B.E.G. LUXOMAT® LC-plus 280
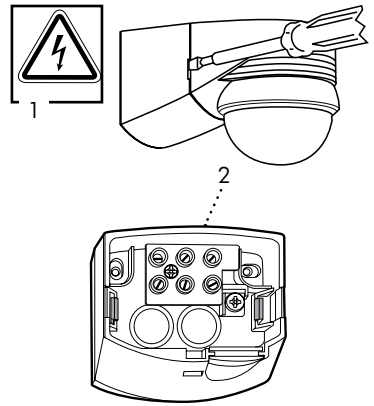
Operating and mounting instructions for motion detector LUXOMAT® LC-plus 280
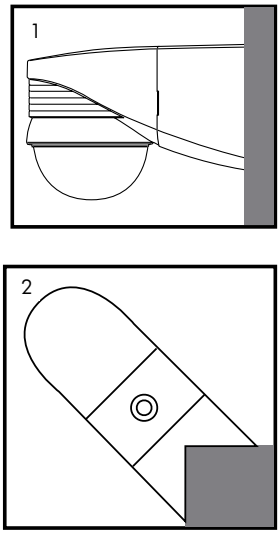
1. Mounting preparations

1) **Caution: have all work involving the 230 V mains supply carried out by a qualified electrician! Before starting disconnect the mains! Please be aware, that the LUXOMAT® LC-plus 280 is not suitable as an intrusion detector, since it is not equipped with a tamper contact.**
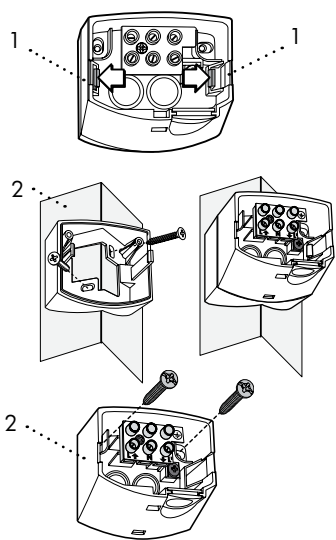2) Socket base corner mounting

Important: The **LUXOMAT®** LC-plus 280 has to be mounted in such a way, that the adjusting elements / rotary regulators are always pointed downward.
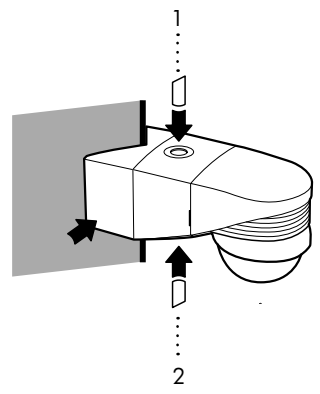
2. Mounting types

1) Wall mounting
2) Outside corner mountable with plug-in socket (included)

3. Plug-in socket

1) Press here for separation of terminal case and plug-in socket
2) Mount the plug-in socket with two screws and the enclosed seal rings on a firm base (Pay attention to inserting of the connection cable, see point 4)

4. Inserting of the connection cable

1) Connection cable from top down
2) Connection cable from below
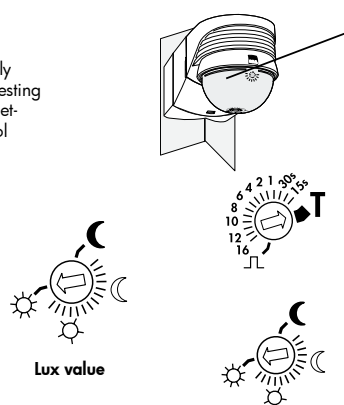3) Terminal markings (Wiring diagrams see point 16)

L N L'
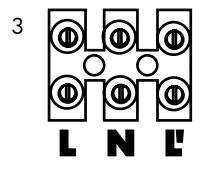
5. Putting into operation / Settings

