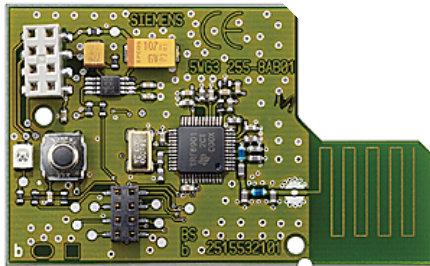| Smoke detector module wave uni M 255	5WG3 255-8AB01

Product and Applications Description

Diagram A

The smoke detector module wave uni M 255 (Diagram A) is a radio-operated module for plugging into the DELTA reflex battery-operated smoke detector.
The local alarm emitted on the smoke detector in case of smoke being detected is then supplemented by a radio-transmitted alarm that can be displayed and relayed to other devices, e.g. by the touch-manager. A radio-transmitted signal of the smoke detector's battery status is also provided. Power is supplied to the smoke detector module from the smoke detector.

Note: The smoke detector module wave uni may only be used in the DELTA reflex smoke detector (5TC1 290, 5TC1 293, 5TC1 294). Operation of the DELTA reflex smoke detector is described in detail in the operating and mounting instructions issued with this device.

The smoke detector module wave uni is put into operation with a pushbutton on the module; no other tools are required.

The smoke detector module wave uni has two different operating modes:

Normal function
- Transmitting smoke alarm signals by radio
- Reporting the battery status every 24 hours

Special function
- Establishing connections with other radio-controlled components
- Deleting connections with other radio-controlled components

Technical Specifications

Frequency band
868 MHz (transmission is not susceptible to interference; frequency band reserved for system and security applications)

Range of radio control
approx. 100 m (applies to free field applications)

Power supply
from the battery-operated DELTA reflex smoke detector

Connections
8-pin socket connector for connecting to the smoke detector

Mechanical specifications
- Dimensions (LxWxH): 63x38x12 mm
- Weight: approx. 10 g
- Fire load: approx. 60 kJ

Electrical safety
Degree of protection (compliant with EN 60529): IP 30 (after installation in the DELTA reflex smoke detector)

Electromagnetic compatibility
complies with EN 300220, EN 301489

Environmental specifications
- Climatic conditions: EN 50090-2-2
- Ambient operating temperature: - 0 ... + 50°C
- Storage temperature: - 25 ... + 70°C
- Relative humidity (non-condensing): 5% to 93%

Certification
complies with KNX - standard
  - radio frequency rf
  - easy mode pushbutton EP

CE norm
In accordance with the EMC guideline (residential buildings) and the R&TTE regulations:

$C\epsilon$

Declaration of conformity
SIEMENS AG declares herewith that the smoke detector module wave uni M 255 complies with the basic requirements and other relevant regulations of Directive 1999/5/EG.

The CE declaration can be inspected at:
SIEMENS AG
Siemensstrasse 10
D-93055 Regensburg

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Installation Instructions

CAUTION:
- Occasionally the transmission range may be influenced by structural conditions (e.g. reinforced concrete) or electric / electronic sources of interference.
- A minimum distance of 1 m must be maintained between the smoke detector module and the relevant receivers.
- Though radio transmission is performed in the safe 868 MHz range, disruptions to the radio transmission cannot be excluded.

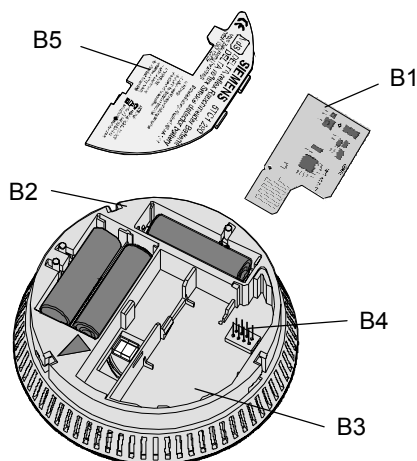## Layout of the smoke detector with the smoke detector module wave uni

Diagram B

Diagram B
B1   Smoke detector module wave uni M 255
B2   DELTA reflex smoke detector
B3   Slot for the smoke detector module wave uni
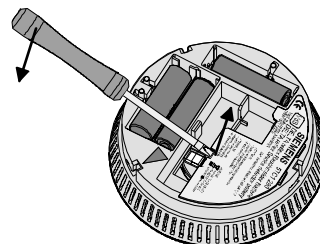B4   8- pin connector
B5   Module cover

Mounting

Diagram C

Installation of the smoke detector module wave uni:

1. Open the smoke detector as described in the operating and mounting instructions issued with the device.
2. Remove the module cover: Insert a screwdriver in the recess provided and lever the module cover out of position (**Diagram C**).
3. Pick up the smoke detector module wave uni by its sides between your thumb and fore finger, insert it in the slot provided and press down until the two catches on the sides of the smoke detector module wave uni latch home (**Diagram D**).
4. Refit the module cover.
5. Put the smoke detector module wave uni into operation (see below).
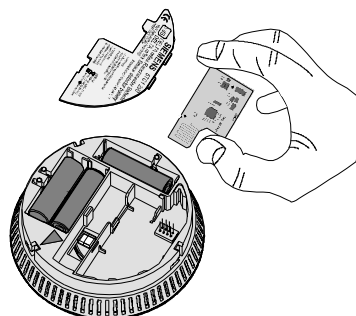6. Close the smoke detector as described in the operating and mounting instruction issued with the device.

