

LUXOMAT® PD9-M-DIM(-GH)

Installation and Operating Instruction for B.E.G. - Occupancy detectors PD9-Master-DIM(-GH)-FC

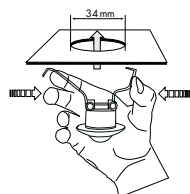
1. Mounting preparations

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!

When in Master / Slave mode of operation, the Master-appliance must always be installed at the location where there is least daylight.

2a. Installation

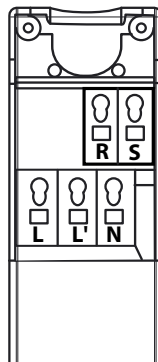


The detector has been designed and developed specifically for installation in suspended ceilings.

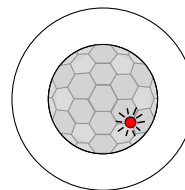
A circular opening of diameter min. 34 mm must be produced in the ceiling.

Having connected the cables in accordance with the regulations, connect the power supply via the RJ11 plug. Therefore, open the power supply with the help of the screws and close it afterwards. After that, put the power supply through the opening in the ceiling and mount the sensor onto the ceiling according to figure.

2b. Connecting terminals

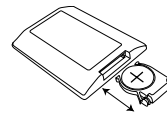


2c. Self test cycle



The LUXOMAT® PD9-M-DIM(-GH) enters an initial 60-second self-test cycle, when the supply is first connected. The occupancy detector is ready for operation.

3. Settings carried out using remote control (optional)



LUXOMAT® IR-PDim Remote Control

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

Option:



Wall bracket for remote control IR-PDim

Unlocking device

Luminance set point for constant light regulation
50 Lux / 1500 Lux

Dimming
The following approach will prove useful when setting a command value (example workplace): Place a luxmeter flat on the desk, then, using the remote control IR-PDim, adjust the light up or down by pressing the keys max or min until the desired command value which best suits your requirements has been reached.

Automatic reading in the current light value as new luminance set point
Individual light value 2 - 2500 Lux

Follow-up time
1 min / 30 min

Orientation lighting and its follow-up time
OFF button: No orientation light
Grey button: Programming the switch-off delay time
On button: Orientation light is permanently activated.
Note: During the orientation light phase, the constant light regulation is also active: if there is sufficient brightness, dimming occurs < 2 V and, if applicable, the lighting is switched off.

Preset / user mode => (see page 2, point 8)

Fully automatic / semi automatic mode => (see page 2, point 7)
Semi automatic: green LED,
Fully automatic: red LED on for ca. 3 sec.

Resetting when open
All values which have been programmed using the remote control IR-PDim are deleted, and those values which have been set by potentiometer are activated.

Lock device

Lock device

Test mode
Reset to deactivate

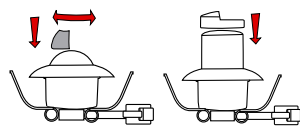
Resetting when closed
The lighting relay is switched off, i.e. opened and the follow-up times reset.

Permanent protection against sabotage
This function blocks the unit permanently (green LED is illuminated). This operating mode can only be activated during the period of 5 seconds after pressing the "lock" button. This status will only permit actuating the function "Light on / Light off".
The procedure for leaving this mode is as follows:

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

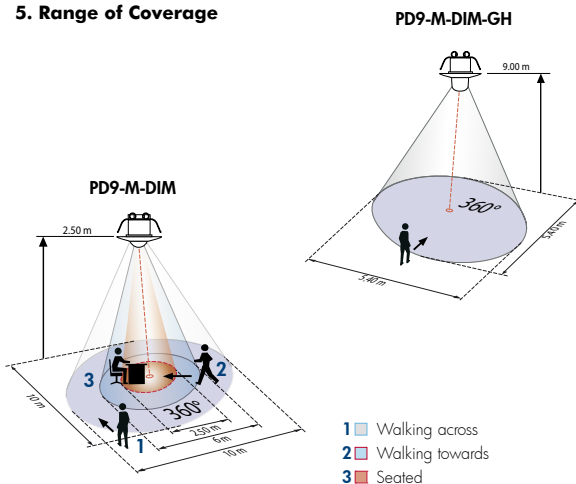
Light on / off => (see page 2, point 9)
The light will remain switched on/off for as long as movements are detected in the areas of coverage. Once the last movement has been detected, the light will remain on for the duration of the follow-up time as per setting. The appliance will then return independently to the mode selected (Fully or Semi-automatic).

