SIEMENS

SMOKE ALARM   **5TC1292-8**
WITH AUTOMATIC SELF TEST

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Package content

- Smoke alarm
- Mounting plate
- Mounting material
  (2 screws and 2 plugs)
- Instruction manual

Product description

a. Siren
b. Test/silence button
c. Light signal (LED)
d. On/off switch

Product description and intended use

This is a smoke alarm (delivered with fixed installed battery) with an optical sensor for installation in residential buildings, apartments and rooms with residential like use. Smoke alarms are designed to provide an early warning of fire smoke and fires to persons present, so that these persons can react appropriately to the hazardous event.
Caution: Always observe local regulations for smoke alarms.

Activate and test

Before using the smoke alarm, it is important to activate and test the product for proper function. Place the smoke alarm on the mounting plate (checklines in position e) and turn it clockwise until you feel a click (to position f)! Wait around 8 seconds to hear a first beep. Then perform a functional test.

Functional test

Test the device by pressing and holding the test/silence button for approx. 3 seconds. If the unit is working properly, it will beep 3 times and flash red 3 times. This is enough for a reliable test.
**Caution:** If this is not the case, do not use the smoke alarm! Contact the supplier.
NOTE: The test signal volume is lower than the alarm signal volume. If you want to hear the volume of the alarm signal, keep on pressing the button without release, you will hear three sequences of 3 low beeps (<85dB) + pause, and from the fourth sequence you will hear sequences of 3 high beeps (>85dB)+ pause.
(First 3 rounds are low, start from 4th round become high >85dB).

Where to install a smoke alarm

Smoke alarms must be installed in such a way that they can be reached unhindered by the fire smoke so that fires can be reliably detected during the development phase. The number and arrangement depend on the room geometry (room arrangement, floor area, height, ceiling shapes, etc.) and the ambient conditions. The local legal regulations must be observed. Larger rooms (> 40 m²) or special room geometries and environmental conditions require the use of several smoke alarms per room.
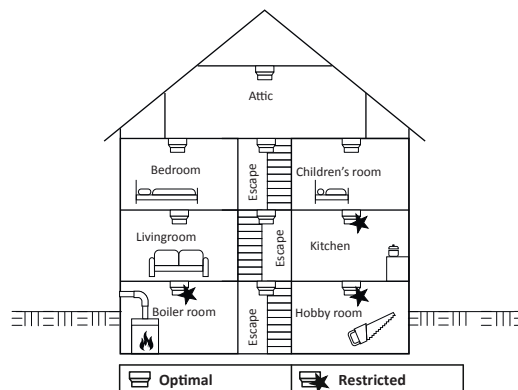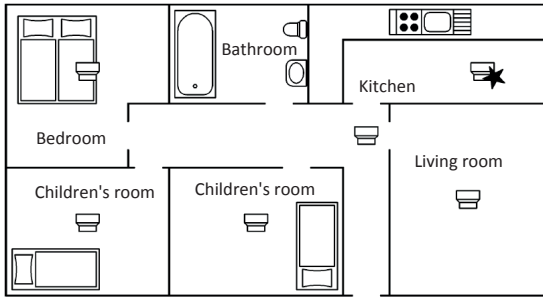

Identification

SIEMENS

Siemens AG
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D93055 Regensburg (Germany)
www.siemens.com

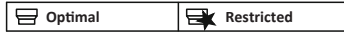CE 22   5TC1292-8
1116   Smoke Alarm
EN 14604:2005 + AC:2008
DoP: 70789A-WA-DoP
https://support.industry.siemens.com

VdS
G222070

Example of application in a home

⊟ Optimal	⊟ Restricted

Minimum requirements:

• in sleeping areas (e.g. sleeping room and
children's rooms)
• in escape routes
• in lounges (where legally required)

Mounting instructions:

• Usually and if possible in the middle of the ceiling of a room.
• At least 50 cm away from the wall, beams and other objects.
• Maximum installation height of 6 meters.
• The penetration of fire smoke into the smoke alarm
must not be hindered.

Caution: Do not install smoke alarms in areas where humidity is high or where false alarms may occur due to, for example, cooking fumes, increased dust generation or exhaust fumes.

Where to install a smoke alarm in rooms with special geometries

• In small rooms and corridors with a width of < 1.0 m, the smoke alarm must be installed centrally on the ceiling between the walls.

