

**Motion detector mini basic**

Art. no.: BM360MBWW

**Operating instructions****1 Safety instructions**

Electrical devices may only be mounted and connected by electrically skilled persons.

Serious injuries, fire or property damage possible. Please read and follow manual fully.

Danger of electric shock. During installation and cable routing, comply with the regulations and standards which apply for SELV circuits.

Do not press on the sensor window. Device can be damaged.

The device is not suitable for use as a burglar alarm or other alarm.

These instructions are an integral part of the product, and must remain with the end customer.

**2 Intended use****Intended use**

- Brightness-independent detection of motion indoors.
- Connection to the KNX devices mentioned under accessories e.g. Multistation or push button interface for the automatic switching of loads.
- Power supply via the unchoked output of a KNX power supply or power supply unit with safety extra-low voltage (SELV).
- Clamp mounting in suspended ceilings.
- Ceiling mounting on fixed ceilings in appliance box according to DIN 49073 or surface-mounted housing (see accessories)

**3 Function**

- Brightness-independent detection of motions in the detection field
- Switch on: After detecting motion
- Switch off: No motion in the detection field and run-on-time elapsed
- Potential-free electronic switching contact

**4 Information for electrically skilled persons****4.1 Fitting and electrical connection****Selecting installation location**

The motion detector is installed on the ceiling and monitors the surface under it.

- Select a vibration-free installation location. Vibrations can lead to unwanted switching.
- Avoid interference sources in the detection area. Interference sources, e.g. heaters, ventilation, air conditioners, and cooling light bulbs can lead to unwanted detections.

**i** If necessary, the detection field can be limited using the push-on cover in order to minimize the influence of interference sources.

## Motion detection

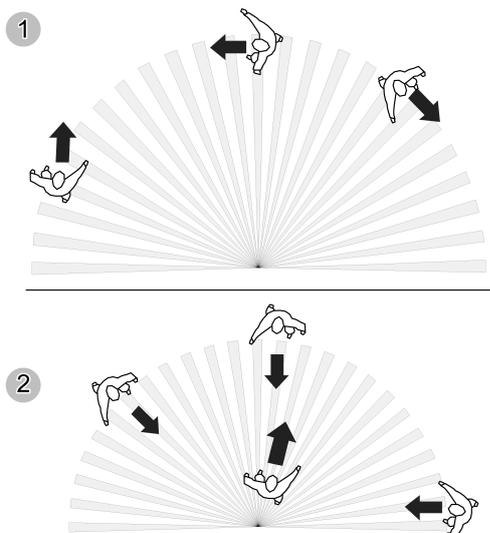


Figure 1: Tangential and radial direction of motion

The device has a detection field of 360°. The diameter of the detection field depends on the installation height and the direction of motion of persons in the detection field (Figure 1). The detection field becomes larger the greater the installation height, while the detection density and sensitivity are reduced at the same time. The following applies to an installation height of 3 m:

- 1: Range for tangential motion on the ground  $\varnothing$  approx. 6 m
- 2: Range for radial motion on the ground  $\varnothing$  approx. 5.5 m



### DANGER!

Electrical shock on contact with live parts in the installation environment.

Electrical shocks can be fatal.

Before working on the device, disconnect the power supply and cover up live parts in the working environment.

### Create a mounting opening in the suspended ceiling

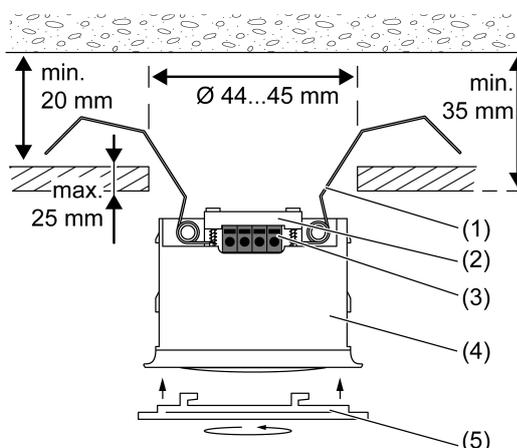


Figure 2: Mounting in the suspended ceiling

- (1) Spring clamp
- (2) Cable fixation

- (3) Terminal
- (4) Motion detector
- (5) Design ring

The environment in the suspended ceiling must be dry.