4. Exclude sources of interference

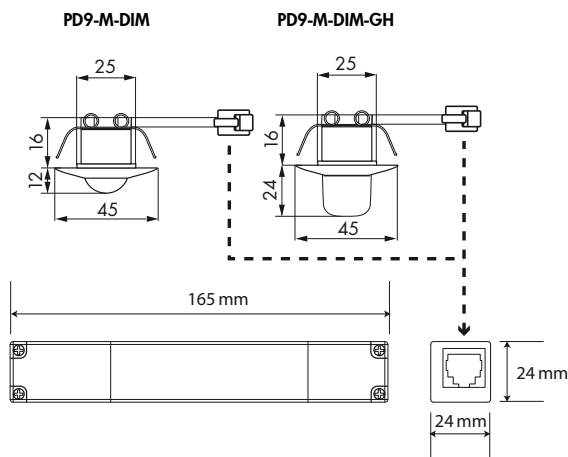


In case the sensing area of the LUXOMAT® PD9-M-DIM(-GH) is too large or areas are being covered that should not be monitored, the range can be reduced or limited through use of the enclosed masking clips.

5. Range of Coverage



6. Dimensions



7. Fully/Semi automatic mode

(for IR-PDIM functions see page 1)



Fully automatic operation (presence)

In this operating mode, the lighting switches automatically on and off for increased comfort, depending on presence and brightness.

Semiautomatic operation (absence)

(Semiautomatic can only be activated via the remote control!)

In this operating condition, in order to gain increased savings, the lighting is energized only after being manually switched on.

Switch-off takes place automatically.

The semiautomatic mode basically behaves like the fully automatic one. However, the difference is that switching-on must always be carried out manually!

As many (closer-contact) buttons as desired can be wired in parallel on the "S" button input (ON/OFF Dimm).

8. Manual Dimming - Preset/User

(for IR-PDIM functions see page 1)



You can dim manually by pressing the pushbutton for a long time (> 2 sec.). When the button is released, the current dimming value is retained. Upon renewed dimming, the dimming direction is reversed.

PRESET – the luminance set point is set during start-up operation by the installer and remains unchanged. The luminance set-point configured through manual dimming is only applied for the time being.

Caution:

The constant light regulation is now deactivated!

The currently set artificial light is retained independent of the ambient/daylight brightness!

After switching off and then back on, the originally set luminance set-point is reset = constant light regulation is activated.

USER - can only be activated via the remote control!

The luminance set-point is changed upon each manual dimming and re-adjusted by the user (Conformation through relay clicking!)

The constant light regulation remains activated!

9. 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.

10. Article / Part-Nr. / Accessory

Typ	RAL9010	RAL9006
PD9-M-DIM-FC (Master)	92910	92911
PD9-S-FC (Slave)	92905	92906
PD9-M-DIM-GH-FC (Master)	92924	92927
PD9-S-GH-FC (Slave)	92928	92929

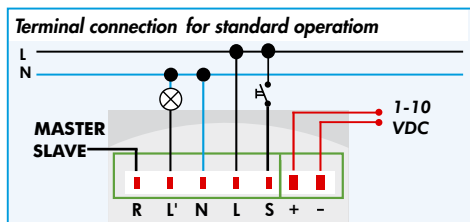
LUXOMAT® Remote control:

IR-PDIM (incl. wall bracket) 92200

Accessory:

