

RM 3000+ Smoke Detector with RS 3000 Relay Base for Hold-Open Systems

DICTATOR RM 3000+ smoke detectors and WM 3000+ heat detectors are used in hold-open systems to automatically close fire protection doors in the event of alarm.

RM 3000+ optical smoke detectors work on the principle of photo-electric detection of scattered light without using any radio-activity. To ensure maximum reliability, three consecutive sensed alarm signals are needed to trigger alarm and to switch off the power supply to the hold-open magnets on the door.

The WM 3000+ heat detector comprises a pair of matched heat detectors. One of them is exposed and therefore responds quickly to changes in air temperature, whereas the second one is insulated and responds more slowly. The relay cuts off the power supply when a certain temperature is reached or in the event of a rapid increase in the temperature of the surrounding air.

The detectors of this series comply with the **European Standard EN 54**.

They have been **tested** as tripping devices for hold-open systems and are **approved** together with DICTATOR electromagnets by the building authorities. The detectors are **among others** included in the following approvals: Z-6.5-1903, Z-6.5-1707.



Technical Data

• Voltage supply	9 to 33 VDC
• Power consumption	25 mA at 24 V; 62 mA on alarm
• Operating temperature (smoke detector)	-20 °C to +60 °C (prevent icing)
• Alarm temperature (heat detector)	+60 °C; other temperatures on request
• Breaking capacity of contacts	1 A at 24 VDC
• Contact voltage	50 V (max)
• Contact current	1 A (non inductive)
• IP rating	IP 54 (heat detector), IP 43 (RM 3000+)



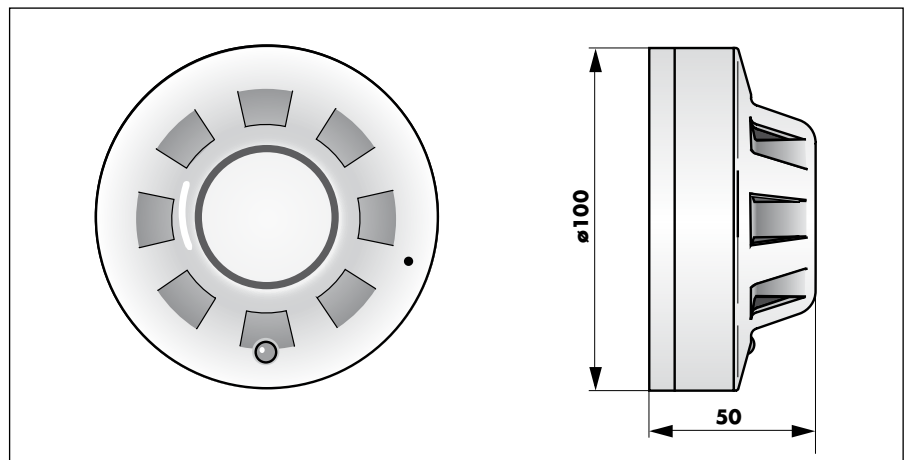
Dimensions

All detectors of the 3000+ range fit into the RS 3000 relay base, i.e. if necessary, smoke detectors can be replaced with a **heat detector** from the 3000+ range. However, please always **observe** during installation **the relevant regulations concerning the arrangement of detectors on openings in walls of the respective approval of the building authorities.**

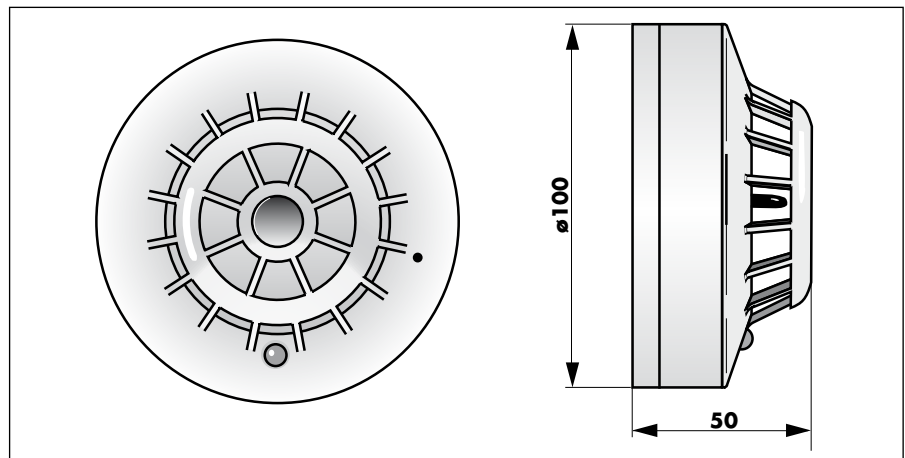
To protect the sensing chamber from pollution during construction work, all detectors are delivered with a red **protection cap** which must be removed when the hold-open system is put into operation.

