**Technical Data**

- **Functional principle**: Microwave module
- **Detection speed**: Min. 0.1 m/s
- **Marking**: CE
- **Inclination angle**: 0° – 40° in 5° steps
- **Detection range**: At 2200 mm installation height and 30° inclination angle
  - Width: 4500 x 2000 mm (WxD)
  - Narrow: 2000 x 4500 mm (WxD)
- **Detecting frequency**: 24.15 GHz – 24.25 GHz K band
- **Operating mode**: Radar motion sensor
- **Function indicator**: Red/green LED
- **Operating elements**: Potentiometer and programming button for setting: switching mode, fall time, response time, disturbance reaction, size of detection area, addressing
- **Operating voltage**: 12 – 36 V DC / 12 – 24 V AC
- **No-load current**: < 50 mA at 24 VDC
- **Power consumption**: < 1 W
- **Switching voltage**: Max. 48 VAC / 48 VDC
- **Switching current**: Max. 0.5 A AC / 1 A DC
- **Switching power**: Max. 24 W / 60 VA
- **Switching current**: 1 A
- **Transmission**: Microwave module
- **Dimensions excluding securing parts**: 123 mm (w) x 65 mm (h) x 57 mm (d)

**Function Settings**

- **Function**: Setting
- **Detection area size**: 9
- **Relay contact**: NO contact
- **Fall time**: 1 s
- **Responsiveness**: Fast
- **Immunity**: 1 (minimal)
- **Address**: 1

**Conformity with Standards**

- **US conformity**: The product RMS-M-NA is compliant with Part 15 of the FCC regulations.
- **Canada conformity**: The product RMS-M-NA contains an IC-approved component. IMPORTANT! The EU-compliant devices must not be marketed in the United States/Canada and the US/Canada-compliant devices must not be marketed in Europe!

**Product Information**

- **Scope of delivery**:
  - RMS remote control
  - Remote control
  - RMS Weather Cap
  - Mounting set and weather protective cover

**Troubleshooting**

<table>
<thead>
<tr>
<th>Fault</th>
<th>Corrective action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door is detected.</td>
<td>Decrease the size of the detection area. Change the inclination angle.</td>
</tr>
<tr>
<td>LED not lit up</td>
<td>No power supply, device not functioning.</td>
</tr>
<tr>
<td>Sensor reacts to the slightest influences such as rain, vibrations, or reflections.</td>
<td>Increase immunity, decrease the size of the detection area.</td>
</tr>
<tr>
<td>Door opens for no apparent reason.</td>
<td>Operation with remote control is switched on. Switch off the remote control mode.</td>
</tr>
<tr>
<td>Potentiometer does not respond.</td>
<td>Operation with button and potentiometer is set. Switch on device addresses.</td>
</tr>
<tr>
<td>Remote control does not respond.</td>
<td>Device is locked. Switch the operating voltage off and on again. The sensor can now be configured without a code for 30 minutes.</td>
</tr>
<tr>
<td>Check the remote control battery.</td>
<td></td>
</tr>
</tbody>
</table>

**Installation**

**Opening the device**

- Insert the screwdriver into the opening provided and carefully push open the cover.
- Fold up and remove the cover.

**Mounting the device**

1. Attach the self-adhesive template and drill according to the markings on the template.
2. Pull the cable through the opening provided. 
3. Fasten the base plate using the screws (screws are in the housing).

**Closing the device**

- Attach the cover on the top and press down until it snaps into place.

**Installation information**

- Protect the radar from rain.*
- Avoid placing moving objects in the detection area (fans, plants, trees, flags).
- Do not cover the radar.
- Only install the radar behind appropriate covers. Mechanically operated drive components may affect the radar.
- Avoid fluorescent lights in the detection field.

* Installation of the RMS Weather Cap is recommended.

**Brief Instructions: Radar Motion Sensor for Detecting People at Automatic Doors**

**General information for your safety**

This device must be installed and maintained only by qualified, trained personnel.

Observe the safety requirements of EN 60950-1. Operate the sensor only with an SELV supply with a limited output of up to 100 W. Use a 2.5 A fuse, for example, to reliably limit the power output.
Detection Field Settings

Antenna characteristics
A wide or narrow detection area can be set with the plug-in and rotatable antenna.

