FDM275, FDM275(F)
Radio manual call point
Mounting
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1 About this document

Overview
The radio manual call points FDM275 and FDM275(F) are intended for use in areas of a house where a fire can be detected by people who can manually trigger an alarm.
The radio manual call points FDM275 and FDM275(F) consist of a housing, a switching unit, and a battery pack.

Goal and purpose
This document contains all the information required to install the radio manual call points FDM275 and FDM275(F).
Prerequisites:
- The installation location of the radio manual call point has been established.
- Mounting should be performed by a specialist in compliance with safety regulations.
You will find more information about the radio manual call points FDM275 and FDM275(F) in document A6V10401120.

Applicable documents

<table>
<thead>
<tr>
<th>Document ID</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>A6V10271323</td>
<td>Data sheet SWING Neural radio fire detector FDCW241, FDOOT271, FDM273, FDM275, FDM275(F)</td>
</tr>
<tr>
<td>A6V10401120</td>
<td>Technical Manual Radio manual call point FDM275, FDM275(F)</td>
</tr>
<tr>
<td>A6V10227631</td>
<td>Planning Radio fire detection system SWING</td>
</tr>
</tbody>
</table>

Intended use
The radio manual call points FDM275 and FDM275(F) may only be used together with a radio gateway FDCW241 in a fire detection system FS20/FS720.

FDM275 will now apply to both variants of the radio manual call point – FDM275 and FDM275(F).
2 Mounting and installation

2.1 Mounting radio manual call point FDM275

Secure the radio manual call point FDM275 at a height of 0.9…1.6 m on an even surface. Observe the country-specific regulations for the exact mounting height!

1. Remove the housing cover with the key.
   - Insert the key into the opening at the bottom of radio manual call point FDM275.
   - Use the key to pull the housing cover forward and off the back box.
2. NOTICE! Keep the key in a safe place.
3. Remove the switching unit from the back box.
4. For securing the back box, select two screw positions that are spaced far apart from one another. See also chapter 'Master gage for recesses [➙ 17]'.
5. Screw the back box tightly in place.
   - The manual call point is now prepared for installation.

Figure 1: Opening the housing with the key FDMK295

The position of radio manual call point FDM275 has been established.
You have a tool and two screws (max. ∅ 4 mm) for securing purposes.
2.2 Installation

The flashing behavior of the internal alarm indicator is described in document A6V10401120 in the 'Internal alarm indicator' chapter.

The back box is fastened.
You have a new, undamaged battery pack to hand.
You have key FDMK295 and a Phillips screwdriver to hand.
The radio gateway has been activated and switched to maintenance mode.

1. Remove the adhesive label with the serial number from the type plate (3) on the switching unit. Use the adhesive label to mark the position of the radio manual call point FDM275 on the device location plan.
2. Label the battery pack (2) with the current date.
3. If the switching unit (7) needs to be switched to 'factory setting'
Close the battery connector (5) and press the button in the 'new' opening with a slim pen or pencil for approx. five seconds.
- The internal alarm indicator flashes red.
- The radio manual call point FDM275 is set to the factory setting.

4. Insert the battery pack into the switching unit so that it snaps into place in the three battery holders (4).

5. Lay the connection cable according to the diagram and connect the battery connector (5).
- The internal alarm indicator (10) lights up red.
- After a further 10 seconds, the radio manual call point FDM275 signals that it is not installed in the housing, and the internal alarm indicator flashes every two seconds:
  - If it flashes red, this indicates the factory setting.
  - If it flashes green, this indicates that the radio manual call point FDM275 has already been logged on to a radio gateway.
- If this does not happen, this means the battery pack is defective and must not be used.

6. Place the switching unit with the battery pack into the back box (1).

7. Remove the plastic/glass insert (11). Details on replacing the glass can also be found in the 'Replacing the plastic insert with a glass insert' chapter.

8. Screw the switching unit tightly to the back box (1) using the two screws supplied with the switching unit (9).

9. Place the glass/plastic insert (11) between the stops (8) and slide the plastic/glass insert against the triggering device (15), as shown in the diagram.
- This pre-stresses the spring (14).
- The internal alarm indicator flashes green and the radio manual call point FDM275 is logged on to the radio gateway.
- If the process of logging on to the radio gateway is successful, the internal alarm indicator stops flashing.

