

Relay module for modular smoke detector/VdS
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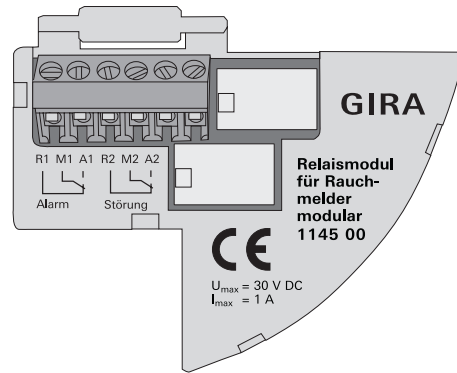
Functional description

The relay module expands the functional scope of the modular smoke detector/VdS. It is inserted into the connector of the smoke detector and enables the connection of external alarm signalers, such as a horn or warning light.

In addition, alarm and fault signals can be switched to a TeleCoplex or an alarm control unit or be forwarded to the EIB via a push button interface.

The relay module has two relays, which are operated for the following conditions:

- a fault in the smoke detector, e.g. if the battery is weak, the fault relay switches
- a local or networked smoke alarm the alarm relay switches



Do not insert the relay module while the battery is connected

The relay module may not be inserted into the smoke detector while the battery is connected.

Alarm relay function

Smoke alarms are forwarded to the connected device via the alarm relay.

Alarm signalling via the alarm relay occurs at the same time as the alarm signal of the smoke detector.

Behaviour with networked smoke detectors

With networked smoke detectors, alarm signalling of all connected smoke detectors is forwarded via the alarm relay.

Terminal names

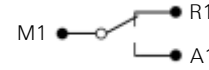
The zero-voltage terminals of the alarm relay are named as follows:

R1: Rest contact of the alarm relay

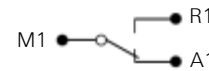
M1: Middle contact of the alarm relay

A1: Active contact of the alarm relay

Switching status normal operation:



Switching status smoke alarm:



Fault relay function (Störung)

The **sensing chamber** and **weak battery** faults are forwarded to the connected device via the fault relay.

Alarm signalling via the fault relay occurs at the same time as the fault signal of the smoke detector (fault relay switches to A2 for 1 sec. every 45 sec.).

Behaviour with networked smoke detectors

With networked smoke detectors, only the local fault of the smoke detector equipped with a relay module is evaluated and indicated via the fault relay. If all smoke detectors are to be monitored for faults, a corresponding number of relay modules must be used.

Terminal names

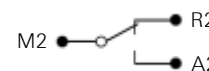
The zero-potential terminals of the fault relay are named as follows:

R2: Rest contact of the fault relay

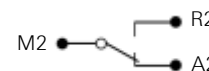
M2: Middle contact of the fault relay

A2: Active contact of the fault relay

Switching status fault-free operation:



Switching status: fault (for 1 sec. every 45 sec.):



Installation

Do not insert while the battery is connected

The relay module may not be inserted while the battery is connected.

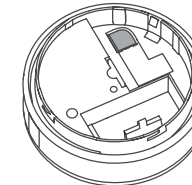
Please install the relay module as follows:

1. Remove the modular smoke detector/VdS from the base by lightly rotating it anticlockwise and remove the battery.
2. Strip the connection line of the device to be connected. Ensure sufficient length of the connection line (approx. 10 cm) so that the relay module may be installed and removed easily.
3. Lay the connection lines on the terminal block of the relay module.

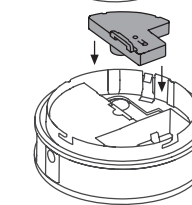
Connection of inductive signal transmitters

When an inductive signal transmitter is connected, a recovery diode must be integrated into the circuit.

4. Remove the tab (shaded grey in the figure) by levering it out with a suitable tool (e.g. a screwdriver).



5. Insert the relay module into the connector until it engages.



6. Connect the battery and insert it into the smoke detector.
7. Perform an operational test.
8. Place the smoke detector into the base and lock it by lightly turning it clockwise.

Operational test

Check the operation of the smoke detector with relay module after a new installation and after each battery change.

- Test alarm relay: Trigger an alarm at the smoke detector by pressing the test button. Proper functioning is indicated by the switching of the alarm relay to contact A1.
- Test fault relay: When the power supply is connected to the smoke detector, the fault relay switches to A2 for 1 sec.

Hardware reset

It may be necessary to reset the relay module if problems or malfunctions occur. For this purpose, disconnect the battery of the smoke detector and short-circuit the battery terminals of the smoke detector (e.g. with a screwdriver).

Technical data

Alarm relay contact:	zero-voltage 2-way switch
Switching voltage:	max. 30 V
Switching current:	max. 1 A
Additional current consumption in case of alarm:	max. 40 mA
Fault relay contact:	zero-voltage 2-way switch
Switching voltage:	max. 30 V
Switching current:	max. 1 A
Additional current consumption in case of alarm:	max. 2 mA
Connection diameter:	0.3 to 1.4 mm

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.

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