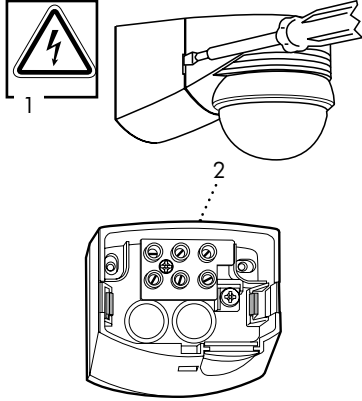


# LUXOMAT® LC-plus 280

## Operating and mounting instructions for motion detector LUXOMAT® LC-plus 280

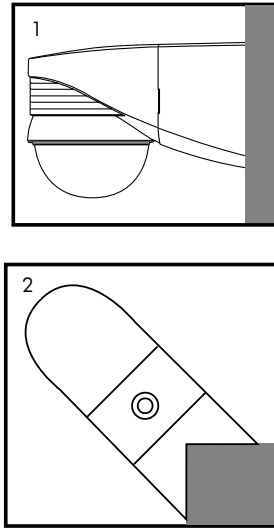
### 1. Mounting preparations



- 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

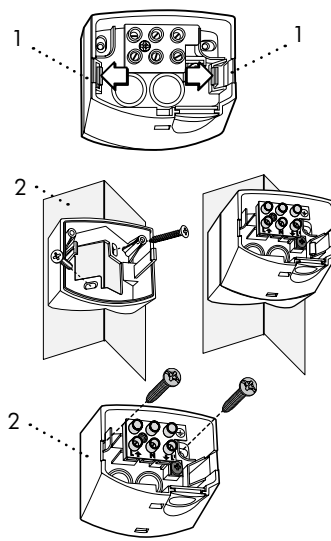
**Important:** The LUXOMAT® LC-plus 280 has to be mounted in such a way, that the adjusting elements / rotary regulators are always pointed downward.

### 2. Mounting types



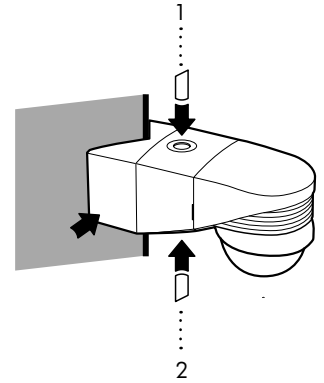
- 1) Wall mounting
- 2) Outside corner mountable with plug-in socket (included)

### 3. Plug-in socket

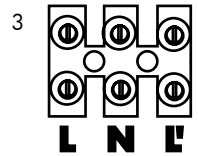


- 1) Press here for separation of terminal case and plug-in socket
- 2) Mount the plug-in socket with two screws and the enclosed seal rings on a firm base (Pay attention to inserting of the connection cable, see point 4)

### 4. Inserting of the connection cable



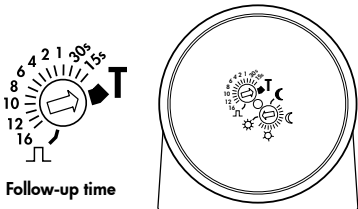
- 1) Connection cable from top down
- 2) Connection cable from below
- 3) Terminal markings (Wiring diagrams see point 16)



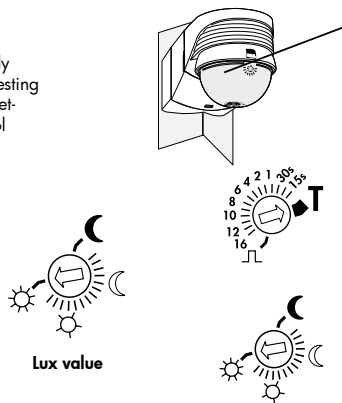
### 5. Putting into operation / Settings

#### 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

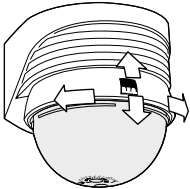


On delivery the potentiometers are adjusted in position "TEST" and "SUN" symbol (daytime operation). With this adjustments the following regular values are active:

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 reset into factory settings (fast LED-flashing).