Self test cycle

After mounting and connecting the 230 VAC supply voltage, the LED flashed for 1 min. to show a self testing unit. Then the unit is ready for operation and the settings can be made manually or with remote control (see point 11).
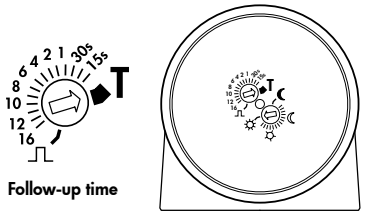
Follow-up time

Lux value

LED Functional display
Slow flashing: EEPROM empty
Fast flashing: EEPROM is written
During the self-testing cycle, the **LUXOMAT®** LC-plus 280 will only react to commands "RESET" and "LIGHT OFF"

Follow-up time
Test operation, 15 sec. … 16 min., Pulse operation
(Test operation: range testing, detector switches on/off the lighting at any recognized movement)

Lux value
Night operation…Dusk…Day operation
(Day operation: light sensor inactive, switching at any brightness value)

6. Factory settings

☀ & "TEST"

On delivery the potentiometers are adjusted in position "TEST" and "SUN" symbol (daytime operation). With this adjustments the following regular values are active:

Follow-up accommodation: 3 min.
Lux value: approx. 20 Lux

Reset: The adjusting into "Factory settings" from any other position causes a "Reset" of the device. That means all parameters are resetted into factory settings (fast LED-flashing).

7. Sensor head optics
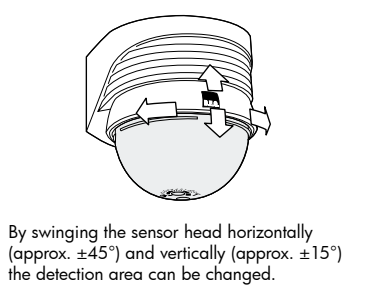
By swinging the sensor head horizontally (approx. ±45°) and vertically (approx. ±15°) the detection area can be changed.

8. Sensitivity adjustment (mounting height 2.50 m); mounting height min. = 2.00 m
(Sensor head justified horizontally, see point 7)

200° 16 m
280° 16 m
2.50 m
280°
20 m
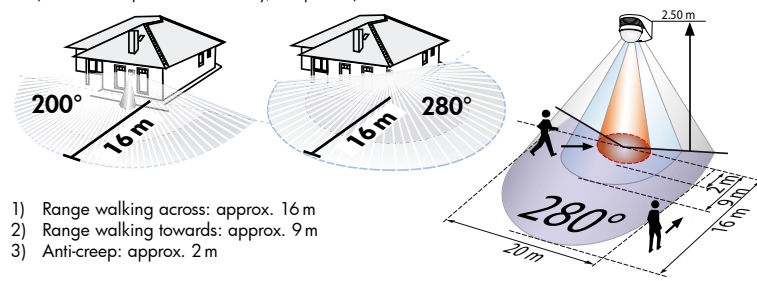
1) Range walking across: approx. 16 m
2) Range walking towards: approx. 9 m
3) Anti-creep: approx. 2 m

9. Exclude sources of interference
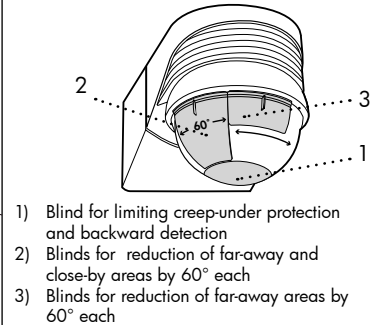
1) Blind for limiting creep-under protection and backward detection
2) Blinds for reduction of far-away and close-by areas by 60° each
3) Blinds for reduction of far-away areas by 60° each

10. Mounting place
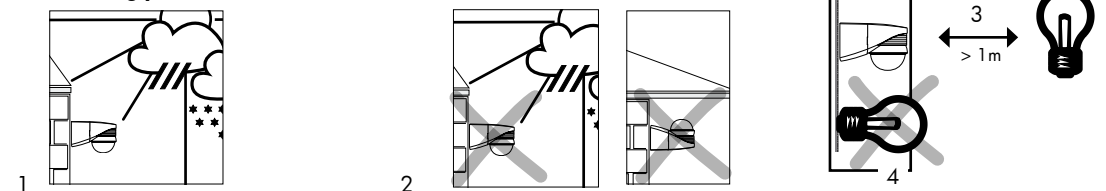
1) If possible mount unit on a safe place (wall or ceiling mount).
2) Influence of weather reduces the lifetime of the unit. Please take care to mount correctly.
3) Minimum distance to switched lighting, frontally or laterally to device: 1 m
4) Never mount the connected lights below the motion detector!

