Control unit, 1-10 V
Order-No. : 036000

Operating instructions

## 1 Safety instructions

Electrical equipment may only be installed and fitted by electrically skilled persons.
Failure to observe the instructions may cause damage to the device and result in fire and other hazards.
Danger of electric shock. Device is not suitable for disconnection from supply voltage.
Danger of electric shock. Always disconnect before carrying out work on the devise or load. At the same time, take into account all circuit breakers that supply dangerous voltage to the device or load.
These instructions are an integral part of the product, and must remain with the end customer.

## 2 Device components



Figure 1: Device components
(1) Control unit
(2) Basic brightness adjuster
(3) Memory adjuster
(4) 1-10 V interface

## 3 Function

Intended use

- Brightness setting for lamp operating devices with 1-10 V interface
- Installation in false ceilings or surface mounting


## Product characteristics

- $\quad$ The light bulb is switched on and off via the load cable and dimmed via the $1-10 \mathrm{~V}$ interface.
- Operation via installation button, NO contact
- Can be switched to memory function with brightness memory
- $\quad$ The 1-10 V interface is short-circuit proof for the control current.


## 4 Operation

## Switch light

- Press push-button briefly.

Memory function switched off: light is switched on with maximum brightness or light is switched off.

Memory function switched on: light is switched on with the last brightness set or light is switched off.

## Switch light on at minimum brightness

Memory function switched off.

- Long press on push-button until the light switches on.


## Adjust the brightness

Light is switched on.

- Long press on push-button.

Memory function switched off: the light becomes brighter up to maximum brightness, remains there briefly and becomes dimmer down to minimum brightness, remains there briefly and becomes brighter again. This process repeats for as long as the push-button remains pressed.
(i) The dimming direction is retained when there is another long press on the push-button. Memory function switched on: the light becomes brighter or dimmer as far as the first limit value, remains there briefly, and then changes the dimming direction. This process repeats for as long as the push-button remains pressed.
(i) The dimming direction is reversed when there is another long press on the push-button.
(i) A mains failure of longer than 2 seconds deletes the stored brightness value.

## 5 Information for electrically skilled persons

### 5.1 Fitting and electrical connection

## DANGER!

Electrical shock when live parts are touched.
Electrical shocks can be fatal.
Before carrying out work on the device or load, disengage all the corresponding circuit breakers. Cover up live parts in the working environment.

## Connecting and mounting the control unit.



Figure 2: Connection diagram, single-phase


Figure 3: Connection diagram, three-phase
(1) Control unit
(5) Lamp operating device with 1-10 V interface, electronic ballast
(6) Installation button, NO contact
(i) The load output is not protected internally. For device protection, connect a 10 A miniature circuit breaker upstream.
(i) Control cable: appropriate type, cross-section and routing for the VDE specifications for 250 V cables, control voltage has basic insulation. The control cable and load cable can be run in a shared cable, e.g. NYM J $5 \times 1.5$. Connect lamp operating device and electronic ballast with earth conductor in accordance with the manufacturer's instructions.
i The maximum number of lamp operating devices that can be controlled by the control unit is the sum of the control currents $I_{1}+I_{2}+I_{3}$ (Figure 2) and $I$ (Figure 3)(see chapter 6.1. Technical data). For the control current of the lamp operating devices, see the information provided by the manufacturer.
i Only use lamp operating devices and fluorescent lamps that are of the same type, the same power level, and from the same manufacturer. Otherwise there may be differences in brightness between the individual lamps.
i Illuminated installation buttons may only be connected if they have a separate N terminal.

## $\triangle$

## CAUTION!

Device defect when the 1-10 V interface is connected connected to the mains voltage.
The device will be destroyed.

- Connect control unit in accordance with connection diagram, single-phase (Figure 2) or according to connection diagram, three-phase (Figure 3).
- If multiple miniature circuit breakers supply dangerous voltages to the device or load, couple the miniature circuit breakers or label them with a warning, to ensure release is guaranteed.


### 5.2 Commissioning

## Adjusting basic brightness

- Switch on mains voltage.
- Switch on the lighting and set minimum brightness using push-button.
- Adjust the basic brightness (Figure 1) until a basic brightness that is still clearly visible is present.


## Switching on memory function

When the memory function is switched on, the light is switched on with the last brightness set.

- Turn Memory adjuster to On.


## Switching off memory function

When the memory function is switched off, the light is always switched on with maximum brightness.

- Turn Memory adjuster to Off


## 6 Appendix

### 6.1 Technical data

Rated voltage
Mains frequency
AC 230 V ~
Ambient temperature $\max .50^{\circ} \mathrm{C}$
Protection rating
1... 10 V interface

Control voltage
Control current
1 ... 10 V
Insulation 2 kV basic insulation
Contact type
Connected load at $25^{\circ} \mathrm{C}$
Ohmic load
2300 W
Lamp operating devices Type-dependent
Tronic transformer Type-dependent
Connection
Single stranded
max. $4 \mathrm{~mm}^{2}$
Finely stranded $\max .2 .5 \mathrm{~mm}^{2}$
finely stranded with conductor sleeve max. $1.5 \mathrm{~mm}^{2}$
Number of extension units
Non-illuminated installation buttons
unlimited
Total length power cable max. 100 m
Total length of control cable

### 6.2 Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade.
Please submit or send faulty devices postage paid together with an error description to your responsible salesperson (specialist trade/installation company/electrical specialist trade). They will forward the devices to the Gira Service Center.

## Gira <br> Giersiepen GmbH \& Co. KG

Elektro-Installations-
Systeme
Industriegebiet Mermbach
Dahlienstraße
42477 Radevormwald
Postfach 1220
42461 Radevormwald
Deutschland
Tel +49(0)21 95-602-0
Fax +49(0)21 95-602-399
www.gira.de
info@gira.de