10. If the logon process has not been successful after a long period of time, remove the switching unit from the back box and then re-insert it.
- The search for the radio network starts again.

11. Install the housing cover on the back box.
- Hook the top housing cover into the back box.
- Snap the bottom housing cover into place in the back box.
- Radio manual call point FDM275 is mounted and ready for commissioning.

**WARNING**

Deactivating the manual call points prevents alarms from being forwarded.
The alarm is not triggered.
- Mark deactivated manual call points or those which are not fully functional with the notice 'NOT IN USE'!
Figure 2: 'Not in use' label
2.3 Installing the protective cover

If a protective cover (accessories) is being used, proceed as described below:

▷ The radio manual call point has been installed and electrically connected. See the chapter 'Installation [➙ 7]'.

▷ A compatible protective cover is available. See the chapter 'Protective cover FDMC295'.

● Snap the protective cover FDMC295 (2) into place in the recesses in the housing cover (1) intended for this purpose. See also 'Protective cover FDMC295' chapter.

▷ The protective cover is installed.

![Figure 3: Installing the protective cover FDMC295](image)

1 Radio manual call point FDM275 2 Protective cover

See also

Protective cover FDMC295 [➙ 13]
2.4 Replacing the plastic insert with a glass insert

Proceed as follows to replace the plastic insert with a glass insert:

▷ The detector line to which the manual call point is connected is switched off.

1. Remove the housing cover [➙ 6] with the key.

2. Remove the plastic insert (1) and dispose of it properly.

3. Place the glass insert (6) between the following points:
   - Retainer (5)
   - Left and right stops (4)
   - Spring (2)
   - Triggering device (3)
   ⇑ This pre-stresses the spring (2).

4. Install the housing cover on the back box.
   - Hook the top housing cover into the back box.
   - Snap the bottom housing cover into place in the back box.

⇑ The plastic insert is replaced with a glass insert.

Figure 4: Replacing the plastic insert with a glass insert

1 Plastic insert  
2 Spring  
3 Triggering device  
4 Stop  
5 Retainer  
6 Glass insert
3 Details for ordering

3.1 Battery pack BAT3.6-10

- For supplying radio devices and the radio gateway with power
- Lithium batteries
  - BAT3.6-10 LI-SOCl2 battery pack 3.6 V, 10 Ah
- Batteries with battery cable
- Connector system with protection against polarity reversal
- Inscription field for commissioning date
- Compatible with:
  - Radio gateway FDCW241
  - Radio manual call point FDM273
  - Radio manual call point FDM275
  - Radio manual call point FDM275(F)
  - Radio fire detector FDOOT271
- Order number: S54370-Z11-A1

3.2 MCL-USB (radio) adapter FDUZ227

- For connecting FDnet/C-NET devices to a personal computer
- Signals can be transmitted to SWING radio devices via radio
- Interface converter for USB on MC link
- Compatible with:
  - Floor repeater terminal FT2010
  - Floor repeater display FT2011
  - Radio gateway FDCW221 and FDCW241
  - Detector exchanger and tester FDUD292
  - Intelligent detector tester FDUD293
  - Line tester FDUL221
  - Radio manual call point FDM27x
  - Radio fire detector FDOOT271
- You will find more information in document A6V10347735
- Order number: S54323-F106-A1
3.3 Protective cover FDMC295

- For protection against unintended alarm activation
- Compatible with:
  - Manual call point FDM1101-Rx
  - Manual call point FDM1101A-Rx
  - Manual call point FDM225-Rx
  - Manual call point FDM226-Rx
  - Radio manual call point FDM275
- Order number: A5Q00013440

3.4 Glass inserts FDMG295-x

- For alarm activation and protection against soiling
- Available in country-specific designs
- Compatible with:
  - Manual call point FDM1101-Rx
  - Manual call point FDM1101A-Rx
  - Manual call point FDM225-Rx
  - Manual call point FDM226-Rx
  - Radio manual call point FDM275
- Order number for glass insert FDMG295, 'Neutral': A5Q00013442
- Order number for glass insert FDMG295-F, 'France': A5Q00013443
3.5 Plastic inserts FDMP295-x

