TECHNICAL DATA

Security Technology

BUS Dual Motion Detector EIM/XB and EIM/XC

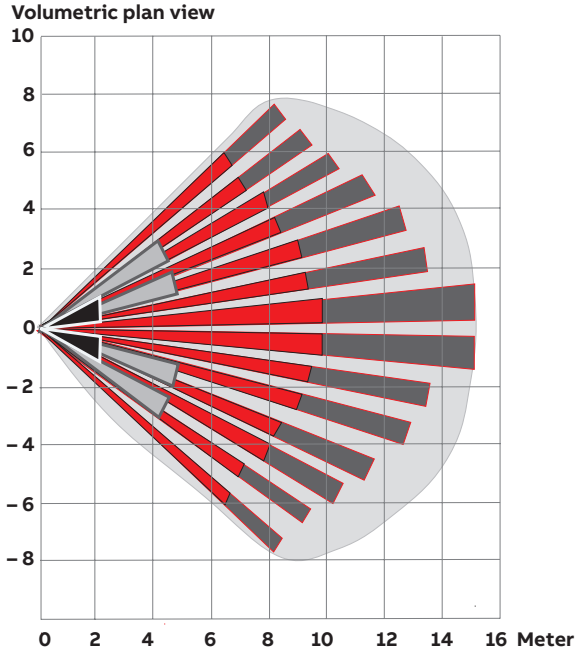
- Detector for Indoor Surveillance

Description of product

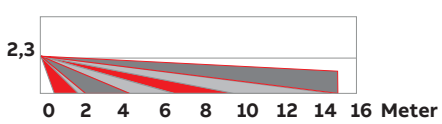
The EIM/X is a bus motion detector designed for indoor applications intended for connection to an ABB Intrusion Alarm Panel. The detector combines proven passive infrared technology with temperature-independent microwave technology. The combination of both functional principles results in a detector featuring high immunity to false alarms even with unfavourable ambient conditions and which still has high detection security.

The detector has 3 LEDs to indicate states which are externally visible. Furthermore, the detector features an alarm memory, an automatic self-test, a remote controlled walk test as well as anti-masking monitoring on the EIM/XC.

Volumetric plan view



Volumetric side view



Installation location
The recommended mounting height is 2.3 m.
The unit can be mounted between 2.1 m and 2.5 m without adjustment, when mounted on a vertical surface.

It should only be mounted on permanent, vibration-free walls. Large objects situated before the detector obstruct the detection range. The detector should not be subject to direct sunlight, heat sources and strong draughts (e.g. fans of air-conditioning systems) to prevent false alarms.

To prevent false operation of the anti-mask monitoring, no objects should be placed within a 1 m radius zone extending in front and below the detector. For example, do not mount the detector over a cupboard or door.

Preparation and mounting
To remove the cover the screw must be loosened (do not unscrew fully). Then insert a flat screwdriver into the slot underneath the screw and twist it.
When the detector is opened the electronic circuit board can be unlatched via the two catches at the top of the circuit board and removed simultaneously from the plug-in socket. On the lower housing section the selected cable entry points and mounting apertures can be knocked out.

Please note that mounting hole no. 6 must be used with the off the wall anti-tamper cup.

Introduce the cables, connect them and provide strain relief using the enclosed cable ties.

Completion of Assembly
The electronics are reinstalled after mounting the lower section.

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CAUTION
During all work the light-sensitive sensor may not be touched.

To refit the cover engage the upper half into the two catches and push both halves together (there will be an audible click) and then tighten the screws.

Connection of the bus see figure next page

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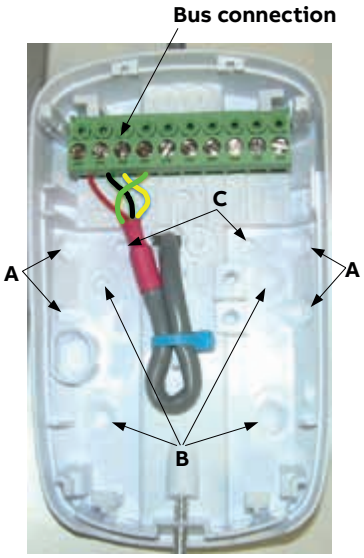
CAUTION
For all other settings – please consult the Intrusion Alarm System manual!