11. Settings of remote control
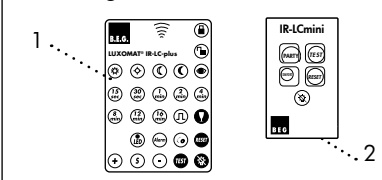
IR-LCmini

1) **LUXOMAT®** IR-LC-plus (accessory, see point 20)
2) **LUXOMAT®** IR-LCmini (accessory, see point 20)

Caution: Settings with remote control subscribe the settings by courtesy of potentiometers (see point 5) (for description see point 12).

12. Functions of LUXOMAT® IR-LC-plus

Unlocking device

Lux value: Day operation
light sensor inactive, switching at any brightness value

Lux value: approx. 100 Lux
Onset of dusk

Lux value: approx. 25 Lux
Advanced dusk

Lux value: approx. 2 Lux
Darkness

Automatic reading in the current light value
Individual light value
2 - 2500 Lux

Follow-up time
15 sec. up to 16 min.

Impulsfunction[1]
1 sec. ON, 9 sec. OFF

Walk test
Switching ON/OFF

Alarm function
Switching ON/OFF,
(ON for 30 sec., OFF for 1 sec., then normal operation)

Vacation- and comfort function
Switching ON/OFF
On: By achieving the Lux value 1 hour daylight independent of movements, then normal operation (switching time changeable, see point 15)

Sensitivity adjustment
~ +15 %, ~ −30 %

Reset
Erasing of all of the values set using the remote control. (Then potentiometer-settings active, see point 5)

Lock device

Double Locking (sabotage protection)
Locking of IR-RC-reception. After locking the device press "Locking" again during a period of 5 sec. (reset see point 6)

Test operation
Switches the light ON/OFF when movement is detected.

Light ON for 12 h[2] / Light OFF for 12 h
By pressing once the party button, the light is switched on for a period of 12 hours. By pressing the party button twice, the light remains switched off until the next evening (see point 14).

Light OFF
Switches the light ON again when movement is detected.

Reset
Light OFF, then automatic mode

[1] As soon as the function "Chime / Impulse" is activated, the following functions will be blocked: Alarm function, Light ON for 12 hrs / Light OFF for 12 hrs, Vacation- and comfort function

[2] Light ON for 12 h can also be activated by disconnection mains twice within 2 - 4 sec.

13. Functions of LUXOMAT® IR-LCmini

Test operation
Switches the light ON/OFF when movement is detected.

Light ON for 12 h / Light OFF for 12 h
By pressing once the party button, the light is switched on for a period of 12 hours. By pressing the party button twice, the light remains switched off until the next evening (see point 14).

Light OFF
Switches the light ON again when movement is detected.

Vacation- and comfort function
Switching ON/OFF
On: By achieving the Lux value 1 hour daylight independent of movements, then normal operation (switching time changeable, see point 15)

Reset
Light OFF, then automatic mode

14. Activation "Light OFF"

Because of the sabotage protection the function "Light off" is deactivated in the factory. When required it must be activated again:

1. Mains to be disconnected
2. Mains to be connected - a self test cycle of 60 sec. starts (the LED is flashing, see point 5).
3. Activation/deactivation of the function "Light Off" can be done only during the self testing cycle

For activation of the function "Light OFF" the button "Light OFF" must be pressed during the self testing cycle (the LED will flash quickly).

For deactivation "Light OFF" the button "Reset" must be pressed during the self testing cycle (the LED will flash slowly).