• In corridors with a maximum width of 3 m: Max. 15 m between 2 smoke alarms. Max. 7,5 m to the front side of the corridor and smoke alarms at each edges/crossings of corridors.
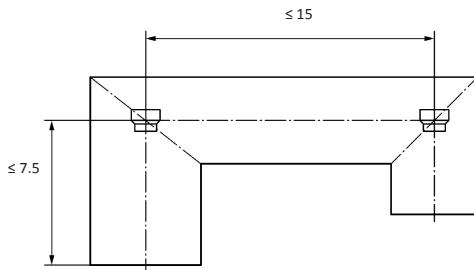
• Rooms with sloping ceilings:
- If the ceiling inclination is >20° to the horizontal: Smoke alarms must be installed at least 0.5 m and at most 1 m from the ceiling top.
- Partial roof slopes: If the flat ceiling is ≤ 1 m wide, consider as ceiling inclination is of >20°. If the flat ceiling is >1 m wide, consider as flat ceiling.
- Ceilings with an angle of inclination ≤ 20° should be treated as horizontal ceilings
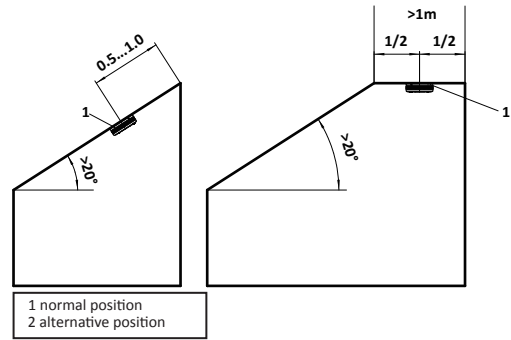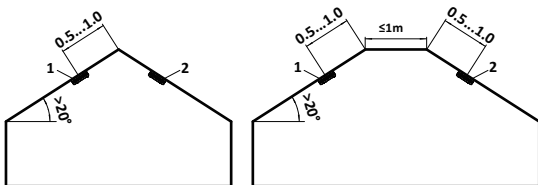

| 1 normal position |
| 2 alternative position |

• Rooms with subdivided ceilings:

- Height of the subdivisions is ≤ 0.2 m: Beams without consideration smoke alarm may be installed on the beams as well as on the ceiling.
- Height of subdivisions is > 0.2 m and area of ceiling panels > 36 m²: a smoke alarm device should be installed in this ceiling panel and additionally a smoke alarm device in the room, preferably in the middle of the other ceiling panel.
- Height of subdivisions > 0.2 m and all area of ceiling panels ≤ 36 m²: Individual ceiling panels are without consideration. A smoke alarm must be installed in a ceiling panel or on the beam, preferably in the middle of the room.

At least 50 cm from the wall, a beam or other objects.

Wall mounting

If, in exceptional cases, ceiling mounting is not possible, attach it to the wall. Preferably be mounted on the longer wall of the room 0.3 m to 0.5 m below the ceiling if possible in the middle third of the wall. The wall surface above the smoke alarm and about 1.0 m below should be free of furnishings in a minimum width of ±0.5 m around the smoke alarm.
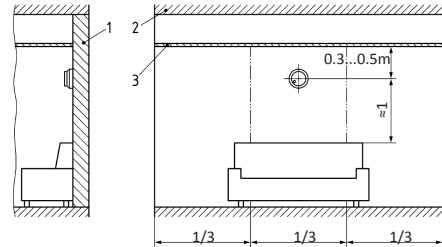
Legend
1 Wall
2 Ceiling
3 False ceiling,e.g.,textile fabric without fastening
   possibilities for smoke alarm devices

Where not to install a smoke alarm

• In an environment with a high risk of draught (e.g. close to air conditioning, fans and ventilation outlets). The movement of air can impair the penetration of fire smoke into the smoke alarm.
• In ventilated or air-conditioned rooms, air currents may cause a delayed response of the smoke alarm, as air movement can impair the penetration of fire smoke into the smoke alarm. In forced-ventilated rooms, perforated ceilings used for ventilation must be closed within a radius of 0,5 m around the smoke alarm.
• Areas where combustions regularly occurs, such as kitchens or in places with increased steam, exhaust fumes or dust generation.
• Areas with high humidity such as bathrooms, or close to devices such as dish washers or washing machines.

In the above areas, the function of the smoke alarm may be impaired.

False alarms can have the following causes:

- Welding and cutting work
- Soldering and other hot work
- Sawing and grinding work
- Dust from renovation work or cleaning work
- Steam, cooking fumes
- Rooms with open fireplaces
- Extreme electromagnetic influences
- Temperature fluctuations that lead to condensation of the humidity in the smoke alarm
- Due to whirled up dust particles or temperature fluctuations near the window
- Insects