Diagram D

NOTICE
To avoid bending the contact pins of the smoke detector, make sure that the plug connector is exactly seated on the pins when you insert the smoke detector module wave uni.

It is also important to avoid touching the components on the smoke detector module wave uni.

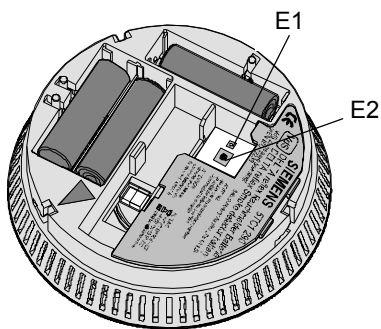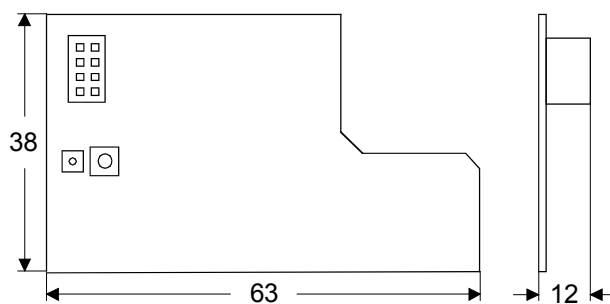## Location and Function of the Display and Operating Elements

Diagram E

Diagram E
E1   LED for displaying the sending of a radio telegram and the linking up with other radio-controlled components
E2   Pushbutton for linking the smoke detector module wave uni with other radio-controlled components

Dimension Diagram

Dimensions in mm

Commissioning

When the smoke detector module wave uni is put into operation, it must be linked by means of "learning telegrams" to the KNX radio-controlled devices that are to process its radio telegrams. Only those radio-controlled devices which are able to process a fire alarm signal can be connected to a smoke detector module wave uni. This is the case, for example, with the wave touch-manager.

Connection by radio
To link (teach-in) a smoke detector module wave uni (**F1**) with a touch-manager wave (**F2**), proceed as follows:

1.   Switch the wave touch-manager (**F2**) to the special function "Teach-in mode" (see the operating instructions issued with the device).
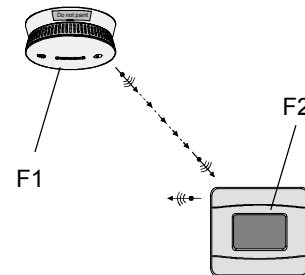

Diagram F

2.   Press the alarm/acknowledge key (**G2**) on the smoke detector for approx. 2 seconds. The smoke detector acknowledges with an acoustic alarm. The smoke detector module wave uni is switched to stand-by.

Diagram G

3.   Within the next 5 seconds press the pushbutton (**E2**) on the smoke detector module wave uni for approx. 1 second.
4.   The LED (**E1**) flashes repeatedly during sending the learning telegrams.

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Deleting a link

If you want a taught-in device to stop reacting to this smoke detector module wave uni, the radio connection has to be deleted, i.e. retaught. When deleting a link, the same process is followed as for making a link.

Function test

After the smoke detector module has been installed and put into operation you must test that the smoke detector (G1) functions properly. To do so, press the alarm / acknowledge key (G2) (as far as the tactile-touch point) for approx. 2 seconds.

- If the horn sounds once and if the LED flashes 10 times, the smoke detector is working correctly.
- If the function test fails, the only response will be that the LED flashes continually. In this case you must replace the smoke detector.
- If neither the horn sounds nor the LED flashes, check the polarity of the batteries. If this fails to solve the problem you must replace the smoke detector.

NOTE:
The functions of the DELTA reflex battery-operated smoke detector are described in detail in the operating and mounting instructions.

When the operation of the smoke detector is tested using the alarm / acknowledge key, the smoke detector module wave uni does not issue any alarm signal by radio.
Smoke sticks can be used to test whether the smoke detector module wave uni works correctly in conjunction with the DELTA reflex battery-operated smoke detector and whether an alarm signal is transmitted when a smoke alarm is issued.

General Notes

- The operating instructions must be handed over to the client.
- Any faulty devices should be returned to your local Siemens office.
- If you have further questions concerning the product please contact our technical support:

☎   +49 (0) 180 50 50-222
🖳   +49 (0) 180 50 50-223
✉   adsupport@siemens.com

Notes

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