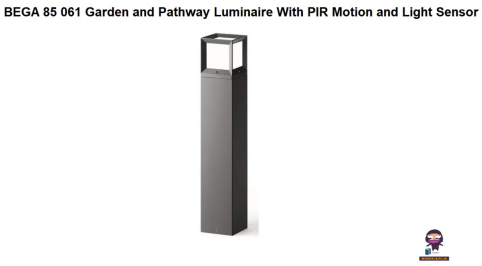


BEGA 85 061 Garden and Pathway Luminaire With PIR Motion and Light Sensor Instruction Manual

Contents

BEGA

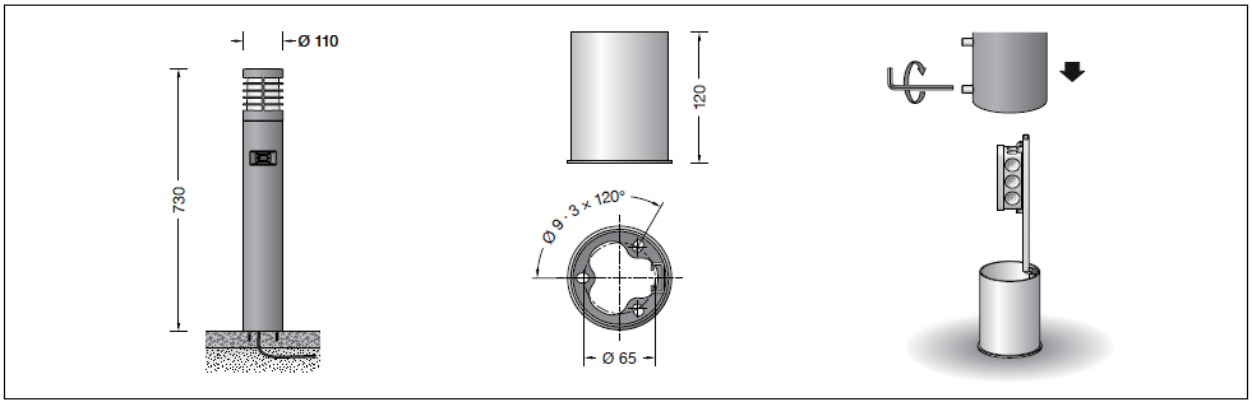
BEGA 85 061 Garden and Pathway Luminaire With PIR Motion and Light Sensor

Specifications:

- **Product Name:** LED Luminaire
- **Model Number:** 85 061
- **Colour Temperature:** 3000 K / 4000 K
- **Colour Rendering Index (CRI**): > 80
- **Luminaire Luminous Flux:** 190 lm / 195 lm
- **Luminaire Connected Wattage**: 5.4 W
- **Lighting Technology:** LED
- **Recommended Light Point Interval:** 4.5 m
- **Transmission Frequency:** 2400-2483.5 MHz
- **Protection Class**: IP65
- **Impact Resistance:** IK04

Garden and pathway luminaire with PIR motion and light sensor

- Project
- Location



Instructions for use

Application
Unshielded garden and path luminaire with safety guard. Light exit 360°. With hand-blown, three-ply opal glass and pleasantly uniform light effect for effective illumination in private gardens. The integrated passive infrared motion and light sensor responds to heat emission in the dark and activates in case of human or animal movement in the vicinity of the luminaire. Configuration is done via Bluetooth using smartphone or tablet and the free BEGA Smart app.

Lamp

- Module connected wattage: 3.9 W
- Luminaire connected wattage: 5.4 W
- Rated temperatureL ta= 25 °C
- Ambient temperature: ta max = 45 °C

85 061 K3

- Module designation: LED-0794/830
- Colour temperature: 3000 K
- Colour rendering index: CRI > 80
- Module luminous flux: 750 lm
- Luminaire luminous flux: 190 lm
- Luminaire luminous efficiency: 35,2 lm / W

85 061 K4

- Module designation: LED-0794/840
- Colour temperature: 4000 K
- Colour rendering index: CRI > 80
- Module luminous flux: 770 lm
- Luminaire luminous flux: 195 lm
- Luminaire luminous efficiency: 36,1 lm / W