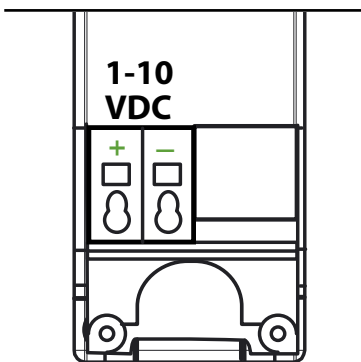
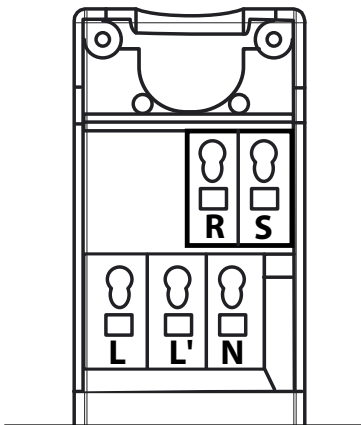
Wire basket BSK 92199		
Wall bracket for remote control as replacement	92100	
Coverring for PD9	white	92238
Coverring for PD9	silver	92237
Coverring for PD9	anthracite	92235
Blind GH	white	33207

11. Wiring diagrams



Standard operation

12. Connections



13. Technical data PD9-Master-DIM(-GH)

Connection of sensor and power supply by means of telephone plug RJ11

Power supply: 230V~ +6%/-10%

Power consumption: < 1W

Ambient temperature: -25°C to +50°C

Degree of protection/class: IP20 / II / CE

Settings: by remote control

Light values: 10 - 2000Lux (remote control)

Extension of the detection area: with Slaves

Area of coverage: circular 360°

Range Ø H 2.50 m / T = 18°C:

PD9-M-DIM seated 2.50 m / tangential

10 m / radial 6 m

max. Ø 5.40 m

Recommended height for mounting

PD9-M-DIM 2 - 3 m

PD9-M-DIM-GH 5 - 10 m

Light measurement: daylight and artificial light

Relay/Channel 1 for light-connection

Time-settings: 1 min. - 30 min.

DIM-Output: Dim output 1 - 10 VDC interface, max. 50 electronic ballasts on one control cable with max. control cable length of 100 m with 0,75 mm² Orientation light (20% of nominal light) as permanent light, adjustable by means of timer

Dimensions H x Ø [mm]

PD9-M-DIM Ø 45 x H 28 mm

PD9-M-DIM-GH Ø 45 x H 40 mm

Power supply L 165 x W 24 x H 24 mm

Technical data PD9-Slave

Electrical data same as above, but just one channel for signaling motion detection.

CE Declaration of Conformity: The product complies with the low voltage recommendation 2006/95/EC and the EMV recommendation 2004/108/EC.

14. LED-functional indicators, faultfinding

The functional indicators in the case of the LUXOMAT® PD9-M-DIM(-GH) (red and green LED's)

Red LED indicating self-checking mode (over a period of 60 seconds following mains-supply lock-on)

Flashing at intervals of 1 second

EEPROM/memory empty

Flashing rapidly

EEPROM/memory contains information

Red LED as an indicator of status

Flashing irregularly

Movements are detected within the area of coverage

Flashing regularly

Detector identifies bright, light off

(dependent upon operating mode)

Not illuminated

Detector identifies dark, light on

(dependent upon operating mode)

Flashing extremely rapidly

Too bright / Too dark / Undefined

Red LED as an acknowledgement of receipt for commands from the remote control

Illuminated for 2 seconds

Signal validly received

Illuminated for 0.5 seconds

Not-accepted command, detector blocked

Flashing extremely rapidly

Not-accepted command, occurs, for example, when an attempt is made to input twilight-value are too bright or too dark

Lights up for 3 seconds

Display automatic: Lights up for 3 seconds

Flashing for 3 seconds

Display semi automatic

Green LED as an indicator of status

(only for status "Permanent protection against sabotage")

Flashing irregularly

Movement are detected within the area of coverage

Flashing regularly

Detector identifies bright, light off

(dependent upon operating mode)

Not illuminated

Detector identifies dark, light on

(dependent upon operating mode)

Illuminated for 2 seconds

Signal validly received

(dependent upon operating mode)