7 Technical characteristics

Operating characteristics	B-TRH	B-MAG
Transmission type	Periodic temperature and humidity measurement	Magnetic event counter. Magnetic event detector: Immediate transmission upon change of sensor state
Frequency	2.4 GHz - Bluetooth Low Energy 4.0/4.2	
Electromagnetic field	< 0.5 V/m at 3 cm according to EN 62311	
Output Power	Up to +4 dBm (configurable)	
Range	Up to 500 meters open field (+4dBm)	
Transmission Period	Configurable from 0.1 sec to 10 sec	Configurable from 0.1 sec to 10 sec
Battery characteristics		
Power supply	3 VDC - Internal Lithium Battery	3 VDC - Internal Lithium Battery
Battery Life	Up to 16 years*	Up to 10 years*
Battery Level	Up to 500 meters open field (+4dBm)	
Measurement performance		
Range	Temperature: -40°C to +85°C Humidity: 0% to 100%	-
Resolution	Temperature: 0.01°C Humidity: 0.01%	-
Accuracy	Temperature: +/- 0.4°C Humidity: ± 5% (40% ... 100% RH)	-
Mechanical characteristics		
Casing materials	POM-C Heraform® R900 Compatible with food products (90/128/EEC)	
Weight	41 g	
Protection Index	IK06 according to EN 61010-1 §8.2.2	
Environmental characteristics		
Protection Index	IP 55	IP 68
Operating temperature	-40°C to +85°C	
Operating altitude	< 2000 m	
Use	Indoor	
Certifications		
Europe	CE: EN 300 328 / EN 300 330 / EN 301 489 / EN 61010	
Singapour	IMDA Standards [N4812-20]	-
RoHS	Yes	

* Refer to the battery life curves in instruction manual for more information.
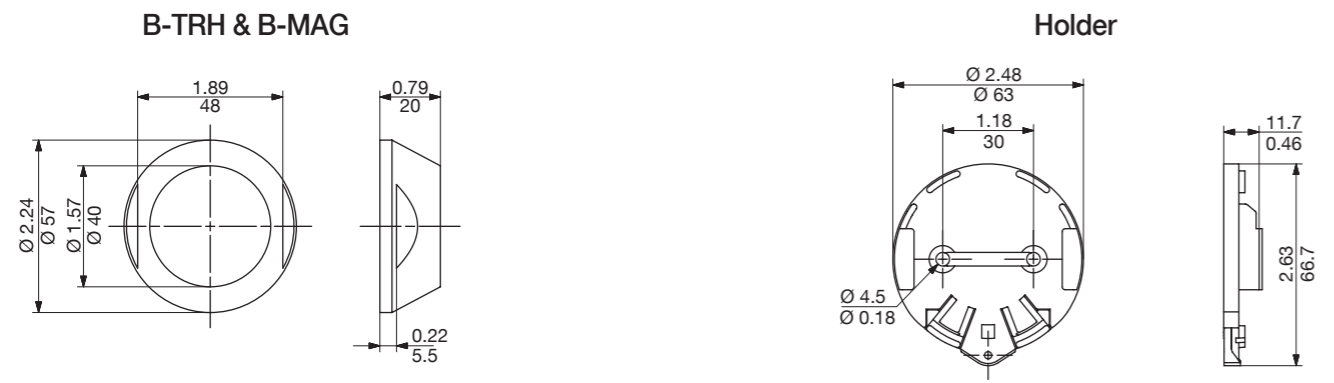
⚡ 🔥 | B-TRH and B-MAG Bluetooth sensors are not designed to be placed on busbars and must not be in contact with live bare parts.

🧲 ⚠ 🚫 | Be careful not to handle 2 magnets close to one another. Their attraction could cause injury and could damage nearby materials.