- For alarm activation and protection against soiling
- Available in country-specific designs
- Compatible with:
  - Manual call point FDM1101-Rx
  - Manual call point FDM1101A-Rx
  - Manual call point FDM225-Rx
  - Manual call point FDM226-Rx
  - Radio manual call point FDM275
- Order number for plastic insert FDMP295, 'Neutral': A5Q00013445
- Order number for plastic insert FDMP295-F, 'France': A5Q00013446

3.6 Key FDMK295

- For testing and resetting manual call points
- For removing the housing cover from the back box
- Compatible with:
  - Manual call point FDM1101-Rx
  - Manual call point FDM1101A-Rx
  - Manual call point FDM225-Rx
  - Manual call point FDM226-Rx
  - Radio manual call point FDM275
- Order number: A5Q00013448
4 Specifications

4.1 Technical data

You will find information on approvals, CE marking, and the relevant EU directives for this device (these devices) in the following document(s); see ‘Applicable documents’ chapter:

- Document A6V10271323

**Device characteristics**

Detector diagnosis: With FXS2061 SWING Tool or connected fire control panel

Type of alarm activation: Type A (direct activation)

**Radio**

Sending/receiving aerials: Dual band aerial

Frequency range:
- 433.05…434.79 MHz in band 44b
- 868…870 MHz in band 48, 49, 50, 54, and 56b

Channel grid: 50 kHz

Number of channels:
- 27 in 868 MHz band
- 20 in 433 MHz band

Transmitting power:
- ≤10 mW ERP in band 44b and 49
- Type 10 (max. ≤25) mW ERP in band 48, 50, 54, and 56b

Range: See document A6V10227631


**Battery**

Lithium battery pack: BAT3.6-10 LI-SOCl2 battery pack 3.6 V, 10 Ah

Battery service life: Dependent upon ambient conditions
- At least 3 years

Service life ‘Battery low’: >3 months

Battery voltage monitored: Yes

Weight: 0.093 kg

**Detector line**

Radio connection to detector line via radio gateway: FDCW241

Radio connection to PC via MCL-USB adapter: FDUZ227

System compatibility: See ‘List of compatibility’
<table>
<thead>
<tr>
<th>Ambient conditions</th>
<th>Place of installation</th>
<th>Inside buildings/indoors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature</td>
<td>-10…+55 °C</td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-30…+75 °C</td>
<td></td>
</tr>
<tr>
<td>Air humidity</td>
<td>≤95 % rel.</td>
<td></td>
</tr>
<tr>
<td>Protection categories (IEC 60529):</td>
<td>IP24D</td>
<td></td>
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<tr>
<td>Electromagnetic compatibility:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 10 kHz…100 kHz</td>
<td>160 V/m</td>
<td></td>
</tr>
<tr>
<td>• 100 kHz…2.5 GHz</td>
<td>30 V/m</td>
<td></td>
</tr>
</tbody>
</table>

| Mechanical data            | Weight:                | 0.216 kg                 |
|----------------------------|                       |                          |
| Housing material           | Red => Polycarbonate (PC) | Black => Acrylonitrile butadiene styrene (ABS) |
| Housing color              | ~RAL 3000 flame red    |                          |

| Standards                  | European standards    | • EN 54-11               |
|----------------------------|                       | • EN 54-25               |
|                            |                        | • EN 300220-2            |
|                            |                        | • EN 301489-3            |
|                            |                        | • EN 60950-1            |
4.2 Dimensions

![Diagram showing dimensions](image)

4.3 Master gauge for recesses

![Diagram showing master gauge](image)

4.4 Environmental compatibility and disposal

This equipment is manufactured using materials and procedures which comply with current environmental protection standards as best as possible. More specifically, the following measures have been undertaken:

- Use of reusable materials
- Use of halogen-free plastics
- Electronic parts and synthetic materials can be separated
  Larger plastic parts are labeled according to ISO 11469 and ISO 1043. The plastics can be separated and recycled on this basis.

Electronic parts and batteries must not be disposed of with domestic waste.

- Take electronic parts and batteries to local collection points or recycling centers.
- Contact local authorities for more information.
- Observe national requirements for disposing of electronic parts and batteries.