GIRA

Relay switching insert 2-gang
Order no.: 5404 00

Operating instructions

1 Safety instructions

Electrical devices may only be mounted and connected by electrically skilled persons.

Serious injuries, fire or property damage possible. Please read and follow manual fully.

Danger of electric shock. Always disconnect before carrying out work on the device or load.

These instructions are an integral part of the product, and must remain with the end customer.

2 Intended use

– Switching of lighting and motors
– Mounting in appliance box according to DIN 49073
– Operation with suitable cover

3 Product characteristics

In combination with 2-gang push-button top
– Two independent outputs
– Time function for output **a2** adjustable
– Connection of extensions possible

In combination with 1-gang push-button top
– Output **a2** switches depending on output **a1** e.g. to switch on ventilation, depending on the lighting, and switch it off with a delay.
– Switch-on delay of output **a2** adjustable
– Switch-off delay for output **a2** can be preset
– Connection of extensions possible

4 Operation with 2-gang push-button top

Switch load

– Left: operation of output **a1**.
– Right: operation of output **a2**.
■ Press push-button.
Output **a1**, **a2** switches on and off.

Extension unit operation

Operation via 3-wire extension with 2-gang push-button top: Press top to switch on, press bottom to switch off.

A 2-wire extension or push-button always switches both outputs.

Rotary dimmer extension only switches output **a1**.

Time function

If a time function is set for output **a2** (see Setting the time function/switch-off delay), it switches off after the set time has expired. The time function starts as soon as output **a2** is switched on. To terminate the time function prematurely, output **a2** must be switched off manually.

ⓘ The time function cannot be restarted by pressing again.

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5 Operation with 1-gang push-button top

Switch load

With the 1-gang push-button top, output **a2** switches depending on the switching state of output **a1**.

■ Press push-button.

Output **a1** switches on or off.

Output **a2** switches immediately or with a delay.

Extension unit operation

Operation using 2-wire extension, push-button or rotary dimmer extension corresponds to operation on the main device.

Operation via 3-wire extension with 1-gang push-button top: Press top to switch on, press bottom to switch off.

Switch-on delay for output a2

For output **a2**, a switch-on delay of 3 minutes is activated at the factory. It starts as soon as output **a1** is switched on. If output **a1** is switched off again before the switch-on delay has expired, output **a2** remains switched off.

Deactivate switch-on delay for output a2

Requirements: Both outputs are switched off.

■ Press the button cover over entire surface for longer than 4 seconds.
Output **a1** is switched on immediately. After 4 seconds, output **a2** is briefly switched on.

■ Release the push-button top.
The switch-on delay is deactivated. Both outputs are switched on simultaneously.

Activate switch-on delay of output a2

Requirements: Both outputs are switched off.

■ Press the button cover over entire surface for longer than 4 seconds.
Both outputs are switched on immediately. After 4 seconds, output **a2** is switched off.

■ Release the push-button top.
The switch-on delay is switched on.

Switch-off delay

For output **a2** a switch-off delay can be set (see Setting the time function/switch-off delay). It starts as soon as output **a1** is switched off.

If output **a1** is switched on before output **a2** is switched off, the switch-off delay of output **a2** is only restarted if:

– output **a1** is switched off when the switch-on delay for output **a2** is switched off.

– output **a1** is switched off after more than 3 minutes when the switch-on delay for output **a2** is switched on.

6 Operation with standard motion detector

The behavior described here requires the cover and insert to comply with release status V02 or higher.

The motion detector switches on output **a1** and switches it off again after the run-on time of 2 minutes set in the motion detector has expired.

During movement, the motion detector switches output **a2** on, independent of the brightness and after the switch-on delay has elapsed. After the switch-off delay for output **a2** has elapsed, the motion detector switches the output off again.

Switch-on delay

The switch-on delay for output **a2** is switched on or off at the insert. For this, a 1-gang push-button top is placed on the insert instead of the motion detector and is then replaced by the motion detector again after the switch-on delay has been set, see also operation with 1-gang push-button top.

Output **a2** is only switched on if movement is detected during the active switch-on delay or if output **a1** is switched on for more than 3 minutes.

Switch-off delay

The switch-off delay for output **a2** is set at the insert as described (see Setting the time function/ switch-off delay).

– The switch-off delay for output **a2** only starts when movement is no longer detected and output **a1** is switched off.
– If only output **a2** has switched on, the switch-off delay is 1 minute.
– If outputs **a1** and **a2** have switched on, the switch-off delay is the time set on the insert.

7 Operation with Bluetooth motion detector

During movement, the motion detector switches output **a1** depending on the brightness and output **a2** independently of the brightness and after the switch-on delay has expired. After the run-on time for output **a1** and the switch-off delay for output **a2** set in the motion detector have expired, the motion detector switches the outputs off again.