Full user manual:
www.socomec.com/
operating-instructions
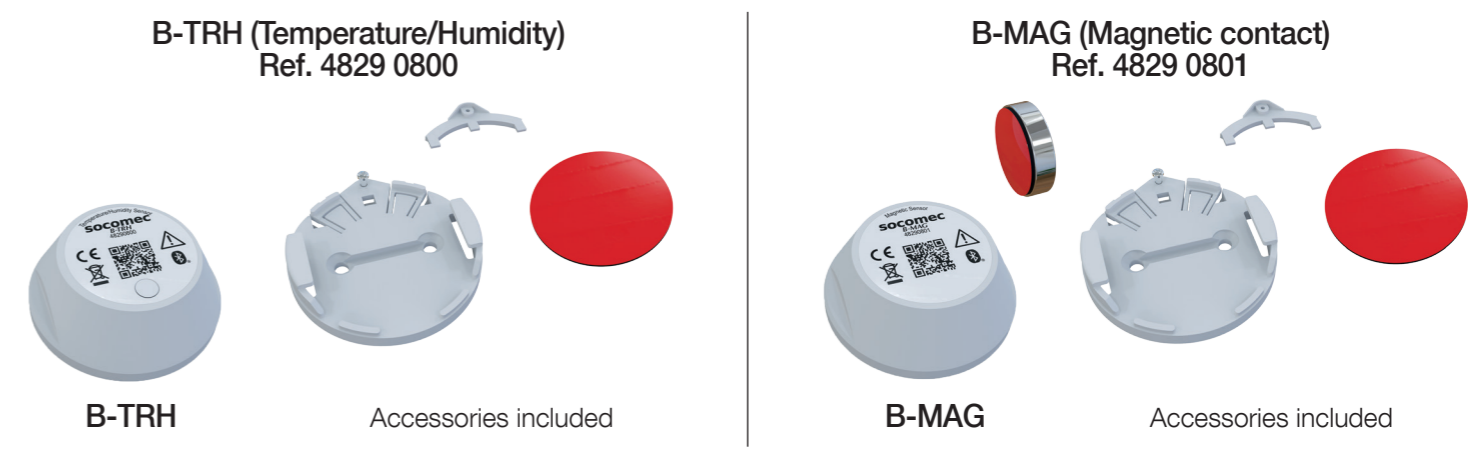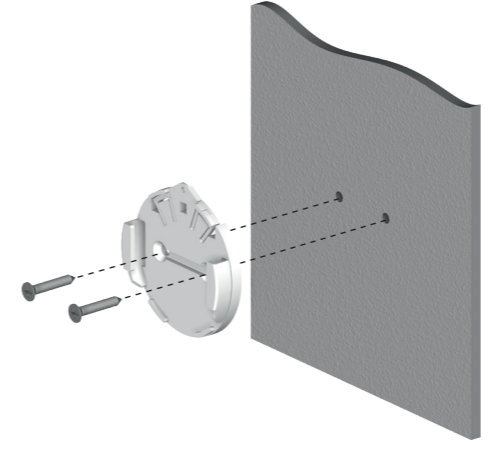www.socomec.com

Dimensions in/mm

B-TRH & B-MAG

1.89 / 48
0.79 / 20
Ø 2.24 / Ø 57
Ø 1.57 / Ø 40
0.22 / 5.5

Holder

Ø 2.48 / Ø 63
1.18 / 30
Ø 4.5 / Ø 0.18
11.7 / 0.46
2.63 / 66.7

551429B

Full user manual:
www.socomec.com/
operating-instructions
www.socomec.com

BLUETOOTH LOW ENERGY SENSORS ®

B-TRH (Temperature/Humidity) Ref. 4829 0800

B-TRH   Accessories included

B-MAG (Magnetic contact) Ref. 4829 0801
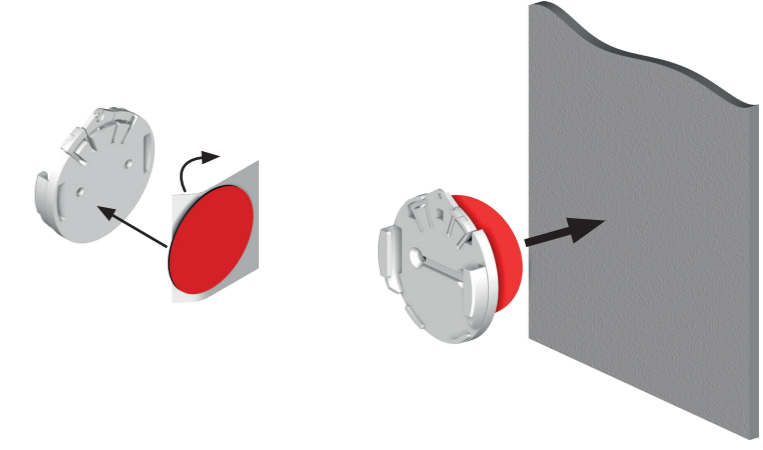
B-MAG   Accessories included
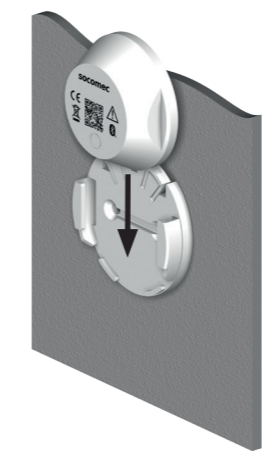
1 Fixing the holder to a back plate

