

VIO-M1

UNIDIRECTIONAL OPENING SENSOR FOR AUTOMATIC SLIDING DOORS

User's Guide for software version 0100 and higher (refer to tracking label on product)

DESCRIPTION

- 1. radar antenna
- 2. potentiometer
- 3. cover

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- 4. main connector
- 5. DIP-switch



TECHNICAL SPECIFICATIONS

Technology:	microwave doppler radar		
Transmitter frequency:	24.150 GHz		
Transmitter radiated power:	< 20 dBm EIRP		
Transmitter power density:	< 5 mW/cm ²		
Detection mode:	motion		
Min. detection speed:	5 cm/s (measured in sensor axis)		
Supply voltage*:	12 V to 24 V AC ±10% (50 - 60 Hz); 12 V to 24 V DC +30% / -10%		
Max power consumption:	< 2 W		
Output*:	relay (free of potential change-over contact)		
Max. contact voltage:	42 V DC/AC peak		
Max. contact current:	1 A (resistive)		
Max. switching power:	15 W		
Mounting height:	from 1.8 m to 3 m		
Degree of protection:	IP54 (IEC/EN 60529)		
Temperature range:	from -20 °C to + 55 °C		
Dimensions:	180 mm (L) x 58 mm (H) x 50 mm (W)		
Tilt angles:	15° to 45° vertical; -15° to +15° lateral		

Specifications are subject to changes without prior notice. Measured in specific conditions.

* External electrical sources must be within specified voltages, max 15W and ensure double insulation from primary voltages.

MOUNTING & WIRING



Apply the mounting template. Drill 1 hole for the cable and pull it through. Drill 2 holes for the screws.



ADJUSTMENTS







TROUBLESHOOTING

\bigcirc	The door remains closed. The LED is OFF.	The sensor power is off.	1 Check the wiring and the power supply.
C	The door does not react as expected.	Improper output configuration on the sensor.	1 Change the output configuration setting on each sensor connected to the door operator.
	The door closes and opens constantly.	The sensor is disturbed by the closing of the door or vibrations caused by the door motion.	 Make sure the sensor is fixed properly. Make sure the detection mode is unidirectional. Increase the antenna angle. Increase the immunity filter. Reduce the field size.
	The door opens for no apparent reason.	It rains and the sensor detects the motion of the rain drops.	 Make sure the detection mode is unidirectional. Increase the immunity filter. Use a rain accessory.
		In highly reflective environments, the sensor detects objects outside of its detection field.	 Change the antenna angle. Decrease the field size. Increase the immunity filter.
		In airlock vestibules, the sensor detects the movement of the opposite door.	 Change the antenna angle. Increase the immunity filter.

A SAFETY INSTRUCTIONS

- Test the good functioning of the installation before leaving the premises.
- The sensor cannot be used for purposes other than its intended use.
- The manufacturer of the door system incorporating the sensor is responsible for compliance of the system to applicable national and international regulations and safety standards.
- The manufacturer of the sensor cannot be held responsible for injury or damage resulting from incorrect use, installation or inappropriate adjustment of the sensor.
- The installer must read, understand and follow the instructions given in this manual. Improper installation can result in improper sensor operation.
- Only trained and qualified personnel may install and setup the sensor.
- The warranty is void if unauthorized repairs are made or attempted by unauthorized personnel.
- Avoid touching any electronic and optical components, avoid vibrations, do not cover the sensor and avoid proximity to neon lamps or moving objects.
- It is recommended to clean the optical parts at least once a year or more often if required due to environmental conditions.

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BEA hereby declares that the VIO-M1 is in conformity with European directives : 2014/53/EU (RED), 2011/65/EU (RoHS). The complete declaration of conformity is available on our website.