Install the device

1. Use the mounting plate as a guide where the holes should be drilled.
2. Drill 2 holes with a diameter of 5 millimeters.
3. Push the plastic plugs into the holes.
4. Place the mounting plate on the wall or ceiling and fasten it with the screws.
5. Hold the smoke alarm against the mounting plate and turn it clockwise for installation. The smoke alarm will switch on automatically. Wait around 8 seconds to hear a first beep. (see paragraph "Activate and test").
6. Perform a functional test (see paragraph "Functional test")
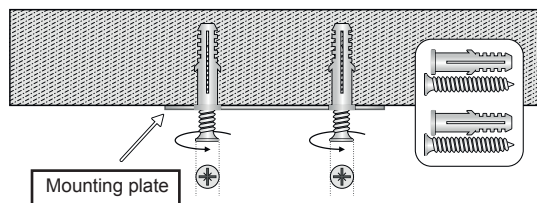
Mounting plate

Drawing for correct wall mounting position

Use a spirit level

When your smoke alarm is mounted on a wall, you need to use a spirit level to check that the smoke alarm is properly mounted. The properly mounted alarm is perpendicular to the ground, maximizing the transmission of the beep.
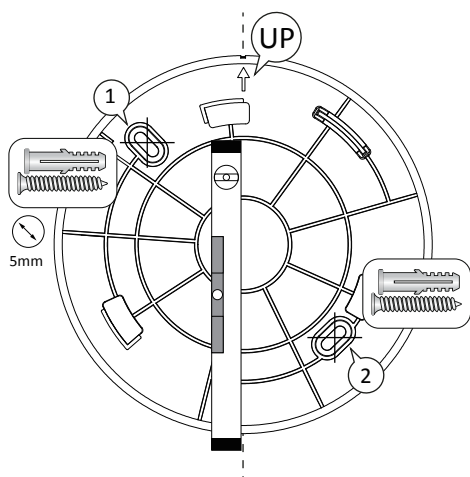
Disassembling of the smoke alarm

Turn the mounted smoke alarm counterclockwise until it unlocks and then remove it from the mounting plate. Then the smoke alarm is deactivated and will not work.

Functionality

Mode	Light signal	Audible signal	Explanation
Standby	1 x per 40 sec.	No sound	Device functions correctly
Self test	1 x per month	1 x per month	Device functions correctly.
Manual test	3 x	3 x	Device functions correctly.
Alarm	3 x quickly, followed by a short pause	3 x quickly, followed by a short pause	Device detected smoke.
Alarm silence	1 x per 40 sec.	No sound	Alarm signal is silenced.
Low battery warning	1 x per 40 sec.	1 x per 40 sec.	Battery is low, replace device a.s.a.p.!
Low battery warning silence	1 x per 40 sec.	No sound	Low battery warning is silenced for approximately 10 hours, replace device a.s.a.p.!
Error (siren) (Fault warning)	1 x per 8 sec.	No sound	Sensor error detected, replace the smoke alarm!
Error (sensor) (Fault warning)	2 x per 8 sec.	2 x per 8 sec.	Sensor error detected, replace the smoke alarm!

Standby mode and night mode

The smoke alarm checks the brightness in the room every 30 minutes.
If the brightness (day or night) changes and remains constant for the next 15 minutes, the smoke alarm switches to night mode in the dark or back to normal day mode when the brightness is sufficient.
Night mode: Standby mode without flashing.
Day mode: Standby mode (short flashing every 40 seconds).

Alarm silence facility

If the smoke alarm detects smoke, it will generate a loud alarm of >85 dB (A). This device is equipped with a silence function to silence the alarm signal for approximately 10 minutes. If the device gives alarm, press the test/silence button to activate this feature. If the device still detects smoke after 10 minutes, it will start alarming again.

CAUTION: Do not take any risks and use the alarm silence function only if you are 100% sure that the situation is safe. In case of doubt, leave the premises and only return when the situation is safe.

Low battery warning

This smoke alarm is equipped with a non-replaceable battery with a service life of approx. 10 years. When the batteries are low, the device switches to low-battery mode and will beep and flash 1 time each 40 seconds. Replace the smoke alarm as soon as possible, but in any case, within 30 days of the occurrence of this warning.
Caution: After these 30 days, the smoke alarm no longer works and can no longer warn people present of fire smoke and fires.
You can temporarily mute the low battery warning by pressing the test/silence button. After approximately 10 hours the warning will resume.

Fault warning mode

When the smoke alarm is not functioning properly, it will turn into the fault warning mode. Try cleaning the smoke alarm (see paragraphs "Cleaning and Maintenance") or replace the smoke alarm.

Self-test mode

This smoke alarm is equipped with a self-test mechanism. At least once a month at a random moment, the device automatically checks the functionality of the sensor and the siren. During a successful test, the smoke alarm will beep and blink briefly. If problems are detected, the smoke alarm switches to error mode. Replace the device immediately if the error message.

