EAE XD100 Presence Motion Brightness Sensor Instruction Manual

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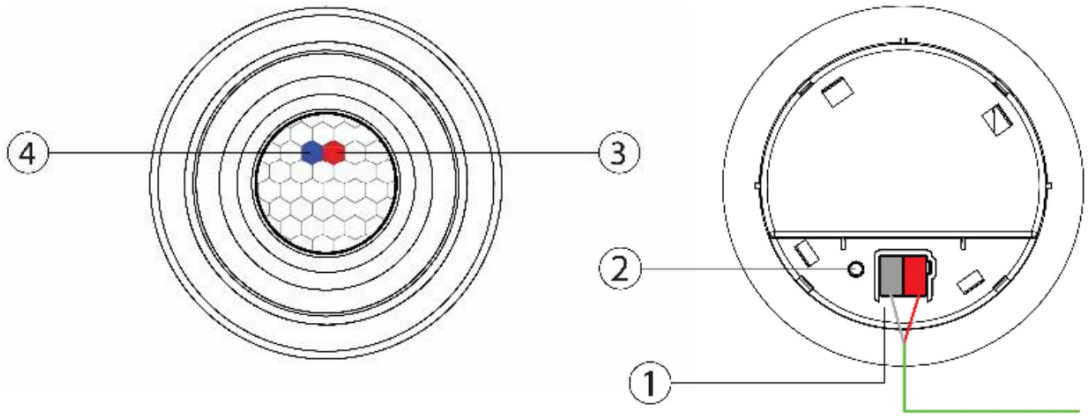
Installation Manual XD100 Flush Mount (PD100, MD100)

EAE KNX Presence/Motion & Brightness Sensor

Contents

Connection



1. KNX connection terminal
2. KNX programming button
3. Programming LED
4. Blue movement LED

Description of Devices

XD100 KNX Presence/Motion Sensors are ideal for interior rooms such as medium to large-size offices, classrooms, conference and meeting rooms, parking buildings, warehouses and sport halls. Detector is available in two models; “Presence Brightness Sensor PD100” and “Motion Brightness Sensor MD100”. Presence Sensor PD100 is suitable in order- to detect minor movements in a smaller detection range. On the other hand Motion Sensor MD100 is suitable to detect larger movements. Both models provide the following functions;

- Constant light function
- Corridor function
- Independent presence channel
- HVAC channel
- Master/Slave operation
- Fully automatic-semi automatic operating mode
- Test and calibration mode