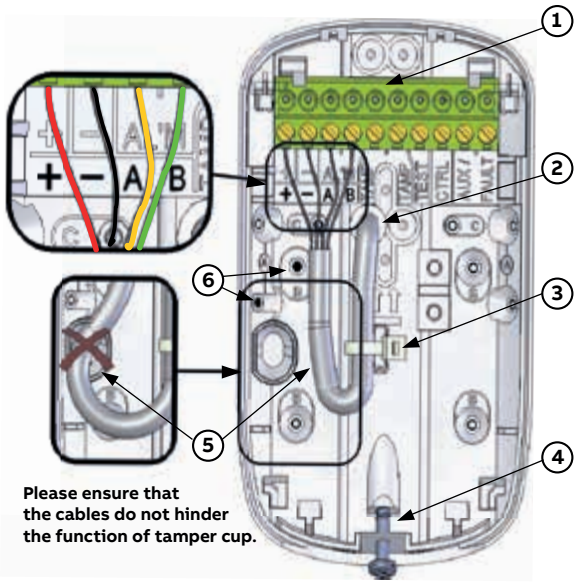
Please note for detectors with antimasking:
To prevent false operation of the anti-mask monitoring, no objects should be placed within a 1 m radius zone extending in front and below the detector. For example, do not mount the detector over a cupboard or door.

Stay at least 2 metres from the unit for 2 minutes while the AM system is calibrating.
Detector instantly calibrates at power up.

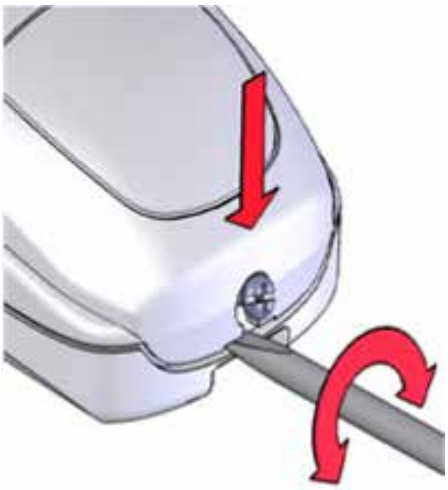
Mounting



A = Knockout for corner mounting
B = Knockout for wall mounting
C = Knockout for mounting bracket



1 = Terminal block
2 = Cable entry point
3 = Cable attachment point for cable tie
4 = Cover screw (loosen only – do not remove)
5 = Observe cable entry
6 = Position of mounting screws for wall – or corner mounting.
(Use is mandatory in conjunction with the off the wall tamper cup detection)



LED displays

When programmed compliant to VdS.

System set: No LED displays

System unset: LEDs activated with [Walk test] or via [Alarm]

Displays	
	Alarm trigger and undervoltage indications
	Microwave indications (MW)
	Infrared indications (PIR)
Indications after Power Up	
	Active IR Anti-mask system calibration - one flash every 3 s (EIM/XC only)
All other indications are fully active after 60 s after Power Up	
Indications of technical faults	
Displayed when unit is UNSET	
	Active IR Anti-mask system calibration fail - flickers quickly (only EIM/XC)
	Undervoltage fault - flashing at 1 Hz
	Microwave fault (MW) - continuously lit
	Infrared fault (PIR) - continuously lit
Indications when walk test enabled	
	Unit alarm triggered and NC Alarm Output is open - lit for 3 s (zone input triggered for 3 s)
	AM system has identified the PIR is masked - flashing at 3 Hz (only EIM/XC)
	AM system has identified the MW is masked - flashing at 3 Hz
Indications from memory function	
Displayed when unit is UNSET	
	Alarm triggered while last set - continuously lit (not in walk test mode)

Approvals
The BUS Dual Motion Detectors EIM/XB and EIM/XC are compliant to EN 50131 part 1.

Declaration of conformity
ABB declares that the BUS-IR Dual Motion Detectors EIM/XB and EIM/XC are certified and approved for use in AT; BE; CH; DK; DE; IE; LU; NL; PT. They are compliant with the fundamental demands of the EU Directive 2014/53/EU.

Intended purpose:	Intrusion detection within closed buildings.
Safety instructions:	The supply voltage must be protected by a separate fuse that is rated < 5 A.

Technical data	
Voltage	12 V (9 V ... 16 V DC)
Current EIM/XB	Quiescent: 9 mA Alarm without LED: 9 mA Alarm with LED: 12 mA
Current EIM/XC	Quiescent: 11 mA Alarm without LED: 11 mA Alarm with LED: 14 mA
Connection	Security bus
Microwave range	50 % to 100 % range, max.15 m Range adjustable via potentiometer (full turn clockwise for 100 %)
Temperature range	-10 °C to +55 °C, environmental class II
Weight	150 g
Dimensions	110 x 66 x 42
VdS approval	
EIM/XB EIM/XC (anti mask)	Klasse B Nr.: G110513 Klasse C Nr.: G110061

Ordering details

Device type	Product Name	Order No.	bbn 40 16779 EAN	Weight 1 pcs. [kg]	Packaging [pcs.]
EIM/XB	BUS Dual Motion Detector, 15 m, VdS class. B VdS-No. G110513	2CDG230025R0011	67879 7	0.15	1
EIM/XC	BUS Dual Motion Detector, 15 m, VdS class C VdS-No. G110061	2CDG230026R0011	67880 3	0.15	1
MW	Mounting Bracket	GHV9230039V0020	66580 6	0.03	1

Notes

Notes

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