Wide (Standard) Width: 4.50 m Depth: 2.00 m
Narrow (Optional) Width: 2.00 m Depth: 4.50 m

Installation height 2.20 m
Inclination angle 40°
Size of detection area Max.

Detection area size
- Change the size of the detection area using the potentiometer.

Immunity
- Immunity can be used to minimize interference such as rain, vibrations, and reflections.

Programming with Button and Potentiometer

The sensor is programmed with the programming button and potentiometer. Use the programming button to activate the programming mode and confirm your settings. Use the potentiometer to adjust functions and values. The LEDs indicate the individual settings by flashing.

For adjustment options, please refer to the table "Settings with pushbutton and potentiometer". Every time you press the button, the setting is saved automatically. If no adjustment takes place within 10 minutes, the programming mode is automatically exited. The set values are saved.

The potentiometer is moved during programming. For this reason, make a note of the potentiometer position prior to programming, so that you can reset the sensitivity to the original value after programming has been completed.

Setting the function

> 2 s
- Press and hold the programming button for approximately two seconds. Programming mode is activated.

To set the function, select the relevant position on the potentiometer. The green LED flashes to indicate the selected function.

Setting the value

> 2 s
- Press and hold the programming button for approx. two seconds.

To set the value, select the relevant position on the potentiometer. The red LED flashes to indicate the selected value.

Confirming the settings

< 1 s
- Press the programming button for less than 1 second. The programming mode is exited. The settings are saved.

Commissioning

Before switching on the device, remove all objects from the door area that do not normally belong there.
- Switch on the device and wait 10 s (LED flashes red).
- Test the settings by walking within range of the sensor.
- The red LED lights up when you are detected.

LED Status Indicator

<table>
<thead>
<tr>
<th>Color indicator</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Device ready for operation</td>
</tr>
<tr>
<td>Red</td>
<td>Detection active</td>
</tr>
<tr>
<td>Green flashing</td>
<td>Command received</td>
</tr>
<tr>
<td>Red flashing</td>
<td>Fault</td>
</tr>
<tr>
<td>Red/green flashing</td>
<td>Initialization after switching on</td>
</tr>
</tbody>
</table>

Some installation situations may limit the adjustment options and the functions of the sensor.

Programming example: Changing the relay fall time to 3.0 s

Function/setting Action

> 2 s
- Press the programming button for two seconds to activate programming mode.

Set the potentiometer to position 2 – 4. The green LED flashes twice to indicate the “fall time for output” function.

> 2 s
- Press the programming button for two seconds to set the fall time.

Set potentiometer to position 6. The red LED flashes seven times to indicate the value “3.0 seconds”.

< 1 s
- Press the programming button for one second to end programming mode.

Reset the potentiometer to the original sensitivity value.

Check the settings of the button and potentiometer by walking within range of the sensor

<table>
<thead>
<tr>
<th>Function</th>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relay contact</td>
<td>0 – 2</td>
<td>1x</td>
</tr>
<tr>
<td>Fall time for output</td>
<td>2 – 4</td>
<td>2x</td>
</tr>
<tr>
<td>Response</td>
<td>4 – 6</td>
<td>3x</td>
</tr>
<tr>
<td>Immunity</td>
<td>6 – 8</td>
<td>4x</td>
</tr>
<tr>
<td>Device addresses</td>
<td>8 – 10</td>
<td>5x</td>
</tr>
</tbody>
</table>

Reset

Press and hold the programming button until the LED flashes green/red alternately for 10 seconds.

Revert to factory settings

Check the settings of the remote control by walking within range of the sensor

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<tr>
<td>Relay contact</td>
<td>NO contact active</td>
<td>Relay contact closes on detection (N.C.)</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Fast</td>
<td>Fast: Sensor triggers earlier (high sensitivity)</td>
</tr>
<tr>
<td>Immunity</td>
<td>1 – 9</td>
<td>9: Maximum immunity</td>
</tr>
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Reset

Reset to factory settings

Code
- Access without code
- Access with code
- Disable access

Access with code
Access with remote control is only possible after a code is entered.
Access with code is not possible after a code is entered.
Access is blocked. Access with the remote control is not possible.

Disconnect
Exit programming mode

Check the settings of the button and potentiometer by walking within range of the sensor

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Check the settings of the button and potentiometer by walking within range of the sensor

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Revert to factory settings

Check the settings of the remote control by walking within range of the sensor

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