Technical Data

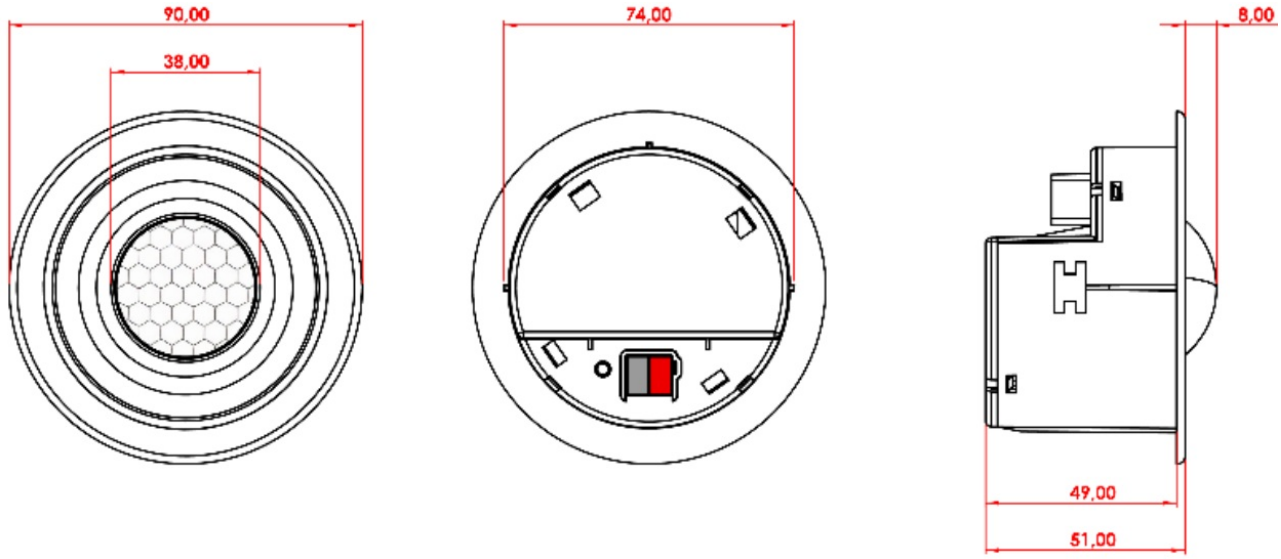
Type of protection	IP 20	EN 60 529
	IP 44 (Surface Mount only)	
Safety class	II	EN 61 140
KNX Supply (1)	Voltage	21 V… 30 V DC SELV
	Current Consumption	≤ 10 mA
Application Area	Interior rooms	
	Passive infrared	
Installation	Location	Ceiling
	Recommended height	2.5m – 5m
Detection PD100	Diameter (at height of 2.5m)	Angle: 360°
	9m movement detection	Light level: 10 – 1000 lux
Additional Channels	Brightness, presence channel, HVAC channel	
	Master/Master, Master/Slave	
Operating Elements	LED (red) and programming button to assign physical address	
	LED (blue) for displaying movement	
Temperature range	Ambien	– 5 °C + 45 °C
	Storage	-25 °C + 55 °C
	Transport	-25 °C + 70 °C
Humidity	Max. air humidity condensation 95 % no moisture	
Dimensions	90 x 51 x 74 mm	
Weight	80 g	
Box	Plastic, polycarbonate, white colour	
CE	In accordance with the EMC guideline and low voltage	
Application Program	Communication Object	44
	Number of Addresses(max)	254

Operation and Display

- **Programming Led (3)**
  Red led lights up after the programming button is pressed.
- **Movement Led (4)**
  Blue led lights up when a motion is detected.

Installation

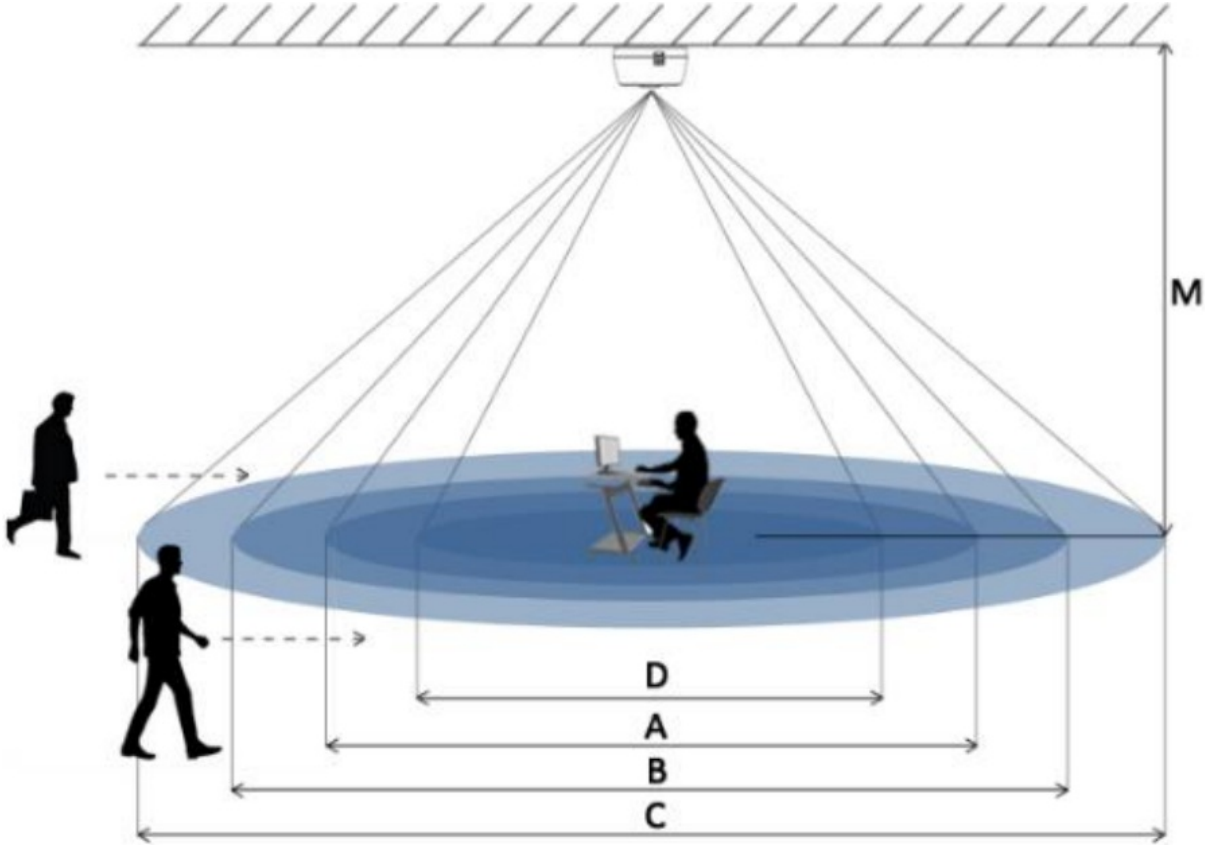
Use a hole saw with diameter of 76 mm in order to install the box of sensor on the ceiling. KNX connector must be connected to the KNX connection terminal. Ensure that coloured cables are connected to terminals accurate.



