**B.E.G.**

**LUXOMAT® PD3N-2C**

**Installation and Operating Instruction**

1. Mounting preparations

Work on the 230V 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!

The device is not suited for safe disconnection of the mains supply.

---

2a. Installation of the LUXOMAT® PD3N-2C-FC

| 1 | Sensor inser | 2 | Cover ring pluggable incl. cover for LEDs (2a) |
| 3 | Blind |
| 4 | Protection cover |
| 5 | Ceiling (drill hole Ø 68 mm) |

---

2b. Installation of the LUXOMAT® PD3N-2C-FM

| 1 | Sensor inser with mounting plate |
| 2 | Cover ring pluggable incl. cover for LEDs (2a) |
| 3 | Blind |
| 4 | FM-Socket (not included) |

---

2c. Self test cycle

The product enters an initial 60-second selftest cycle, when the supply is first connected. The occupancy detector is ready for operation (see LED-functional indicators point 9).

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3. Putting into operation / Settings

**Min/Sec**

| 10 | 5 | 4 | 2 |
| 20 | 30 | 40 | 50 |

Follow-up time “Min/Sec”

The time can be set infinitely variably at between 30 seconds and 30 minutes.

Symbol: T: impulse < 1sec.

**Twilight-switch “Lux”**

The switch-on value for the light can be set at between 10 and 2000 Lux. Using the rotary control, the luminance set points can be set as desired.

Symbol: Day operation, light sensor is inactive, it switches on/off regardless the light level

Follow-up time “Control devices”

The time can be set infinitely variably at between 5 and 120 minutes

**Option:**

**Settings with remote control**

**Remote control LUXOMAT® IR-PD3N-2C**

1. Check Battery: open battery compartment by pressing the plastic springs together and removing the battery-holder.

2. Hardware Reset: Reset: The setting of “Factory-setting” from any other position causes a “Reset” of the device. That means all operating modes activated at that time are reset to the factory setting (fast flashing of all LEDs for 5 seconds).

Caution:

Settings with remote control overwrite the settings by courtesy of potentiometers.

---

**Description of the button functions**

**Luminance set point**

Day operation: light sensor is inactive, it switches on/off regardless the light level / Night operation: very low luminance set point of approx. 10 Lux for special applications

Automatic reading in the current light value as new luminance set point

**Determination of the switch on threshold**

Stepwise increasing of the actual luminance set point of 20 Lux every time you push the button (50 Lux from 100 Lux)

**Follow-up time / Impulse function Channel 1**

**Sensitivity normal / Sensitivity high**

Activation of test mode in locked position

Deactivation: Press Reset

Resetting when closed

Stop a running follow up timer and switch the relays off.

**Permanent protection against sabotage**

This function blocks the unit permanently (green LED is illuminated for motion display). This operating mode can only be activated during the period of 5 seconds after pressing the “lock” button (white LED is flashing). The procedure for leaving this mode is to implement a Reset (see point 4) or to act as follows:

1. Switch off the current
2. Apply current for 31 - 59 seconds
3. Switch on the current again
4. Apply current
5. Open detector

In the initialisation period:

12h Light ON/OFF (party function)

Activated by “Light” + push button

Deactivated by “Reset” push button (default)

---

**Wall bracket for remote control IR-PD3N**

**IR-PD-Mini**
5. Manual Switching
You can switch the lighting on and off manually by pressing the pushbutton for a short time. It will stay on or off as long as people are detected plus the configured follow-up time. By pushing the button for more than 3 seconds the lighting will be switched on for 12 hours (Party program) and returns to full automatic mode after timeout.

6. Range

In case the sensing area of the LUXOMAT® PD3N-2C is too large or areas are being covered that should not be monitored, the range can be reduced or limited by using the enclosed masking clips.

7. Exclude sources of interference

8. Article / Part no. / Accessory

<table>
<thead>
<tr>
<th>Type</th>
<th>SM</th>
<th>FC</th>
<th>FM</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD3N-2C</td>
<td>92198</td>
<td>92188</td>
<td></td>
</tr>
</tbody>
</table>

LUXOMAT® Remote control:
- IR-PD3N-2C (incl. wall bracket) 92115
- IR-PD-Mini 92159

Accessory:
- BSK Ball basket guard 92199

9. LED-functional indicators

<table>
<thead>
<tr>
<th>LED function indicators after each mains recovery (60 sec. initialisation period)</th>
<th>Operating state</th>
<th>LED function indicators</th>
<th>Indicator/programmed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double-locked</td>
<td></td>
<td>White and green shines 5 sec. all 20 sec., after initialisation notification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indicator</td>
<td>Indicator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>unprogrammed</td>
<td>programmed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Red flashes</td>
<td>Red flashes quickly</td>
<td></td>
</tr>
<tr>
<td>Standard mode</td>
<td>Red and green flash on each detected movement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12h ON/OFF active</td>
<td>Red and green flash on each detected movement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12h ON/OFF function active</td>
<td>Red and green flash on each detected movement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IR command</td>
<td>Red flashes once</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IR command “Open” and sabotage active</td>
<td>White and green flash on each detected movement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Wiring diagrams

Standard mode with 2-channel motion detector

```
N     C1     C2
E1    M1

M1 = HVAC-function
```

11. PD3N-2C-Connections

12. Technical data PD3N-2C

Sensor and power supply in one case
- Power supply: 230 V ± 10%
- Terminal clamps: for single-wire conductor
- Power consumption: < 0.25 W
- Ambient temperature: 25°C - +50°C
- Degree of protection/class: FC = IP23; FM = IP20 / II
- Settings: via potentiometer or remote control
- Area of coverage: circular 360°
- Range of coverage Ø H 2.5 m / T=18°C
  - smaller movements 4 m / tangential 10 m / radial 6 m
- Recommended height for mounting: 2 - 3 m
- Lux values:
  - 10 - 2000 Lux
  - 12 h ON/OFF
  - active Red and green flash

13. Trouble shooting

1. Lamp does not light up
   - Lamp may be defect: Replace lamps
   - No mains connection/power: Check connection and mains fuse by qualified electrician
   - Incorrect setting of CDS twilight threshold: Correct setting of CDS threshold
   - Lens of sensor unit obstructed by dirt or other objects: Clean lens, remove objects

2. Lamp turns ON too late or detection range too small
   - LUXOMAT® PD3 is mounted too high: See table of mounting heights.
   - Correct mounting if required.

3. Lamp stays ON continuously
   - Continuous thermal activity detected ie fan, central heating ducts, animals within detection area: Remove heatsource. Check proper function of LUXOMAT® PD3N by covering the fresnel-lens. After expiry of delay timer, PD3N has to turn OFF lighting.
   - LUXOMAT® PD3N connected in parallel to a manual override switch: Connect switch correctly

4. Unintended switching of light
   - Movement of heat source within detection area: Check on presence of animals, fans or heaters