To facilitate the installation of detectors in **suspended ceilings**, a special base with a mounting bar (part no. 040842) is available.

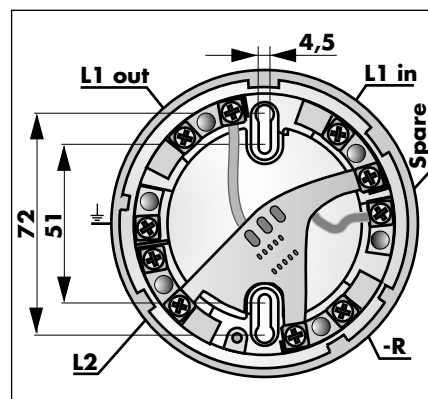
1. Optical Smoke Detector



2. Heat Detector



3. RS 3000 Relay Base



The two slots in the base make it very easy to install as precise fixing holes in the ceiling are not required.

The wide interior diameter of the bases in the 3000 range allows for ease of access to wires and the five terminals. Wiring is possible both from the back or from the side (knock-outs in the base).

The detector is plugged in by turning it clockwise. An anti-theft feature is included. A missing detector means alarm.

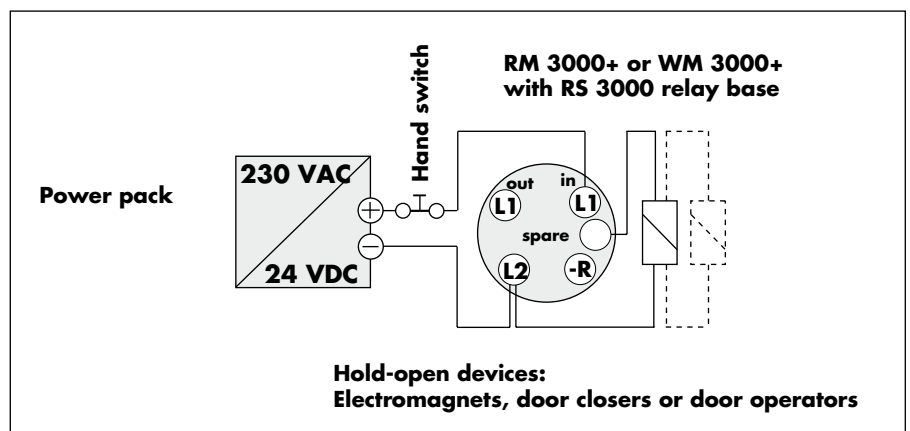


RM 3000+ Smoke Detector, WM 3000+ Heat Detector Easy to Connect, with Integrated Relay

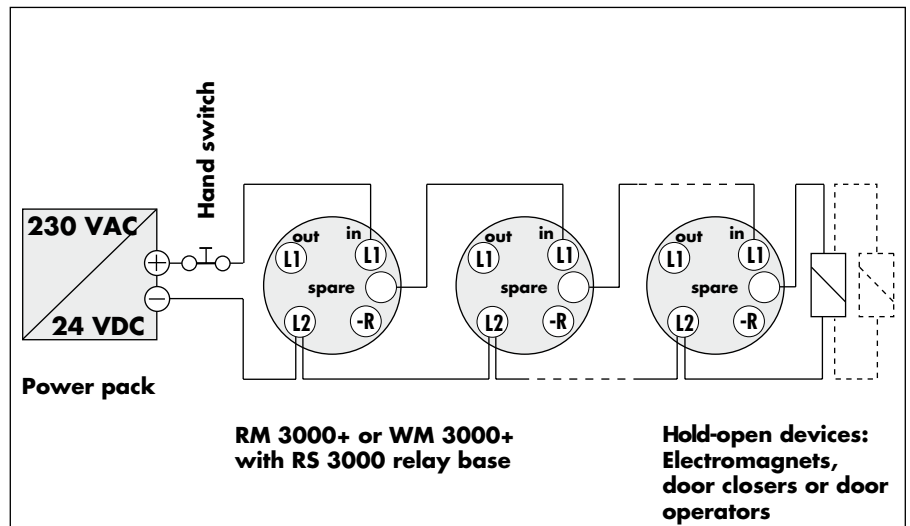
Connect the required number of smoke detectors (see the respective relevant approval of the building authorities) to one of our power packs. When **choosing the power pack** please make sure that the total power consumption of all connected detectors does not exceed the supply current of the power pack. These smoke detectors consume maximum 62 mA in the event of alarm.