Maintenance

Maintenance must be carried out at least once a year.
The following work shall be carried out:
• Control for disassembly
• Monitoring of the intended operating time.
• Check whether there is any functional damage to the smoke alarm
• Check whether the smoke penetration openings are free (e.g. covers, contamination by fluff and dusts).
• Check whether the environment of 0.5 m around the smoke alarm is free of obstacles (e.g. furnishings) that could hinder the penetration of fire smoke into the smoke detector.
• Checking whether other external influences prevent proper functioning, see "Where should a smoke alarm not be installed"
• Manual functional testing (see paragraph "Activate and test" and "Functional test")
Caution: If it is determined during the maintenance that the smoke alarm is not able to detect and warn of fire smoke at an early stage, appropriate measures must be taken immediately to establish the target state. Do not try to repair this smoke alarm.
Tip: Put a reminder in your calendar to prevent you from forgetting the annual test.

Cleaning

Dust is a major cause of false alarms. Therefore, clean the smoke alarm once a month. Use a vacuum cleaner to gently clean the sides of the smoke alarm from accumulated dust. Never use a wet cloth or detergent to clean your device. This may damage the sensor.

End of life

In accordance with the legal requirements, the smoke alarm must be replaced latest 10 years after activation. It is recommended to note the replacement date (10 years) on the label of the smoke alarm, in a calendar or in another easily verifiable place. This typical service life of up to 10 years can be reached if the following terms of use are complied with:
1. Install and activate the smoke alarm at the latest 1 year after manufacturing date. If activation is done after 1 year, the life of the product can be reduced, therefore in this case we recommend that the product must be replaced within max. 11 years after manufacturing date.
2. Conduct the project planning and assembly according to this operating manual and the legal requirements.
3. The ambient temperature must comply with the provisions in the paragraph "product specifications".
4. Maximum alarm time per year: 90 seconds.
5. Max. 12 functional tests per year.
6. Extensive cycling between high and low temperatures will significantly reduce battery life and sensor life.
7. Constant exposure to high or low humidity or temperatures may reduce battery life and sensor life.
8. Long periods of storage will reduce battery life and sensor life.

Frequently asked questions (FAQ)

Question	The smoke alarm gives false alarms regularly.
Answer	False alarm can be caused by dust or vapor released during showering or cooking. Try cleaning your smoke alarm or temporarily relocating it to another location to determine the cause of the problem.
Question	The smoke alarm beeps and flashes approximately every 40 seconds.
Answer	Battery is low, replace device a.s.a.p.!
Question	The smoke alarm does not emit a light or sound signal after I press the test button.
Answer	If the smoke alarm does not emit a light or sound signal after the test button is pressed, it means that the unit has not been activated or is not working properly. Check if the smoke alarm is correctly activated (chapter Activate and Test). Press and hold the test/silence button until the device emits a light and sound signal. If this does not happen, the device is not working properly and should not be put into operation.

Safety and compliance

• Warning: To prevent injury, this device must be securely attached to the ceiling/wall according to the installation instructions.
• Warning: Do not expose the product and batteries to extreme temperatures.
• Warning: Keep electronic equipment and packing materials out of the reach of children and pets.
• This product is not water resistant and is suitable for indoor use only. Do not open the device or attempt to repair it yourself. Do not paint or cover the device. Only use this device as intended by the manufacturer, otherwise the warranty will void.
• By affixing the CE marking on a product, the manufacturer declares that the product complies with all legal requirements for CE marking.
• Refer to local legislation for smoke alarms.

Recycling and disposal

The WEEE symbol means that this product and batteries must be disposed separately from other household waste. When they reach their end of life, take them to a designated waste collection point in your area to guarantee a safe disposal or recycling. Batteries must be removed from the product by a qualified person, opening the product by the rear clips.
Protect the environment, human health and natural resources.

Product specifications

Power supply:	Non-replaceable 3 V DC battery (CR17450)
Expected lifetime device:	10 years after activation. (if activation is max. 1 year after manufacturing date). See "End of life" paragraph.
Battery lifetime :	Designed for 10 years
Detection:	Optical
Alarm volume:	85 dB (A)
Capacity:	Suitable for rooms with a surface area of max. 40 m²
Temperature range:	In use: 0 - 40 °C
Humidity range:	In use: < 93 %
Storage/transport range humidity:	<93%
Storage/transport range temperature:	0 - 40 °C
Installation in leisure accommodation vehicles:	YES
Mounting location:	Ceiling and wall
Dimensions:	Diameter: 105 mm. Depth: 35 mm.
Weight:	140gr.

Transport
Product is classified as a dangerous good, observe dangerous goods regulations!

http://www.siemens.com/lowvoltage/dangerousgood   https://support.industry.siemens.com

Note: During the transport, the product must be deactivated. Remove the mounting plate from smoke alarm for deactivation.