

## Voltage-overload protection module with acoustic signal

Order-No.: 0339 00

## **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. Insulate unused wires.

To protect against high-energy surges, install multistage selective protection. Otherwise connected devices may be damaged.

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

## 2 Device components

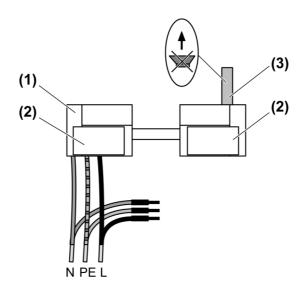


Figure 1: Device components

- (1) Surge protection module
- (2) Adhesive surfaces
- (3) Pull tab
- L black, BK
- N blue, BU
- PE green/yellow, GN/YE

### 3 Function

#### Intended use

- Surge protection module for retrofitting of Schuko socket outlets with screwless plug-in terminals
- Type 3 fine protection for protecting electrical and electronic devices against transient power surges according to EN 61547
- For use only in combination with Type 1 coarse protection and Type 2 medium protection
- For use only in TN and TT systems
- Installation in appliance box to DIN 49073

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#### **Product characteristics**

- The device protects electrical and electronic devices against transient power surges.
- Failure of the protection function is indicated by an acoustic signal.

#### Instructions for operation

- Keep cables between loads and the surge-protected socket outlet (4) as short as possible, max. 4 m.
- Do not lay protected cables parallel to unprotected cables. Otherwise there is a danger of surge voltage coupling.
- When performing insulation measurements on the system, all surge protection products should always be disconnected, because otherwise the test voltage will be limited by the protective modules, thus leading to incorrect measurements.

## 4 Information for electrically skilled persons

# 4.1 Mounting 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.

#### Mounting the surge protection module

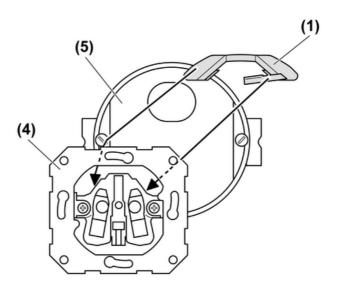


Figure 2: mounting

- (1) Surge protection module
- (4) Socket outlet
- (5) Appliance box
- Pull film off of the adhesive pads (Figure 1) of the module.
- Stick surge protection module to the socket outlet insert as shown. The connecting cables should point to the rear. The pull tab must be easily accessible.

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#### Connecting the surge protection module

Do not exceed the maximum continuous voltage (see chapter 5.1. Technical data). In multiple combinations, when a socket with a surge protection module is used the other socket outlets used in the combination are also protected. For this the socket outlets have to be installed on the same conductor. For ring-shaped wiring with several socket outlets, install an additional module in a socket outlet about every 5 m.

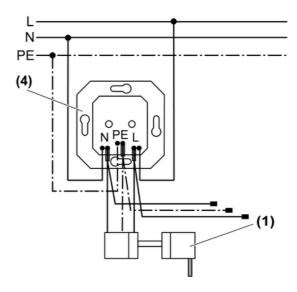


Figure 3: Connection diagram for single socket outlet (terminal box)

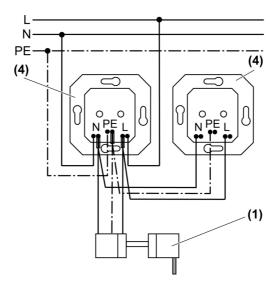


Figure 4: Connection diagram for socket outlet combination

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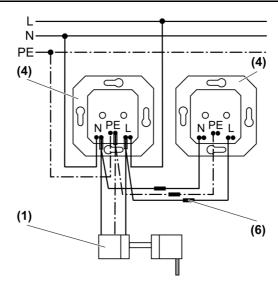


Figure 5: Connection diagram for through-contacted individual socket outlets

- (1) Surge protection module
- (4) Socket outlet
- (6) Connector
- Connect cable ends according to connection diagram. Connect the short terminals directly to the socket outlet insert. For through-wiring to the next socket outlet, remove the insulating sleeves from the long cable ends. If no through-wiring is being done, check if the insulating sleeves on the long cable ends are intact. Otherwise insulate the bare long ends of the cables adequately.
- Place socket outlet insert in the appliance box and fasten with screws.
- Mount the frame and cover.
- Switch on mains voltage.

The socket outlet and surge protection are now in operation.

#### Switching off the acoustic signal

The acoustic signal sounds if the surge protection has failed.



#### 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.

- Remove cover and frame.
- Pull pull tab on surge protection module out all the way.
- Mount the frame and cover.
- Switch on mains voltage.

The socket outlet is in operation again, the surge protection and the signal tone are deactivated.

# 5 Appendix

#### 5.1 Technical data

Surge protection
Rated voltage
Mains frequency
Maximum continuous voltage

Type 3 arrester (one port) AC 230 V ~ 50 / 60 Hz



L/N	AC 335 V ( $U_{\rm C}$ )
N/PE	AC 260 V ( $U_{\rm C}$ )
Nominal load current, 30°C	16 A ( $I_{\rm L}$ )
Discharge surge current (8/20)µs	max. 4.5 kA (1x)
Combined surge	4 kV ( $U_{\rm OC}$ )
Protection level L/N L/PE;N/PE	≤1.3 kV (U <sub>P</sub> ) ≤ 1.5 kV (U <sub>P</sub> )
TOV characteristic	400 V/5s (U <sub>⊤</sub> )
Circuit breaker	max. 16 A (gL/B)
Ambient temperature	-25 +75 °C

This device can protect connected loads only up to the protection level specified in the technical data. Surge voltages that are higher than that may still damage the connected devices. The same applies for devices that require a lower protection level. For this reason we accept no liability for any damage to the connected loads.

# 5.2 Troubleshooting

#### Acoustical signal sounds.

Surge protection has failed due to high surge voltage. The socket outlet continues to supply connected loads with mains voltage, but with no protection function.

Switch off acoustic signal (see chapter 4.1. Mounting and electrical connection). To obtain surge protection again, exchange surge protection module.

### RCD protection switches trip.

The discharge of high surge voltages to earth by the surge protection can cause RCD protection switches to trip.

Use RCD protection switches with a high peak withstand current.

# 5.3 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

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