Lighting technology
Recommended light point interval 4.5 m

Product Description:
Luminaire made of cast aluminium, aluminium and stainless steel

- BEGA Unidure® coating technology
- Colour graphite or silver
- Opal glass with screw neck
- Silicone gasket

Luminaire with mounting base made of hot-dip galvanised steel according to EN ISO 1461 for bolting onto a foundation provided by the customer or on other paved surfaces such as terraces and paving stones Base plate

with 3 fixing holes ø 9 mm · Pitch 120° · Pitch circle ø 65 mm Mounting bracket with connection box for through-wiring of up to 3 x 2,5 mm²

- Passive infrared motion sensor (PIR)
- Range up to 12 m
- Opening angle 120°–150°

Decals for reducing the detection range are provided Minimum temperature difference between moving object and environment 4 °C Object speed ideally 1 m/s Adjustable sensitivity of the motion sensor (inertia) Shut-down delay adjustable between 5 s and 240 min

Light sensor: adjustable value range from darkness (ca. 0 lx) to approaching dusk (approx. 150 lx)

Fixed pre-set hysteresis for suppression of undesired switching operations in luminaires during rapid brightness fluctuations

- **Transmission frequency range:**
  - 2400-2483.5 MHz
- **Maximum transmission output:** 10 mW

Luminaire switchable via relay output (on/off) integrated in the sensor module Relay contact with a switching capacity of 2300 W · 10 A

- Please note the starting current of the switching loads – max. 100 A
- **Ambient temperature:** -25°C to +55°C
- Luminaire power supply unit
- **Starting current:** 7 A (112 µs)
- 220-240 V y 50-60 Hz
- BEGA Thermal Switch®

Temporary thermal shutdown to protect temperature-sensitive components

Safety class I

- **Protection class IP 65**

  Dust-tight and protection against water jets
- **Impact strength IK04**

  Protection against mechanical impacts < 0.5 joule
- **CE** – Conformity mark

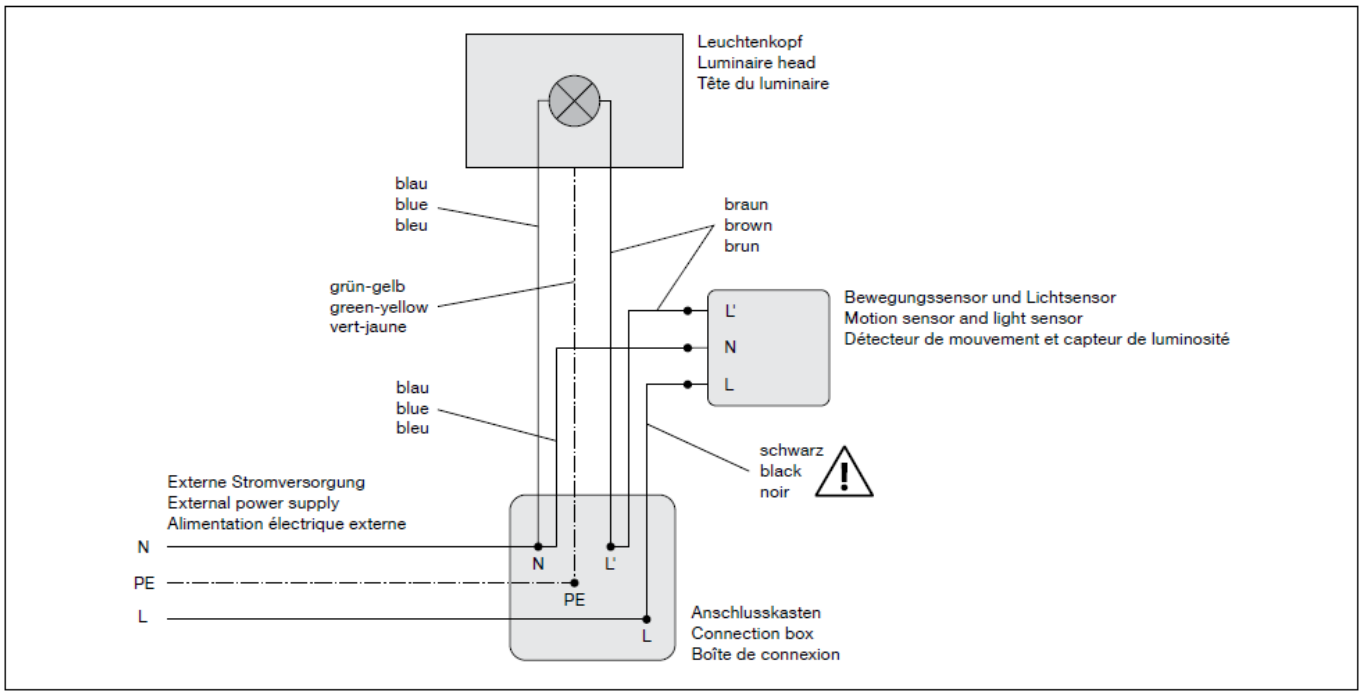
This product contains light sources of energy efficiency class(es) C

