

Automatic staircase lighting mechanism

Order no.: 0821 00

Impulse insert

Order no.: 5410 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. In so doing, take all the circuit breakers into account, which support dangerous voltages to the device and or load.

Danger of electric shock. Automatic RMD is not suitable for disconnection from supply voltage.

Do not connect automatic RMDs in parallel. Damage to devices may result.

Use pulse insert exclusively for activation of the automatic RMD.

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

2 Intended use**Intended use of automatic RMD**

- Manual or automatic switching of light in stairways
- Installation in distribution boxes on DIN rail according to EN 60715
- Switch on using pulse insert or push-button

i The automatic RMD can also be used with pulse inserts from the System 2000.

Intended use of pulse insert

- Manual or automatic switch-on of an automatic RMD
- Installation in appliance box according to DIN 49073
- Operation with suitable cover, see accessories

Automatic switching of light

The pulse insert is combined with a motion detector cover. As soon as the brightness drops below a value set on the motion detector cover and motions are detected, the pulse insert sends a switch-on signal cyclically to the automatic RMD. The latter switches on the light for the set run-on time. After the run-on time has elapsed, the automatic RMD switches the light off. After switch-off, pulse inserts with motion detector covers will not detect any motions for approx. 3 seconds.

3 Operation**Switching the light on manually**

- Press the button cover on the pulse insert or push-button. Light is switched on independently of the brightness for the run-on time. LED (2) on automatic RMD lights up.

i The run-on time is restarted if actuation is repeated.

i In conjunction with motion detectors and buttons, long operation on the button can lead to the motion detectors being restarted. During this time, the motion detector cannot be operated via app.

Setting the automatic RMD

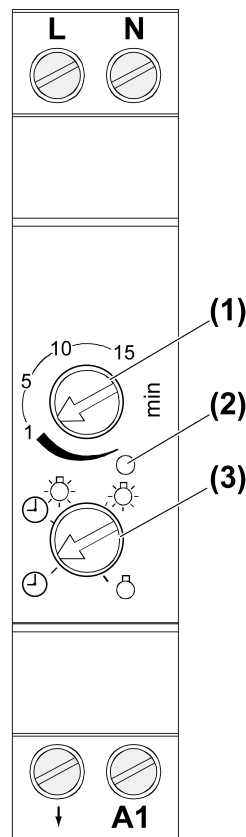


Figure 1: Automatic RMD

- ⌚ Automatic function without switch-off warning. The lighting is switched off after the run-on time elapses.
- ⌚🔆 Automatic function with switch-off warning. After the run-on time elapses, the lighting is not switched off immediately, but rather only after flashing three times at intervals of 10 seconds.
- 🔆 Light is switched on continuously.
- 🔆 Light is switched off continuously.
- Set run-on time. Turn adjuster (1) (Figure 1).
- Presetting the operating mode. Turn adjuster (3) (Figure 1).
- 📘 With the automatic function with switch-off warning, the service life of the relay contact may be reduced when fluorescent lamps or energy-saving lamps are used. The set run-on time is prolonged by approx. 30 seconds.

4 Information for electrically skilled persons



DANGER!

Mortal danger of electric shock.

Disconnect the device. Cover up live parts.

4.1 Fitting and electrical connection

The automatic RMD can be used for a 3-conductor circuit (Figure 2) or a 4-conductor circuit (Figure 3). The 4-conductor circuit has the advantage that an additional luminaire can be switched separately.

