

Smoke Detector

Art. Nr.: 0583 00

Art. Nr.: 0863 00

Smoke Detectors save lives

All night, when you and your family are asleep, fires are at their most dangerous. Toxic smoke, given off when substances such as plastics burn, does not wake you up; it makes sleepers unconscious. Smoke detectors therefore save lives.

The smoke detector is a quality product designed for private households. It detects the smoke generated by smouldering fires and gives an alarm. A loud pulsating tone (approx. 85 dBA) wakes you up and can therefore save your life and the lives of your family.

Product Features

- Photoelectric principle: reliable, robust, highly sensitive reaction to smoke
- Battery operation: not dependent on mains power
- Red LED flashes briefly about every 40...50 seconds; the detector has performed a self-test and is in good working order.
- Battery low-power monitor: the smoke detector indicates that the battery voltage is growing weaker by emitting short beeps at intervals of 40...50 seconds.
- Loud pulsating warning tone if smoke detected: highly effective (approx. 85 dBA)
- System operation (only when type Relay/Networking): up to 40 smoke detectors can be linked together; if one of them detects a fire, the alarm is given by all detectors in the circuit.
- Reverse polarity protection: the detector is not damaged if the battery is installed with the wrong polarity.

Choice of location

The smoke detector must be fixed to the ceiling as near to the centre of the room as possible. One detector can monitor a room with a maximum floor area of 60 m² and ceiling heights of up to 6 m. In hallways and narrow corridors (up to 3 m wide) the detector monitors distances up to 7,5 m in each direction. A gap of at least 0,5 m must be maintained from walls and fixtures.

You should therefore install (see Fig. 1):

- as an absolute necessity one smoke detector in the hallway (to monitor the escape route) between living and sleeping areas
- for optimum protection one detector in every living room and every bedroom
- in multistorey buildings at least one detector on each landing
- in converted lofts one detector above the staircase

Installation on the ceilings of boat cabins or caravans is also possible.

When travelling, simply take smoke detector with you into your hotel room.

Unsuitable Locations

Never install the smoke detector

- near to air ducting and strong drafts
- directly in the apex of pitched roofs (a minimum distance of 30 cm from the apex must be maintained)
- in rooms where there is a lot of steam, dust or smoke under normal conditions (e.g. workshops, kitchens, bathrooms, laundry rooms, etc.)
- in rooms where the temperature rises above + 40°C or falls below + 5°C.