Max. thickness of the suspended ceiling approx. 25 mm. Installation depth min. 35 mm. Distance between concrete ceiling and suspended ceiling min. 20 mm (Figure 2).

- Create ceiling cut-out Ø 44...45 mm(Figure 2).

### Connecting the device

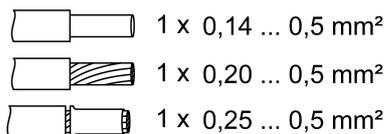


Figure 3: Clampable conductor cross-section

Recommended line J-Y(St)Y 2×2×0.8 (2 wire pairs, conductor diameter 0.8 mm this corresponds to a conductor cross-section of 0.5 mm²).

For the cable length, also observe the information in the instructions for the device to be connected.

- Use the unchoked output of a KNX power supply or power supply unit with safety extra-low voltage as power supply.
- Connect the connection cable to device connection terminal (3) (Figure 2).

### Connection in general

#### Terminal assignment of motion detector

Terminal	Connection
DC24V +	Power supply +
DC24V –	Power supply GND
A+	Switching output +
A–	Switching output –

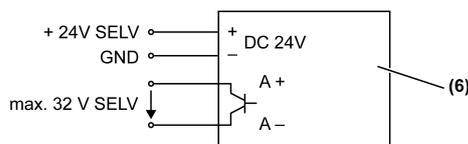


Figure 4: Connection in general

For connection diagrams for various KNX devices, see accessories

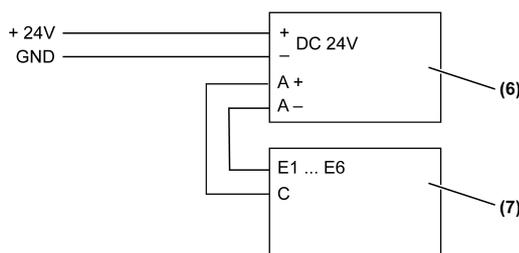


Figure 5: Connection to Multi station

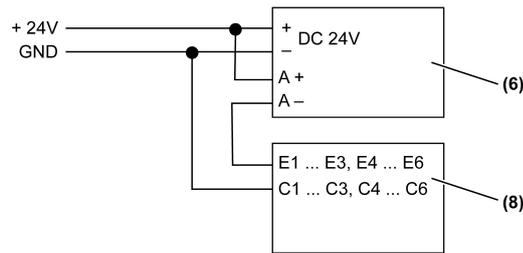


Figure 6: Connection to Binary input 6-gang

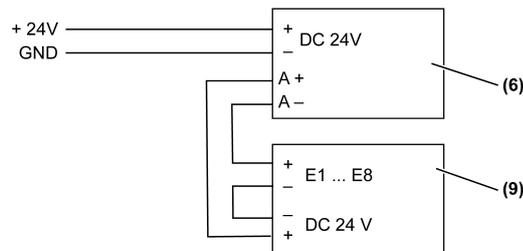


Figure 7: Connection to Binary input 8-gang, 230 V

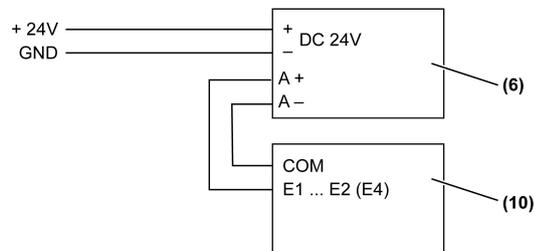


Figure 8: Connection to Push-button interface, 2-gang, Push-button interface, 4-gang

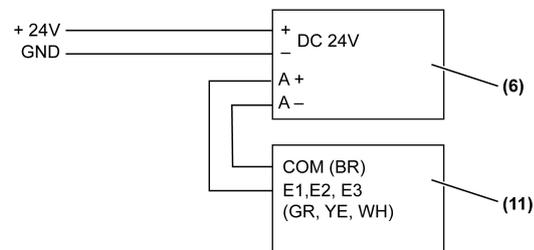


Figure 9: Connection to Flush-mounted blinds actuator, 1-gang with satellite input