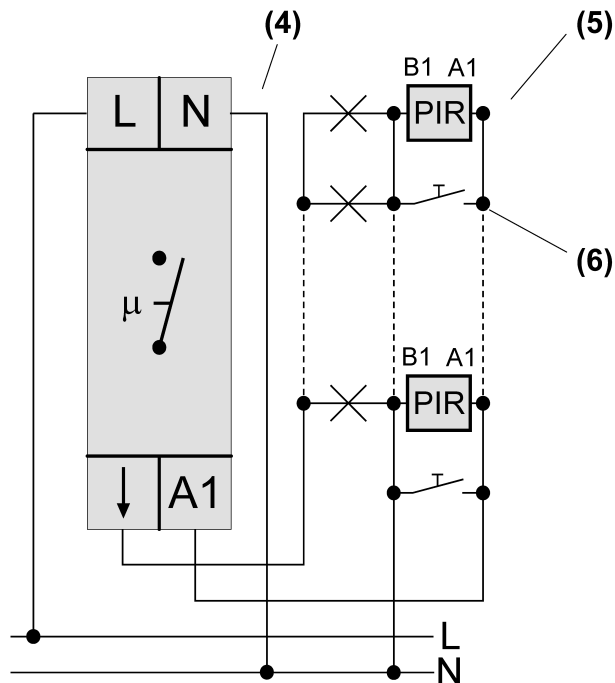


Figure 2: Connection diagram for 3-conductor circuit

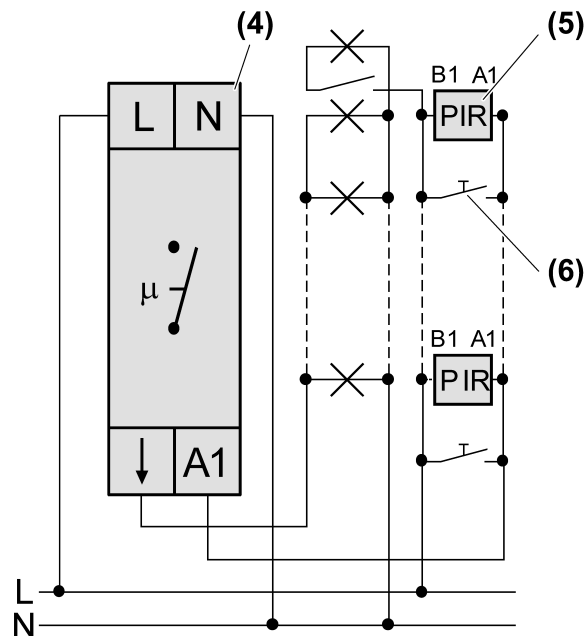


Figure 3: Connection diagram for 4-conductor circuit

- (4) Automatic RMD
- (5) Pulse insert with motion detector cover or button cover
- (6) Push-button, NO contact

**CAUTION!**

Overvoltage when connected two external conductors.

Destruction of the automatic RMD.

Connect to only a single phase.

Do not operate multiple automatic RMDs next to each other.

Avoid having heat sources, e.g. RMD dimmers, in the immediate vicinity of the automatic RMD.

Ensure sufficient heat dissipation.

i On control input A1 of the automatic RMD the aggregate current load must not exceed 40 mA. To determine the current load, add together the current consumption of all connected pulse inserts and lighting elements of the push-buttons.

If only pulse inserts are used, a maximum of 14 pulse inserts can be connected.

Example with pulse inserts and push-buttons: 6 x pulse insert: $6 \times 2.8 \text{ mA} = 16.8 \text{ mA}$ current available for lighting elements: $40 \text{ mA} - 16.8 \text{ mA} = 23.2 \text{ mA}$ number of lighting elements for 0.9 mA per element: $23.2 \text{ mA} / 0.9 \text{ mA} = 25.7$ This allows 25 illuminated push-buttons to be connected. The number of push-buttons is not limited.