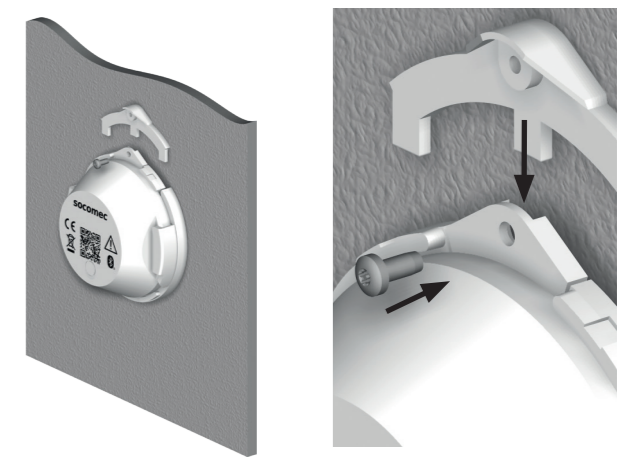**1a** With screws

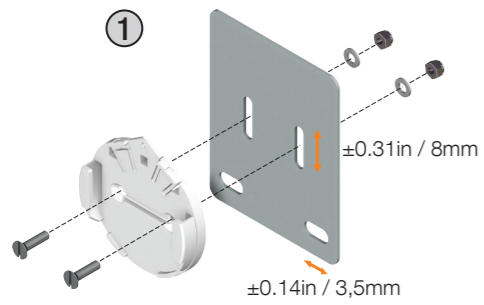**1b** With the double sided sticker

2 Fixing the B-TRH / B-MAG sensor
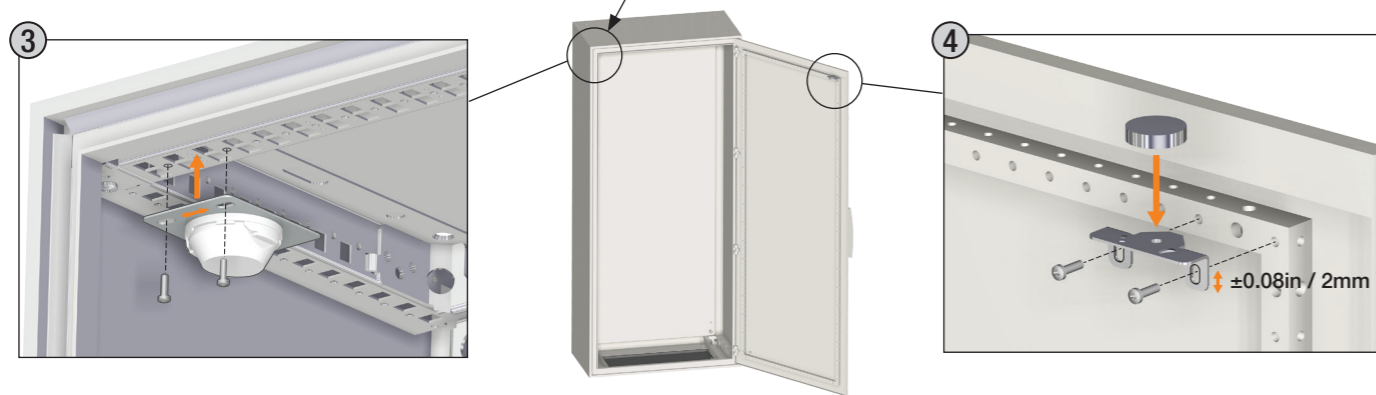
2a Inserting the sensor into its holder

2b Locking the sensor

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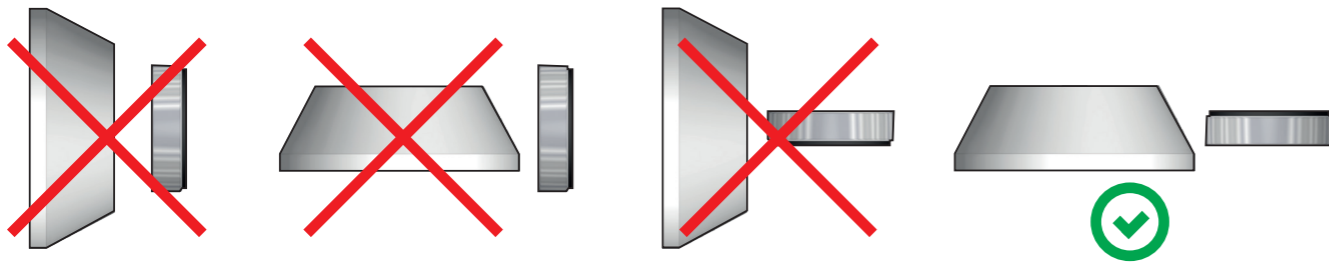**3** B-MAG accessories for installation inside electrical panel

① ±0.31in / 8mm
±0.14in / 3,5mm
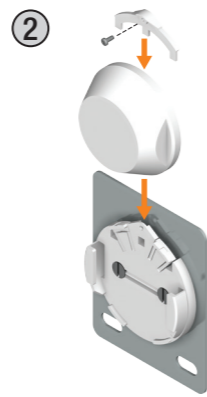
⚠ To ensure a proper magnetic contact detection, make sure to follow the positioning recommendations given in section 4.
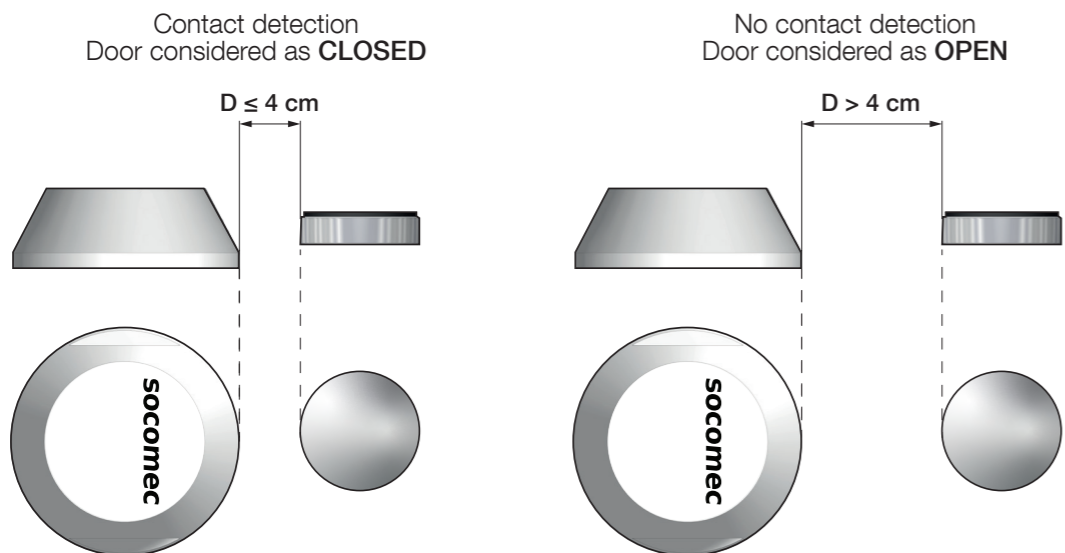
②

③

④ ±0.08in / 2mm

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4 B-MAG and magnet positioning

a. Position of magnet in relation to B-MAG sensor

✗ ✗ ✗ ✓

b. Maximum distance for magnetic contact detection

Contact detection
Door considered as **CLOSED**

D ≤ 4 cm

No contact detection
Door considered as **OPEN**

D > 4 cm

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5 Activating the Bluetooth sensor using a smartphone via NFC

Available on the App Store

GET IT ON Google Play

Step 1: Scan the QR code on the sensor to download the Activation App

Step 2: Activate the sensor following the instructions in the app.

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6 Association of Bluetooth sensors with DIRIS Digiware D-xx / M-xx

Option 1: Local association from HMI

Option 2: Remote association from webserver

WEBVIEW-M
Power & Energy Monitoring

⚠ It is recommended to turn off the Bluetooth of neighboring cell phones to improve the scanning and association process.