

# **SMOKE & HEAT DETECTORS**





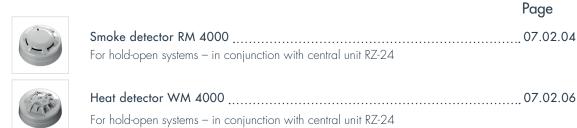
Fire detectors (smoke or heat detectors) immediately report a fire to the central unit (RZ-24) and thus ensure that the hold-open system is triggered in time

The smoke detector identifies a possible fire quickly and reliably on the basis of smoke development

In some cases, heat detectors are also used – they register a rapid rise in temperature or recognise a certain threshold temperature which trigger them.



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Subject to technical changes. No claim for compensation in case of errors.



# **Smoke detector RM 4000**

Together with the central unit RZ-24



### **CHARACTERISTICS**

- Optical smoke detector tested according to EN 54-7
- Operated together with the RZ-24 central unit which supplies the necessary voltage to the detector and simultaneously evaluates it
- Apt for use in a temperature range from -40 °C to +70 °C
- Very low false alarm rate thanks to special sensor chamber and the use of algorithms for interference filtering
- If the detector is dirty to the point where it can no longer compensate, it will immediately change to alarm and the fire closures will reliably be closed
- No relay is required in the detector itself, which reduces costs
- Single operating states are indicated via integrated LED with 360° visibility in two colors (red/yellow) and different flashing frequencies
- The smoke detectors RM 4000 must be replaced after 8 years at the latest, even if the detectors are still working properly during the function or maintenance test. This ensures that the hold-open system is always fully functional and that doors close reliably in the event of a fire



## **TECHNICAL DATA**

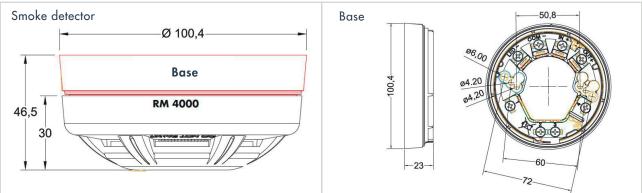
| Supply voltage        | 8.5 to 33 VDC   |  |
|-----------------------|---|--|
| Power consumption     | Ø quiescent current + switch-<br>on surge current at 24 VDC:<br>95 μA<br>alarm current at 24 VDC:<br>40 mA    |  |
| Sampling frequency    | once every 4 seconds,<br>photo-electric sensor with<br>automatic detection and<br>adaption of the sensitivity |  |
| Alarm indicator       | integral LED (red/yellow) for status indication   |  |
| Operating temperature | -40 °C to +70 °C (no condensation or icing!)  |  |
| IP rating             | IP 23D  |  |
| Material casing       | molded in white<br>polycarbonate  |  |

#### **INSTALLATION**



## **DIMENSIONS**

All dimensions in mm





### STATUS INDICATIONS

The various operating states of the RM 4000 smoke detector are indicated by an LED. This LED lights up yellow or red depending on its status

| LED red        | LED yellow                             | Function  |
|----------------|--|---|
| Flashes 1x/sec | No flash                               | After switching on the power supply (or inserting the detector into the socket): confirms correct wiring. Phase duration: 4 minutes. During this start-up phase, a quick functional test is possible within few seconds. During normal operation it takes longer. |
| Permanently on | No flash                               | Alarm   |
| No flash       | No flash                               | Normal operation  |
| No flash       | Flashes 1x/sec during start-up         | If the yellow LED flashes instead of the red LED during the first 4 minutes after switching on or inserting the detector, the detector has reached the drift compensation limit.  |
| No flash       | Flashes every 4 seconds after start-up | Sensor no longer functions properly and detector has to be replaced immediately   |

## **INSTALLATION ACCESSORIES**

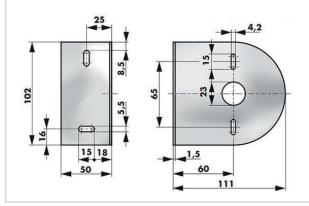
The mounting brackets allow a simple installation of the smoke detectors on walls. According to the DIBt requirements for the installation of fire detectors, it is permissible in exceptional cases to replace ceiling detectors with wall detectors. The prerequisite is that the horizontal distance between the wall and the axle of the detector must be 0.5 m. The mounting bracket, part no. 040575 meets this demand. All fixing holes correspond to those of the bracket part no. 040570.