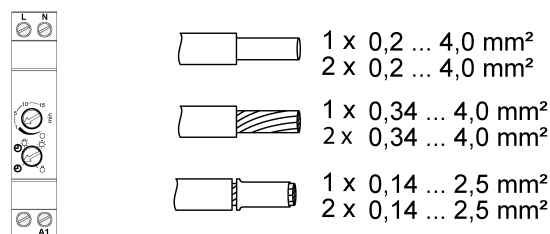


Figure 4: Clampable conductor cross-section automatic RMD

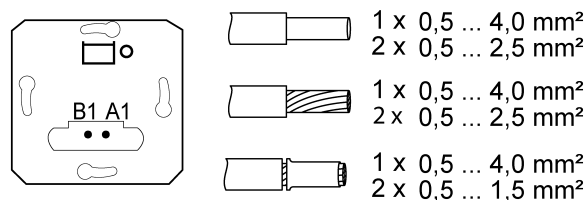


Figure 5: Clampable conductor cross-section pulse insert

- Note clampable conductor cross-sections automatic RMD (Figure 4) and pulse insert (Figure 5).
- Mount automatic RMD (4) on DIN rail.
- Connect automatic RMD (4), pulse insert (5) and push-button (6) according to connection diagram (Figure 2) or (Figure 3).
- Fit pulse insert or push-button in an appliance box, pulse insert terminals must be at the bottom.
- Install the cover frame and the cover.
- If multiple circuit breakers supply dangerous voltages to the device or load, couple the miniature circuit breakers or label them with a warning, to ensure disconnection is guaranteed.
- Set run-on time and operating mode on automatic RMD, see "Operation".
- Adjust the brightness threshold and sensitivity on the motion detector cover, see instructions for the respective cover.

i When in combination with a pulse insert, not all functions on the on the motion detector can be used.

5 Technical data

Automatic staircase lighting mechanism, order no. 0821 00

Rated voltage	AC 230 V~
Mains frequency	50 Hz
Power consumption	approx. 1 W
Ambient temperature	+5 ... +45 °C
Run-on time	approx. 10 s ... 15 min
Tolerance	± 20 %
Control input A1	
Current carrying capacity	40 mA
Switching voltage	AC 250 V~
Switching current ohmic	16A
Switch-on current 20 ms	max. 165 A
Minimum switching current AC	100 mA
Connected load	
Incandescent lamps	2300 W
HV halogen lamps	2300 W
HV-LED lamps	typ. 400 W
Fluorescent lamps, uncompensated	1200 VA
Fluorescent lamps, parallel compensated	920 VA
Fluorescent lamps, duo circuit	2300 VA (140µF)
Electronic transformers	1500 W
Inductive transformers	1000 VA
Electronic ballast	Type-dependent
Fitting width	18 mm / 1 module
Total line length	
pwr cable	max. 100 m
Control cable	max. 100 m

Impulse insert, order no. 5410 00

Rated voltage	AC 230 V~
Mains frequency	50 Hz
Power consumption depending on the cover	0.25 ... 0.45 W
Current consumption	approx. 2.8 mA
Ambient temperature	-5 ... +45 °C
pulse duration	approx. 60 ms
pulse stop	approx. 8 s

6 Troubleshooting

Light switches on but not off

Cause 1: The overload protection of the control input has tripped on the automatic RMD, because too many pulse inserts or push-buttons are connected.

Reduce number of connected devices.

Cause 2: The overload protection of the control input has tripped on the automatic RMD, because the automatic RMD has been installed too close to an external heat source, e.g. a dimmer.

Check installation situation, ensure better cooling.

Light does not switch off.

Cause: Constant motion in detection area of motion detector cover.

Check installation situation of motion detector cover.

Reduce sensitivity on the motion detector cover (see instructions for the cover).

Replacing defective devices in systems with System 2000 devices

Automatic RMD is defective.

The automatic RMD can be replaced one to one.

System 2000 pulse insert or cover is defective.

Replacement of the defective device by a corresponding System 2000 device.

Replacement by System 3000 devices. The insert and cover must be replaced as System 2000 and System 3000 inserts and covers cannot be combined together.

The current consumption of the S3000 pulse insert is 0.3 mA higher than that of the System 2000 pulse insert. In systems with many pulse inserts and/or illuminated buttons, this can lead to an overload of the control input of the automatic RMD. Therefore, for safety reasons, recalculate the current consumption of all pulse inserts and lighting elements.

7 Accessories

Operating top unit	Order no. 5360 ..
Presence and motion detector 360° top unit BT	Order no. 5377 02
Motion detector top unit 1.10 m Standard	Order no. 5373 ..
Motion detector top unit 2.20 m Standard	Order no. 5375 ..
Motion detector top unit 1.10 m Komfort BT	Order no. 5374 ..
Motion detector top unit 2.20 m Komfort BT	Order no. 5376 ..

8 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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