Caution: The implementation of "Reset" with potentiometers (see point 6) or with remote control (see point 12) does not influence the activation/deactivation of the function "Light OFF"

15. Vacation- and comfort function

The duration of the on-period can be adjusted:

1. "Unlock" unit with remote control
2. The button "Co" to be operated. The LED flashes for 10 sec.
3. During these 10 seconds the duration of the light-on period can be selected: from e.g. 15 sec. = 15 min. up to 16 min. = 16 hrs.
4. The unit to be locked with the button "Lock".
5. "Vacancy/Comfort" is activ now (deactivation see point 12)

Caution: If the "Vacation- and comfort function" is active or with lower deviation of the Lux value the LC-plus turns on the light again after a time delay of 60 sec.

16. Wiring diagrams

Standard operation (with optional arc extinctions kit)
Optional extension for switching of parallel inductors, rocker switches, fluorescent lamps etc.
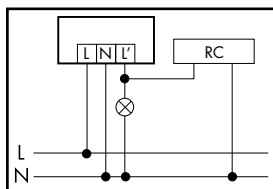
Terminal connection for parallel operation
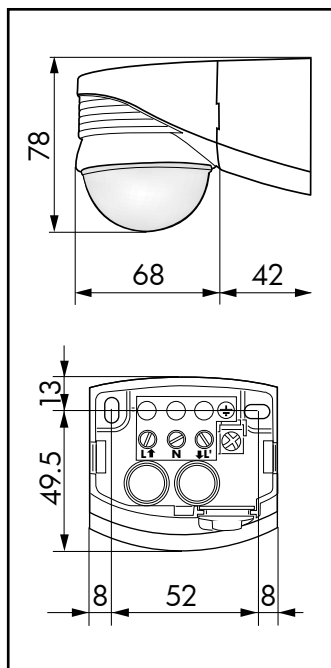We recommend max. 5 motion detectors.
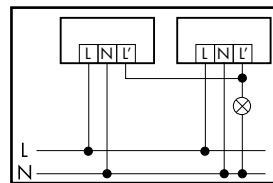
Permanent light operation with external push button
Additionally manuel switching is possible. The NC-contact is to press for approx. 0.5 - 2 sec.
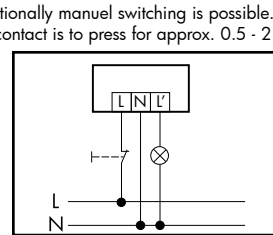
Permanent light operation with external switch
Switching is manually possible (permanent light operation). Caution: Light has to switched off manually.
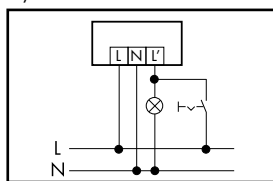
17. Dimensions (mm)

18. Technical data

Power supply: 230 V~ +6 % -10 %
Switching power:
2000 W, 250 V, (cos(φ)= 1)
1000 VA, 250 V, (cos(φ)= 0.5)
Range: approx. 16 m
Time settings: Impuls, 15 sec. - 16 min.
Photo electric switch: approx. 2 - 2500 Lux
Factory settings: follow-up accommodation 3 min., photo electric switch approx. 20 Lux
Detection area: 280°, 360° anti-creep protection
Degree of protection/class: IP44 / II
Dimensions: L 110 x W 68 x H 78 mm
Material: UV-stabilised Polycarbonate
Mounting types: wall and outside corner mountable with included plug-in socket
Inserting of the connection cable: once from top down and from below
Range adjustment:
> Swivelling of the sensor head: vertically (approx. ±15°), horizontally (approx. ±45°)
> With blank out clips (included)
Electrical adjustments: in traditional manner with potentiometers valid for time and Lux value only, with infrared remote control.

19. Article / Part nr. / Accessory

LUXOMAT® Motion detector:

LC-plus 280	white:	91008
	brown:	91018
	black:	91028
	silver:	91048

LUXOMAT® Remote control:

IR-LC-plus (incl. wall bracket)	92095
IR-LCmini	92093

Accessory:

Arc extinction kit	10880