All dimensions in mm

## Mounting bracket part no. 040570

Part no.: 040570

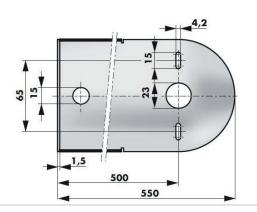
For the installation of smoke detector RM 4000 as lintel detector  $\,$ 



## Mounting bracket part no. 040575

Part no.: 040575

For the installation of smoke detector RM 4000 on the wall



## **ORDER INFORMATION**

| Description                      | Part no.  |
|----------------------------------|-----------|
| RM 4000 smoke detector with base | 040860SET |

## **ACCESSORIES**

| Description  | Part no. |
|--|----------|
| Mounting bracket for fire detectors RM/WM, arm length 550 mm | 040575   |
| Mounting bracket for fire detectors RM/WM, arm length 111 mm | 040570   |
| 3,9 kOhm resistor  | 040893   |
| Standard base for detectors RM/WM 4000                       | 040862   |



## Heat detector WM 4000

Together with the RZ-24 central unit



### **CHARACTERISTICS**

- Heat differential detector tested in accordance with EN 54-5
- Responds not only when a certain temperature has been reached, but also when the temperature increases rapidly
- Should be used whenever there's a danger of false alarm from smoke detectors caused by smoke or similar airborne particles (e.g. dust) that may occur during normal working conditions (ATTENTION: observe national regulations in your country!!!)
- Standard temperature level between 54 °C and 65°C.
  Heat detectors with different levels of demand are also available on demand
- Operated together with the RZ-24 central unit which supplies the necessary voltage to the detector and simultaneously evaluates it. This reduces the cost of the system considerably.
- Single operating states are indicated via integrated LED with 360° visibility in two colors (red/yellow) and different flashing frequencies
- The heat detectors WM 4000 must be replaced after 8 years at the latest, even if the detectors are still working properly during the function or maintenance test. This ensures that the hold-open system is always fully functional and that doors close reliably in the event of a fire.



## **TECHNICAL DATA**

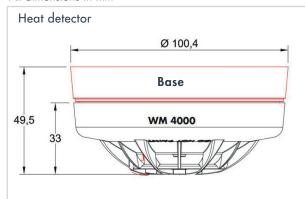
| Supply voltage        | 8.5 to 33 VDC   |
|-----------------------|---|
| Power consumption     | Ø quiescent current + switch-<br>on surge current at 24 VDC:<br>95 μA<br>Alarm current at 24 VDC:<br>40 mA                    |
| Heat measurement      | by means of a thermistor,<br>1 measurement every 4<br>seconds   |
| Operating temperature | A1R: static response<br>temperature between 54 °C<br>and 65 °C;<br>operating temperature: -40<br>°C to +50 °C (without alarm) |
| Alarm indicator       | integral LED for status<br>indication   |
| IP rating             | IP 23D  |
| Material casing       | moulded in white<br>polycarbonate   |

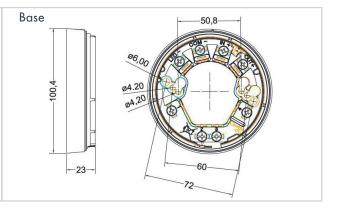
### INSTALLATION



### **DIMENSIONS**

All dimensions in mm







### STATUS INDICATIONS

The various operating states of the WM 4000 smoke detector are indicated by an LED. This LED lights up yellow or red depending on its status

| LED red        | LED yellow                             | Function  |
|----------------|--|---|
| Flashes 1x/sec | No flash                               | After switching on the power supply (or inserting the detector into the socket): confirms correct wiring. Phase duration: 4 minutes. During this start-up phase, a quick functional test is possible within few seconds. During normal operation it takes longer. |
| Permanently on | No flash                               | Alarm   |
| No flash       | No flash                               | Normal operation  |
| No flash       | Flashes 1x/sec during start-up         | If the yellow LED flashes instead of the red LED during the first 4 minutes after switching on or inserting the detector, the detector has reached the drift compensation limit.  |
| No flash       | Flashes every 4 seconds after start-up | Sensor no longer functions properly and detector has to be replaced immediately   |

### **INSTALLATION ACCESSORIES**

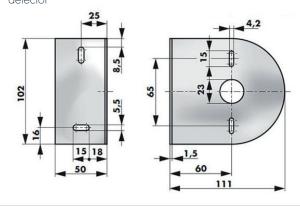
The mounting brackets allow a simple installation of the smoke detectors on walls. According to the DIBt requirements for the installation of fire detectors, it is permissible in exceptional cases to replace ceiling detectors with wall detectors. The prerequisite is that the horizontal distance between the wall and the axle of the detector must be 0.5 m. The mounting bracket, part no. 040575 meets this demand. All fixing holes correspond to those of the bracket part no. 040570.

All dimensions in mm

## Mounting bracket part no. 040570

Part no.: 040570

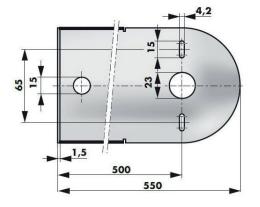
For the installation of smoke detector WM 4000 as lintel detector  $\,$ 



## Mounting bracket part no. 040575

Part no.: 040575

For the installation of smoke detector WM 4000 on the wall



## **ORDER INFORMATION**

| Description                               | Part no.  |
|---|-----------|
| WM 4000 heat detector type A1R, with base | 040861SET |

### **ACCESSORIES**

| Description  | Part no. |
|--|----------|
| Mounting bracket for fire detectors RM/WM, arm length 550 mm | 040575   |
| Mounting bracket for fire detectors RM/WM, arm length 111 mm | 040570   |
| 3,9 kOhm resistor  | 040893   |
| Standard base for detectors RM/WM 4000                       | 040862   |