Detection range depends on movement types. These types are divided as follows;
A) Sitting position in working desk height (0,8m)
B) Walking straight to the detector
C) Walking across the detector
D) Area of the brightness measuring in working desk height (0,8m)

Table 1 – MD100				
M	**A**	**B**	**C**	**D**
5.0m	**–**	**9 m**	**15 m**	**Ø3.0**
4.0m	**–**	**8 m**	**13 m**	**Ø2.3**
3.5m	**–**	**7,5 m**	**12 m**	**Ø2.0**
3.0m	**–**	**7 m**	**10,5 m**	**Ø1.6**
2.5m	**–**	**6,5 m**	**9m**	**Ø1.2**
5.5m	**–**	**12m**	**18m**	**Ø3.3**

Table 2 – PD100				
M	**A**	**B**	**C**	**D**
4.0m	**7,8 m**	**7 m**	**12 m**	**Ø2.3**
3.5m	**7,3 m**	**6,5 m**	**10 m**	**Ø2.0**
3.0 m	**6 m**	**6 m**	**8 m**	**Ø1.6**
2.5m	**5 m**	**5 m**	**6 m**	**Ø1.2**



Detection Range

Commissioning

Determination of the physical address and setting of parameters are actualized with Engineering Tool Software (ETS5 or higher). ".knxprod" file must be imported to the ETS. Please check website for latest ".knxprod" file.

www.eaetechnology.com A detailed information about parameter configuration can be found in Product Manual of device.

Installation and commissioning of device may only be implemented by trained electricians. The relevant standards, directives, regulations and instructions must be observed when planning and implementing the electrical installation.

- When connecting the device make sure that the device is isolated!
- Protect the device against moisture, dirt and damage during transport, storage and operation!
- Do not operate the device out of the specified technical data which is stated.
- The device may only be operated in closed enclosures (Distribution boards etc.)

Cleaning

If device becomes dirty, only a dry cloth can be used for cleaning. It is not suitable to use wet cloths, caustics and solvents.

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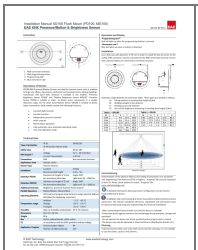
Documents / Resources

	EAE XD100 Presence Motion Brightness Sensor [pdf] Instruction Manual XD100, PD100, MD100, XD100 Presence Motion Brightness Sensor, Presence Motion Brightness Sensor, Motion Brightness Sensor, Brightness Sensor, Sensor

References

- EAE Technology – KNX Akıllı Ev Sistemi, Aydınlatma Otomasyonu
- EAE Technology – KNX Akıllı Ev Sistemi, Aydınlatma Otomasyonu
- User Manual