The **hand switch** needs to be placed in the wiring to the first detector. The electrical **hold-open magnets** are connected to the last detector in the detector circuit. This allows for a simple, linear wiring.

Wiring Diagram for Single Detector



Wiring Diagram for Three Detectors



If you need to install more than 3 detectors, simply place them within the circuit. The power pack and hand switch must always be connected to the first detector, and the hold-open magnets must be wired to the relay base of the last detector in the circuit. DICTATOR electromagnets and door operators are provided with the necessary spark extinction diode as standard. If the base relay switchable load is not sufficient, you need to connect an additional relay. We will be happy to provide the necessary information.

Attention: The functioning of hold-open systems must be tested every month - provided no other period is given in the approval document - and they require annual maintainance by authorized personnel.

IMPORTANT: after an alarm a **RESET** is necessary. This can be done either by pressing the hand switch or by removing the detector from the relay base and screwing it back again.



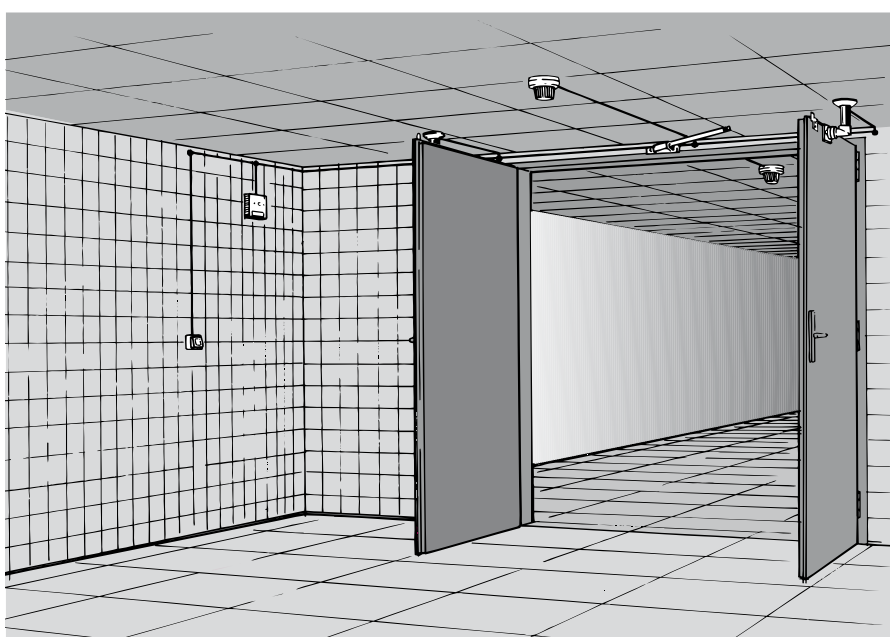
RM 3000+ Smoke Detector, WM 3000+ Heat Detector

Dictator smoke detectors and Dictator heat detectors are equipped with an integrated relay in the base. This switches off electromagnets, door closers or door operators in the event of fire. The doors then close automatically.

Important for maintenance services: the maximum allowable delay in responding of the detector are 39 seconds.

IMPORTANT: the detectors must be protected from icing and condensation.

Installation and Function



The relay base can directly be fitted to the ceiling. The detector is plugged into the base and secured by turning clockwise. When mounting it on a wall, a mounting bracket has to be used to make sure the detector is always in a horizontal position.