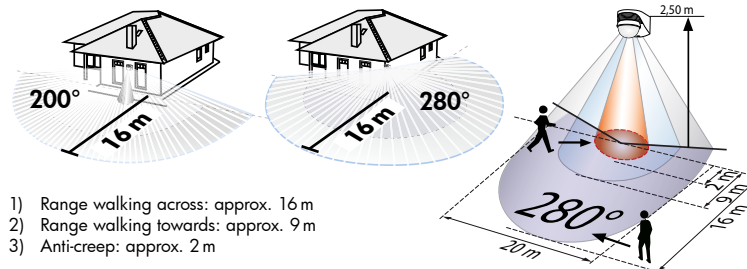
### 7. Sensor head optics



By swinging the sensor head horizontally (approx.  $\pm 45^\circ$ ) and vertically (approx.  $\pm 15^\circ$ ) the detection area can be changed.

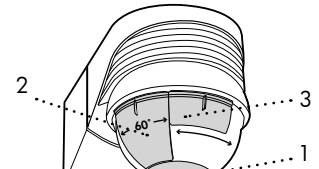
### 8. Sensitivity adjustment (mounting height 2.50 m; mounting height min. = 2.00 m)

(Sensor head justified horizontally, see point 7)



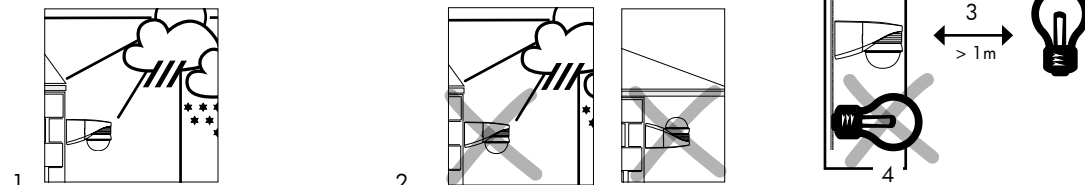
- 1) Range walking across: approx. 16 m
- 2) Range walking towards: approx. 9 m
- 3) Anti-creep: approx. 2 m

### 9. Exclude sources of interference



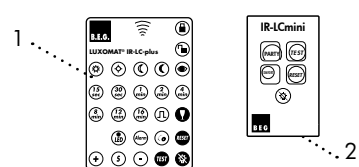
- 1) Blind for limiting creep-under protection and backward detection
- 2) Blinds for reduction of far-away and close-by areas by  $60^\circ$  each
- 3) Blinds for reduction of far-away areas by  $60^\circ$  each

### 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



- 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<sup>1)</sup>**  
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 (by pressing the button shortly)**

**Double lock device (sabotage protection)**  
Keep the button pressed while LEDs flash. As soon as the LEDs are on permanently, the double-locking is active.

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

**Light ON for 12h<sup>2)</sup> / Light OFF for 12h**  
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 12h can also be activated by disconnection mains twice within 2 - 4 sec.

## 13. Functions of LUXOMAT® IR-LCmini

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

**PARTY** **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.

**COMFORT** **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** **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

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

**RESET** 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

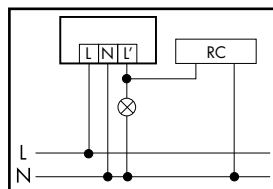
**The duration of the on-period can be adjusted:**

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 active now (deactivation see point 12)

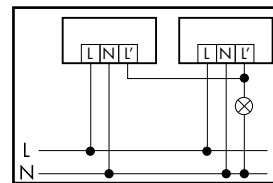
**Caution:** If the "Vacation- and comfort function" is active or with lower deviation of the Lux value the LC-plus turns on the light again after a time delay of 60 sec.

## 16. Wiring diagrams

**Standard operation (with optional arc extinguish kit)**  
Optional extension for switching of parallel inductors, rocker switches, fluorescent lamps etc.

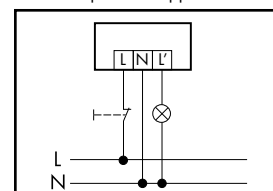


**Terminal connection for parallel operation**  
We recommend max. 5 motion detectors.

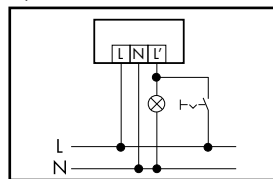


**Permanent light operation with external push button**

Additionally manual 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.



## 18. Technical data

**Power supply:** 230 V ~ ±10 %  
**Switching power:** 2000 W, cosφ = 1  
1000 VA, cosφ = 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

## 17. Dimensions (mm)

