B.E.G. LUXOMAT® Indoor 180-R/-T

Operating and mounting instruction B.E.G. motion detector Indoor 180-R and Indoor 180-T

1. Product information

- Wall motion detector with acoustic sensor
- **Indoor 180-R:** Relay version in 3-conductor engineering for inductive, capacitive and ohmic loads
- **Indoor 180-T:** Triac version with 2-wire technology, no neutral
- **Indoor 180-T:** Only for resistive loads
- Individually adjustable acoustic sensor
- Automatic restart of follow-up time on movement and sound
- Available with surround (interior cover dimensions 60 x 60 mm) or without surround for use with faceplate (interior cover dimensions 50 x 50 mm) in 5 different colours
- Centre plates are available for installation in different manufacturers' switch systems: see accessories
- Push button manual switching available

2. Operation

The motion detector switches the light automatically, depending on people being present (movement) and on ambient light.

The motion detector switches the light on if the ambient light level is below a brightness threshold (which can be set on the device) and movement is detected.

The motion detector switches off again once no more movement is detected within a follow-up time, i.e. it remains switched on as long as it detects movements (independent of the light level).

As well as a PIR sensor for motion detection, the device also has an additional acoustic sensor. Motion detection is always required first for switching on the lighting. When it is switched on, a follow-up time starts, which restarts when either sound or motion is detected. After the follow-up time has expired and therefore the lighting has switched off, there is an additional duration of 9 sec. in which the lighting may be switched on again by sound.
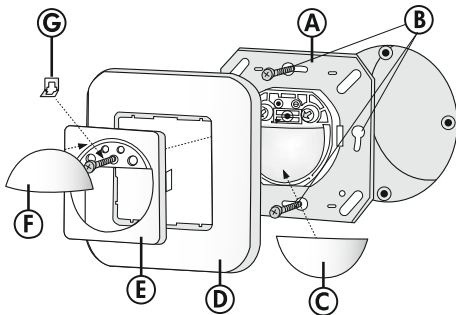
3. Safety information

⚠ **Work on the 110 - 240 V mains supply may only be carried out by qualified professionals or by instructed persons under the direction and supervision of qualified skilled electrical personnel in accordance with electrotechnical regulations.**
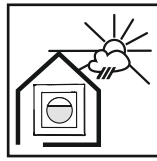
⚠ **Disconnect supply before installing!**

⚠ **This device is not suitable for disconnection.**
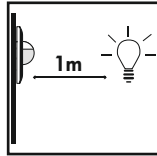
4. Mounting

(A) Sensor insert
(B) Mounting screws
(C) Blinds for the exclusion of interference sources (Animals, small children …)
(D) Frame
(E) Cover
(F) Cover-cap
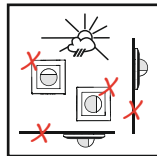**(G)** Vandal-proofing of potentiometer cover against unwanted removal

⚠ The connected load must not exceed the following values:
180-T (Triac version):
Incandescant / halogen lamps min. 40 - max. 300 W
180-R (Relay version):
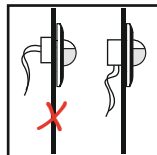2300 W, cos φ = 1
1150 VA, cos φ = 0,5

Install the unit in a protected position, for wall mounting at a height of 1.10 to 2.20 m.

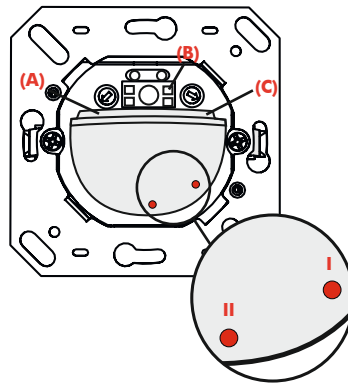Minimum distance to lighting being controlled, to the front or to the side of the unit: 1 m

Inappropriate installation or use will interfere with trouble-free operation or lead to damage to the unit.

Suitable for installation in a 60 mm flush-mount box. The cable inlet should be vertical.

5. Hardware configuration
Position LEDs and Potentiometer

Potentiometer **(A)**: Potentiometer for Brightness setting
Potentiometer **(B)**: Potentiometer for Acoustic sensor
Potentiometer **(C)**: Potentiometer for Follow-up time

LED **I**: red
LED **II**: red (Acoustic sensor)

6. Self test cycle/Startup behavior
The product enters an initial 60-second self-test cycle, when the supply is first connected (LEDs flash).

7. Putting into operation/Settings

Brightness threshold (Potentiometer A)
The brightness set value can be defined between 40 and 2000 Lux. Using the rotary control, the luminance set points can be set as desired.

Symbol ☾: Night-time operation (10 Lux)
Symbol ☼: Day-time operation (light evaluation inactive)

Follow-up time for light control (Potentiometer B)
The time can be set infinitely variably between 15 sec. and 16 min.

Symbol **TEST**: test mode, only motion-dependent. Every movement switches the light on for 1 sec., then off again for 2 sec.
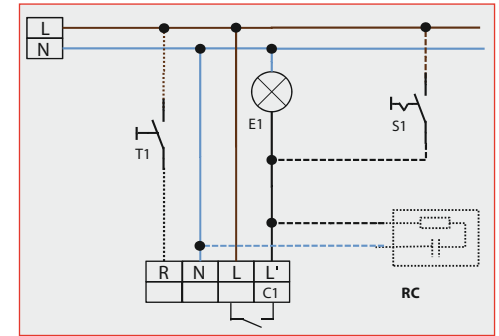Symbol ⊓: approx. 1 sec. on, 9 sec. off