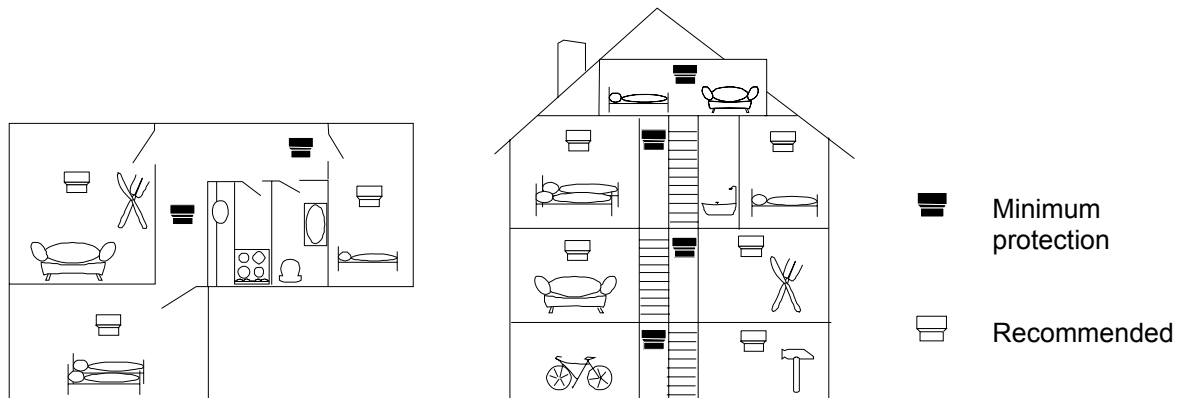


Fig. 1: Locations for installing smoke detectors

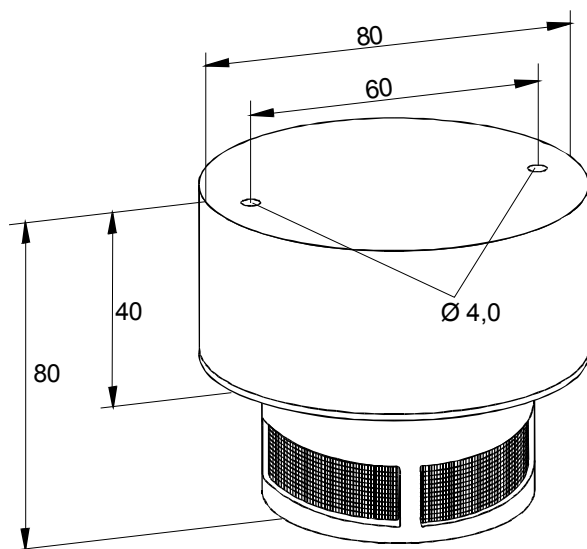


Fig. 2: Dimensions

Installation and Commissioning

- Remove the smoke detector from its base by turning it anticlockwise.
- Screw the base to the ceiling using the fixing materials provided (see Fig. 2 for dimensions).
- Attach the 9 V rectangular battery to the connector.
- Insert the smoke detector into the base and turn it gently clockwise until it clicks into place.

Linking Several Smoke Detectors

With the type Relay/Networking smoke detector up to 40 devices can be linked together in one network. To do this, first remove the plastic protection from the terminal strips. The connection from detector to detector is by means of a two-core cable (telephone cable), the terminals 3 and 4 (green) being used as shown in Fig. 3. An external alarm device can be connected to the volt-free contacts via terminals 1 and 2 (orange).

If an inductive load (e.g. a klexon or a relay of an unknown design) is connected, a free-wheeling diode (type 1N4007) must be included in the circuit, so that the smoke detector is not damaged by inductive voltages.

Attention !

Not compatible with earlier versions when connecting to network (without green, orange terminals).

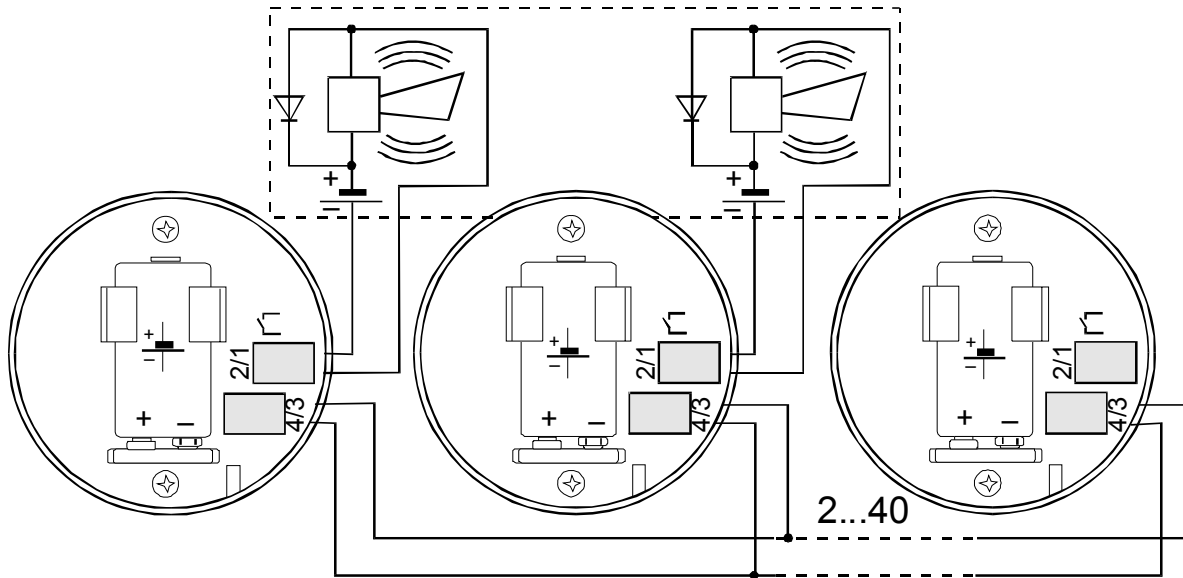


Fig. 3: Networking up to 40 smoke detectors (type Relay / Networking only)

Test

The smoke detector has an integral self-test routine: this is carried out every 40...50 seconds and is indicated by the red LED flashing briefly.