Run-on time

The run-on time for output **a1** is set in the motion detector via app. The run-on time starts when movement is no longer detected.

Switch-on delay

The switch-on delay for output **a2** is controlled by the insert and is 2 minutes in the default setting. Output **a2** is only switched on if movement is detected during the active switch-on delay. The switch-on delay can be set in the motion detector via an app.

Switch-off delay

The switch-off delay for output **a2** is controlled by the cover and is 5 minutes in the default setting. The switch-off delay for output **a2** starts when movement is no longer detected and output **a1** is switched off. The switch-off delay can be set in the motion detector via an app.

[i] If only output **a2** has switched on, the preset switch-off delay is extended by up to 1 minute, depending on the preset switch-on delay.

8 Operation with timer with display

In combination with a timer with display, the switch insert behaves as with a 1-gang push-button top. The timer switches output **a1** on or off manually or automatically. Output **a2** switches immediately or with a time delay, depending on output **a1**.

Deactivate switch-on delay for output a2

The switch-on delay for output **a2** is switched off at the insert (factory default: switched on).

Requirements: Both outputs are switched off.

■ Press ↑ and ↓ for longer than 4 seconds.
Output **a1** is switched on immediately. After 4 seconds, output **a2** is briefly switched on.

■ Release both buttons ↑ and ↓.
The switch-on delay is deactivated. Both outputs are switched on simultaneously.

Activate switch-on delay of output a2

The switch-on delay for output **a2** is switched on at the insert (factory default: switched on).

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Requirements: Both outputs are switched off.

- Press ↑ and ↓ for longer than 4 seconds.
  Both outputs are switched on immediately. After 4 seconds, output **a2** is switched off.
- Release both buttons ↑ and ↓.
  The switch-on delay is switched on.

Switch-off delay

The switch-off delay for output **a2** is set at the insert as described (see Setting the time function/ switch-off delay).

9 Operation with Bluetooth timer

In combination with a Bluetooth timer, the switch insert behaves as with a 1-gang push-button top. The Bluetooth timer switches output **a1** on and off manually or automatically. Output **a2** switches depending on output **a1**. The switch-on delay and switch-off delay for output **a2** are stored in the Bluetooth timer. The switch-on delay for output **a2** is 2 minutes in the default setting and the switch-off delay is 5 minutes.

Activate switch-on delay

- Switch on output **a1**.
- Press the left button of the Bluetooth timer over entire surface for longer than 4 seconds.
  Output **a1** switches off.

  After 4 seconds, output **a1** is switched on and **a2** is switched off.

Deactivate switch-on delay

- Switch on output **a1**.
- Press the left button of the Bluetooth timer over entire surface for longer than 4 seconds.
  Output **a1** switches off.

  After 4 seconds, output **a1** and **a2** are switched on.

10 Operation with radio switch top for eNet SMART HOME

Switch load

With the radio switch top for eNet SMART HOME, output **a2** switches depending on output **a1**. The switch-on delay and switch-off delay for output **a2** are stored in the radio switch top. Operation via extensions essentially corresponds to operation on the main device.

- Press the left button.
  Output **a1** switches on or off.

  Output **a2** either switches immediately or only after the set time delays have expired.

Activate switch-on delay

The switch-on delay for output **a2** is 2 minutes in the as-delivered state.

- Switch on output **a1**.
- Press the left button of the radio switch top over entire surface for longer than 4 seconds.
  Output **a1** switches off.

  After 4 seconds, output **a1** is switched on and **a2** is switched off.

Deactivate switch-on delay

- Switch on output **a1**.
- Press the left button of the radio switch top over entire surface for longer than 4 seconds.
  Output **a1** switches off.

After 4 seconds, output **a1** and **a2** are switched on.

Switch-off delay

The switch-off delay for output **a2** is 5 minutes in the as-delivered state.

If output **a1** is switched on before output **a2** is switched off, the switch-off delay of output **a2** is only restarted if:

– output **a1** is switched off when the switch-on delay for output **a2** is switched off.

– output **a1** is switched off after more than 2 minutes when the switch-on delay for output **a2** is switched on.

11 Information for electrically skilled persons

⚠️ **DANGER!**

Mortal danger of electric shock.