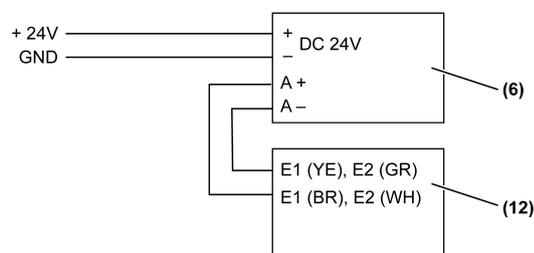


Figure 10: Connection to Switch actuator, 2-gang

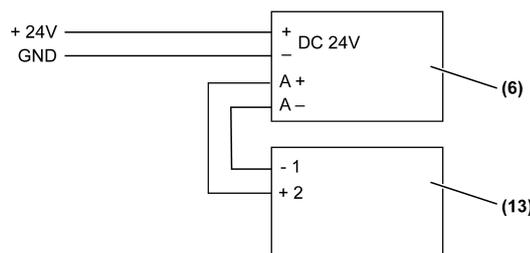


Figure 11: Connection to Valve drive (motor-operated) with controller

- (6) Motion detector mini basic
- (7) Multi station, Art. no.: 23066REGHE
- (8) Binary input 6-gang, Art. no.: 2116REG
- (9) Binary input 8-gang, 230 V, Art. no.: 2118REG
- (10) Push-button interface, 2-gang, Art. no.: 2076-2T/Push-button interface, 4-gang, Art. no.: 2076-4T
- (11) Flush-mounted blinds actuator, 1-gang with satellite input, Art. no.: 2501 UP
- (12) Switch actuator, 2-gang, Art. no.: 2132.6UP
- (13) Valve drive (motor-operated) with controller, Art. no.: 2177SVR

#### Mounting the device in the suspended ceiling

- Secure the connection cable with the enclosed cable fixation (2) (Figure 2).
- Bend back the spring clamps (1) and push the motion detector (4) into the suspended ceiling (Figure 2).
- Attach the large design ring (5) and rotate it in clockwise direction (Figure 2).

## 5 Technical data

Rated voltage	DC 24 ... 32 V SELV
Standby power	< 0.1 W
Current consumption	max. 4 mA
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C
Relative humidity	10 ... 100 % (no moisture condensation)
Protection class	III
Degree of protection	IP44
Detection angle	360°
Installation height	3 m
Detection field	Ø approx. 6 m
Run-on time	approx. 10 s
Switching output	
Electric strength	40 V
Current carrying capacity	max. 50 mA
Connected load	max. 150 mW
Dimensions	
Dimensions Ø×H	53.5 × 38 mm (with design ring)
Ceiling cut-out Ø×D	44 × 35 mm
Cable length	max. 30 m

## 6 Accessories

Power supply 160 mA	Art.-no.: 20160REG
Power supply 320 mA	Art.-no.: 20320REG
Power supply 640 mA	Art.-no.: 20640REG
Power supply 1280 mA	Art.-no.: 21280REG
Multi station	Art.-no.: 23066REGHE
Binary input 6-gang	Art.-no.: 2116REG
Binary input 8-gang, 230 V	Art.-no.: 2118REG
Push-button interface, 2-gang	Art.-no.: 2076-2T
Push-button interface, 4-gang	Art.-no.: 2076-4T
Flush-mounted blinds actuator, 1-gang with satellite input	Art.-no.: 2501 UP
Switch actuator, 2-gang	Art.-no.: 2132.6UP
Valve drive (motor-operated) with controller	Art.-no.: 2177SVR
Flush mounting set	Art.-no.: PMM-UP-SET-WW
Surface mounting set	Art.-no.: PMM-AP-SET-WW

## 7 Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade.

### **ALBRECHT JUNG GMBH & CO. KG**

Volmestraße 1  
58579 Schalksmühle  
GERMANY

Telefon: +49 2355 806-0  
Telefax: +49 2355 806-204  
kundencenter@jung.de  
www.jung.de