Manual test:

Spray the smoke detector with an aerosol tester type 918/5 from a distance of about 20 cm. About 10 seconds later spray it again. Within the next 8...16 seconds the alarm must be sounded and the red LED must light up. This test can also be performed using cigarette smoke.

Warning! Do not use the aerosol tester and cigarette smoke at the same time, as the aerosol propellant is highly flammable and could be ignited by the cigarette. The smoke detector must not be tested with a naked flame!

The alarm resets itself automatically when there is no more aerosol left in the detector. If an alarm is not given, the battery must be checked and, if necessary, replaced. The test procedure must then be repeated.

Operating and Warning Signals

Signal	Detector status
Loud alarm tone at intervals Red LED flashes	Local smoke alarm
Loud alarm tone at intervals Red LED does not flash	External smoke alarm; the detector is repeating an alarm from another smoke detector (only with networked by type Relay/Networking detectors)
Brief uniform beep tone at intervals of 40...50 seconds, with the red LED flashing simultaneously	Battery low-power indicator The battery must be replaced
Brief uniform beep tone at intervals of 40...50 seconds, with the red LED flashing out of phase	Smoke detector system fault (clean detector or replace it)
Red LED flashes briefly at intervals of 40...50 seconds	The integral self-test is being carried out Normal operating condition

Maintenance and Care

To ensure proper functioning of the smoke detector, routine maintenance should be carried out at intervals of about 6 months. Proceed as follows:

- Remove the smoke detector from its base and clear away the dust (do not use compressed air).
- Wipe the smoke detector with a damp cloth.
- Reinsert the smoke detector in its base and turn it clockwise until it clicks into place.
- Change the battery if the low-power signal is given (see operating and warning signals).
- Only use 9 V rectangular batteries type ICE6 LR61. **Caution! Do not use rechargeable batteries.**
- Verify that the integral self-test is carried out (see operating and warning signals).
- Replace smoke detectors after about 10 years of service.

Technical data

Type	: optical smoke detector
Enclosure	: polymer
Operating voltage	: 9 V
Battery type	: Rectangular battery Type ICE6 LR61, 9 V
Quiescent current	: < 8 μ A
Signals	: See operating and warning signals
Type Relay/Networking detector only	: NO contacts
Alarm output to external signal devices/ central alarm system	max. current, volt-free: 30 V, 1 A
Ambient temperature for service	: + 5 to + 40 °C
Dimensions	: see Fig. 2
Weight (without battery)	: 114 g
Storage temperature (without battery)	: - 5 to + 60 °C

Safety instructions

- The smoke detector must not be painted.
- The loud alarm signal can damage hearing.
- A warning light or a vibrating pillow must be installed for people with hearing defects. These can be activated from the relay in the type Relay/Networking detector.
- In the Type Relay/Networking detector the "network" terminal (green) must not be confused with the "relay" terminal (orange).
- Smoke detectors do not extinguish fires. If an alarm occurs, the source of the fire must be located and, if necessary, the fire brigade alerted.
- The smoke detector only works when the battery is in good working order and correctly installed; the detector must not be operated with rechargeable batteries.
- The smoke detector responds to the smoke from a fire, not to the flame itself.
- The smoke detector only monitors a defined area and will not necessarily detect a fire in another room or on another floor. Therefore install a sufficient number of smoke detectors in order to ensure optimum protection.
- The smoke detector should be audible in the entire living area. If necessary, install additional sounders, e.g. a klaxon.
- It is possible that people under the influence of alcohol or drugs may not be woken up by the alarm signal.

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:

Gira
Giersiepen GmbH & Co. KG
Service Center
Dahlienstrasse 12
D-42477 Radevormwald



The CE sign is a free trade sign addressed exclusively to the authorities and does not include any warranty of any properties.

Gira
Giersiepen GmbH & Co. KG
Postfach 1220
D-42461 Radevormwald

Telefon: +49 / 21 95 / 602 - 0
Telefax: +49 / 21 95 / 602 - 339
Internet: www.gira.de