Disconnect the device. Cover up live parts.
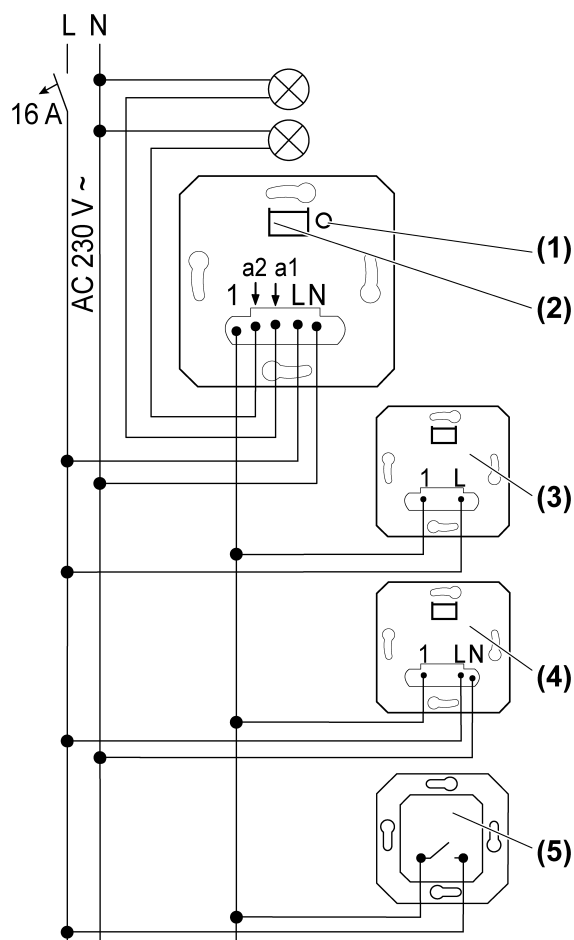
Connecting and fitting the device

Figure 1: Connection diagram with optional extensions

(1) Button **TEST**
(2) Display LED and connection socket for cover
(3) 2-wire extension
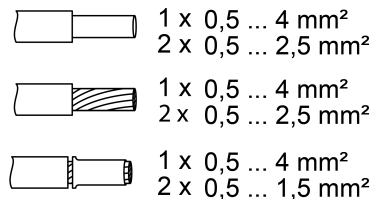(4) 3-wire extension/rotary dimmer extension
(5) Push-button, NO contact

Figure 2: Clampable conductor cross-section

ℹ️ For protection, only the circuit breakers specified in the technical data may be used.

ℹ️ Observe the current carrying capacity: In total, the switching current for both outputs must not exceed 16 A.

■ Connect the switch insert according to the connection diagram (Figure 1). Observe the clampable conductor cross-sections (Figure 2).

ℹ️ Lit push-buttons must have a separate N terminal.

ℹ️ The load at both outputs can be switched by briefly pressing the **TEST** button (1) (switching states: **a1** on **a2** off, **a1** off **a2** on, **a1** and **a2** on, **a1** and **a2** off).

Setting the time function/switch-off delay

■ Press the **TEST** button (1) for longer than 4 seconds.
LED (2) lights up in the colour of the set time, see table.

LED signalling

LED colour	Set time
green	Function off
white	1 minute
blue	5 minutes
yellow	30 minutes
red	60 minutes

■ Release the **TEST** button (1) briefly and press it repeatedly until the LED (2) lights up in the colour of the desired time.
The set time is automatically saved after 30 seconds or after pressing the **TEST** button (1) for approx. 4 seconds. When the LED goes out, the saving process was successful.

Overheating protection

The electronic overtemperature protection switches both channels off in the event of overtemperature. If the switch insert has sufficiently cooled down, it can be switched on again.

12 Technical data

Rated voltage	AC 230 V~
Mains frequency	50 / 60 Hz
Standby load depending on the cover	approx. 0.1 ... 0.5 W
Ambient temperature	-25 ... +45 °C
Storage/transport temperature	-20 ... +70 °C
Switching current per device	Σ 16 A
Switching current per channel for 25 °C	
Ohmic	10 A (AC1)
Minimum switching current AC	100 mA
Motors	3 A (cos φ 0.68)

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Connected load per channel for 25 °C

HV-LED lamps	typ. 400 W
Compact fl lamp.	typ. 500 W
Incandescent lamps	1500 W
HV halogen lamps	1500 W
Electronic transformers	1000 W
Inductive transformers	625 VA
Fluorescent lamps, uncompensated	750 VA
Capacitive load	580 VA (70 µF)

Power reduction

per 5 °C in excess of 25 °C	-5%
when installed in wooden or dry construction walls	-15%
when installed in multiple combinations	-20%

Number of extension units

2-wire, push-button	unlimited
3-wire, rotary dimmer extension	10

Only use these circuit breakers 16 A

Manufacturer	Type
ABB	S201-B16
ABL Sursum	B16S1
Hager	MBN116
Legrand	403357
Schneider Electric	A9F03116
Siemens	5SL61166

13 Accessories

Operating top unit 2-gang	Order no. 5362 ..
Operating top unit	Order no. 5360 .., 5361 ..

14 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.

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