Order Information

RM 3000+ smoke detector	part no. 040800N
WM 3000+ heat detector (alarm temperature 60 °C)	part no. 040820N
Heat detectors with other alarm temperatures (no approval)	on request

Accessories

Base with relay and evaluation electronics	part no. 040841
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Further Accessories

Power packs (450 mA, 800 mA)	see page 07.017.00
Electromagnets for installation on wall/ceiling/floor	see page 07.029.00
Hand switch for manual release of door	see page 07.069.00
Sequence controllers	see page 07.073.00
Automatic and semi-automatic door operators	see page 05.001.00
160 N or 320 N spring rope pulley or counterweight	see page 05.047.00
Hydraulic radial dampers and final dampers	see page 05.049.00

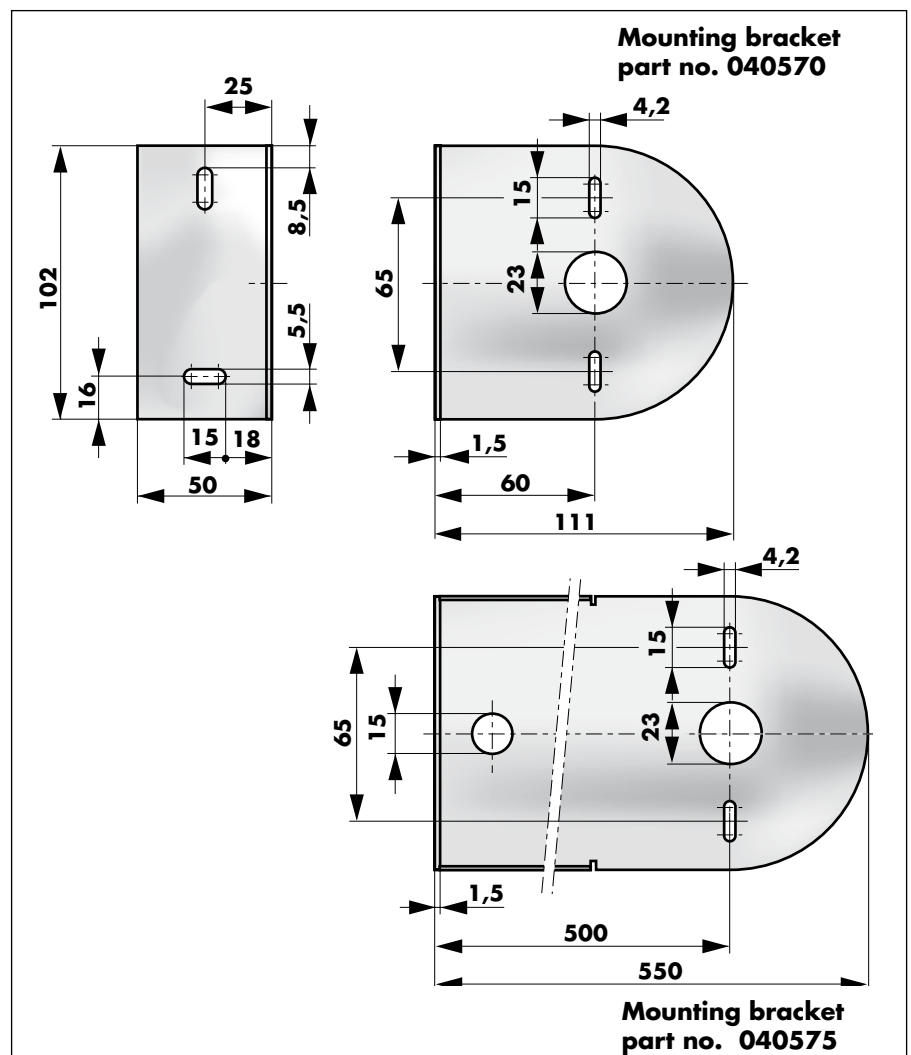


Mounting Bracket for RM 2000, RM 3000+ and WM 3000+

The mounting bracket (part no. 040570) allows DICTATOR smoke and heat detectors to be fixed to the wall without difficulty. The fixing holes are suitable for both the RM 2000 and RM 3000+/WM 3000+ range.

According to the demands of the Deutsches Institut für Bautechnik in Berlin regarding the installation of fire detectors, in exceptional cases it is allowed to replace a detector on the ceiling by a detector on the wall (see page 07.014.00 et sqq.). However, 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.

Dimensions



Order Information

Bracket for installation on the wall (RM 2000/RM 3000+)	part no. 040570
Bracket for installation on the wall, length of the arm 550 mm	part no. 040575