Acoustic sensor
The sensitivity of the acoustic sensor is infinitely adjustable with the rotary control (Left position = max. sensitivity, Right position = acoustic sensor off).
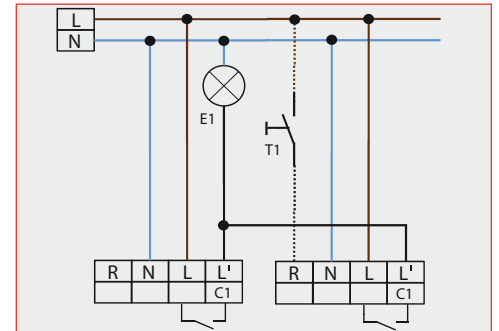
8. Wiring diagrams

Standard mode with 1-channel motion detectors Indoor 180-R and optional arc extinction kit

Optional
S1 = switch for permanent light
T1 = NO button, manual switching additionally possible
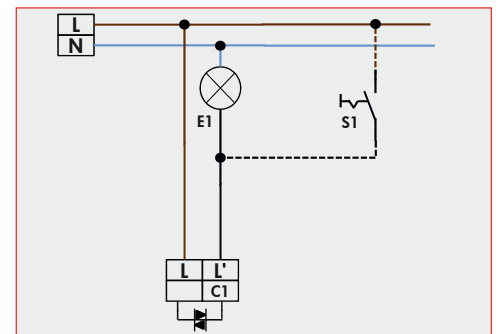RC = RC-suppression kit if required

Parallel connection with 1-channel motion detectors Indoor 180-R (max. 8 parallel)

Optional
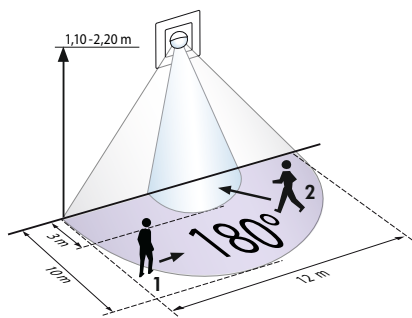T1 = NO button, manual switching additionally possible
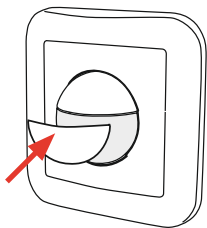
Standard mode with 2-wire technology, triac

Optional
S1 = switch for permanent light

9. Range

1,10 - 2,20 m

180°

3 m
10 m
12 m

1 ☐ Walking across
2 ☐ Walking towards

10. Exclude sources of interference

To hide the detection area below the detector (f.e. animals/small children), the enclosed Blind can be mounted or attached on it.

11. Technical data

11a. Technical data Indoor 180-R

Power supply:	110 – 240 VAC, 50/60 Hz
Power consumption:	approx. 0.5 W
Area of coverage:	semicircular 180°
Range of coverage Ø H 1.10 m / T = 18°C:	
	tangential 10 m / radial 3 m
Max. mounting height:	2.2 m
Degree of protection/class:	IP20, with accessory IP54 / II
Ambient temperature:	-25°C – +50°C
Housing:	UV- and shock resistant polycarbonate
Dimensions:	H 87 x W 87 mm (with cover frame)

• Channel 1 for light control

Switching power / contact	2300 W, cos φ= 1 1150 VA, cos φ= 0,5 NOC/with pretravel tungsten contact
Follow-up time:	15 sec. to 16 min. or pulse
Brightness threshold:	10 - 2000 Lux

11b. Technical data Indoor 180-T

Power supply:	110 – 240 VAC, 50/60 Hz
Power consumption:	approx. 1.3 W
Area of coverage:	semicircular 180°
Range of coverage Ø H 1.10 m / T = 18°C:	
	tangential 10 m / radial 3 m
Max. mounting height:	2.2 m
Degree of protection/ class:	IP20, with accessory IP54 / II
Ambient temperature:	-25°C – +50°C
Housing:	UV- and shock resistant polycarbonate
Dimensions:	H 87 x W 87 mm (with cover frame)

• Channel 1 for light control

Switching power / contact	only incandescent / halogen lamps min. 40 - max. 300 W, cos φ= 1
Follow-up time:	15 sec. to 16 min. or pulse
Brightness threshold:	10 - 2000 Lux

C E **Declaration of Conformity:**

This product respects the directives concerning

1. electromagnetic compatibility (2004/108/EU)
2. low voltage (2006/95/EU)
3. restriction of the use of certain hazardous substances in electrical and electronic equipment (2011/65/EU)

12. Article / Part-No. / Accessory

Type	Part-No.
Indoor 180-R, covering included	92623
Indoor 180-T, covering included	92622
Indoor 180-R, covering not included	92665
Indoor 180-T, covering not included	92664

Accessory:

Covering IP20	pure white, mat RAL9010	92630
Covering IP20	traffic white, mat RAL9016	92631
Covering IP20	oyster white, mat RAL1013	92632
Covering IP20	silver, mat RAL9006	92633
Covering IP20	anthracite, mat RAL7021	92634
Covering IP54	pure white, mat RAL9010	92139
SM-Socket for Indoor	pure white, brilliant RAL9010	92141
Central plate 55x55mm	pure white, brilliant RAL9010	39222
Central plate 55x55mm	traffic white, brilliant RAL9016	39223
Central plate 56x56mm (angular)	pure white, brilliant RAL9010	35126
Central plate 56x56mm (rounded)	pure white, brilliant RAL9010	35127
Central plate 45x45mm	traffic white, mat RAL9016	38947
Central plate 45x45mm	cream white, mat RAL9001	39076
Blinds vertical/ horizontal detection	transparent	92294

13. LED-functional indicators

LED function indicators during operation	
Process	**LED function indicators**
Mains power restored	Self-test: LED I flashes red regularly for approx. 60 seconds
Motion detection	LED I flashes red on every movement detected
Sound detection	LED II flashes red on every sound detected