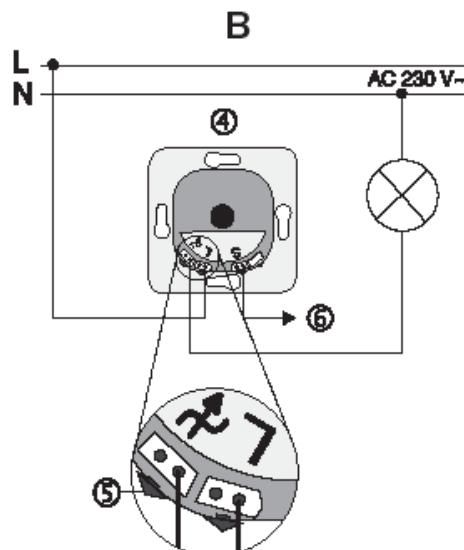
Wiring of the devices is shown in figs B and C. Universal dimmer insert ④ extension unit insert ⑥ to power booster ⑦

The wires are connected to the Universal dimmer insert ④ or the extension unit insert ⑥ by means push-lock terminals accessible from below. After removing the insulation over abt. 15 mm, the conductor is pushed into the opening of the pushlock terminal without depressing the release lever ⑤.

For removing the wire from the push-lock terminal, lever ⑤ must be lifted.

For maximum connected load rating see technical specifications.

With the full load connected to the dimmer, up to 10 power boosters can be connected in addition ⑦.



In conjunction with Gira Tronic transformers use Tronic power boosters (built-in or DIN rail types).

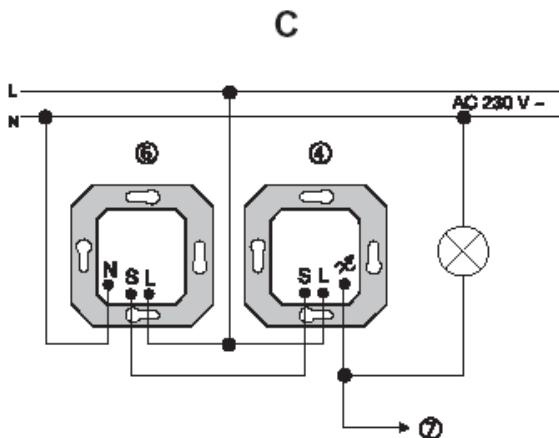
In conjunction with conventional transformers, use lowvoltage power boosters (built-in or DIN rail types).

Observe the Technical Connection Rules of the power supply companies.

Centralized multi-service control pulses of the power stations may be noticeable by short-time flickering at low dimming positions.

**Important:**

The upper side of the base-plate has measuring points for checking of the voltages applied without removing the dimmer.



## Technical specifications

Nominal voltage: AC 230 V ~, 50 / 60 Hz

Connected load

flush-mounting Type: 50 - 420 W/VA  
surface-mounting Type: 50 - 400 W/VA

Type of loads:

- 230 V incandescent lamps (ohmic load, phase **cut-off**)
- 230 V halogen lamps (ohmic load, phase **cut-off**)
- Gira TRONIC transformers (capacitive load, phase **cut-off**)
- conventional transformers (inductive load, phase **cut-on**)

Mixing of specified load types (**do not mix capacitive with inductive loads**).

When using mixed loads with conventional transformers, the ohmic load must not exceed 50%.



The symbols used to identify dimmer loads designate the type of the electrical behaviour of loads connected to dimmers:  
R = ohmic, L = inductive, C = capacitive

Number of power boosters: 10 max.

Setting range: fast: 360°; slow: 720°

OFF condition - brightness during next switch-on  
1/4 turn to the left: minimum brightness  
1/4 turn to the right: maximum brightness

Wiring: double terminals  
solid conductor  
1,0 mm<sup>2</sup> to 2,5 mm<sup>2</sup>

Stripping length: 15 mm (see also dimmer baseplate)

Extension control units: use extension unit insert for universal dimmer insert only

Number of extensions: 5

Length of cable: 100 m max.

## Acceptance of guarantee

We accept the guarantee in accordance with the corresponding legal provisions.

**Please return the unit postage paid to our central service department giving a brief description of the fault:**

Gira  
Giersiepen GmbH & Co. KG  
**Service Center**  
Dahlienstrasse 12  
D-42477 Radevormwald

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