Safety
The installation and operation of this luminaire are subject to national safety regulations. Installation and commissioning may only be carried out by a qualified electrician. The manufacturer accepts no liability for damage caused by improper use or installation. If subsequent modifications are made to the luminaire, the person responsible for these modifications shall be considered the manufacturer.

Installation:

1. Ensure installation is carried out by a qualified electrician.
2. Avoid direct contact with the LED light output during installation or replacement.
3. Connect the luminaire securely and align the bollard tube on the anchorage unit.
4. Tighten all screws evenly and firmly.
5. Securely attach the glass with the gasket into the luminaire housing, ensuring correct seating of the gasket.

LED are high-quality electronic components!
Please avoid touching the light output opening of the LED directly during installation or relamping. The base of the luminaire must not be below top edge of the ground surface. A cable length of 400 mm above the ground surface is required for the electrical connection of the luminaire. Remove the mounting base from the luminaire by undoing the screws at the base of the luminaire. Lead underground cable from below in the mounting base. Fix the mounting base with enclosed or any other suitable fixing material onto the mounting surface. Open the connection box. Lead the luminaire wiring and mains supply cable into the connection box. Make the earth conductor connection and the electrical connection. Note the correct configuration of the terminals (see drawing).



Close the connection box. Lead the bollard tube on the anchorage unit and align. Tighten the screws evenly. Screw the glass with the gasket into the luminaire housing and tighten firmly. Make sure that the glass gasket is seated correctly (see sketch).

Commissioning:
Connect the power supply for luminaire commissioning. 2. Allow up to 10 minutes for the brightness sensor to calibrate after power activation. The power supply must be connected for the commissioning of the luminaire. The brightness sensor will need up to 10 minutes after activation of the power supply to correctly calibrate the brightness value. Once installed, the luminaire can be operated immediately in its factory settings; configuration via smartphone will not be required.

The factory settings as are follows:

- **Mode:** Motion and light
- **Motion sensitivity:** 100 % (high sensitivity)
- **Shut-down delay:** 5 minutes

- **Brightness threshold:** 32 (approx. 50 lx)

Alternatively, the integrated PIR motion and light sensor can be configured via smartphone or tablet using the free BEGA Smart app. The default values can be reinstated at any time via the BEGA Smart app.

Download the app for Android or iOS and add the luminaire as your starting point. The Data matrix code needed for commissioning is provided on the sensor housing, the luminaire head and on the connecting cable of the luminaire. Please retain the additional enclosed QR codes in your customer documentation (e.g. Instructions for use, at the top of Page 1). Select the “Share access” function in the BEGA Tool app enables parameterisation or control via additional smartphones. function in the BEGA Tool app if you want to use a different or additional smartphone for the configuration of the integrated sensor module or controlling the luminaire head.

Please note:
The integrated light sensor operates with a time delay to prevent responses to short-term brightness fluctuations in the environment of the luminaire. Delay time approx. 1 to 3 min. A manual darkening of the sensor will therefore not result in an immediate response.

Once successfully commissioned, the sensor can be configured in the BEGA Smart app.

The following 3 states can be set:

- “Illumination during movement”
  - State that is activated for the configured shut-down delay period when movement is detected.
  - If the light sensor is also active, motion detection is only activated if the light sensor detects the environmental brightness to be below the configured threshold. After the shut-down delay period, the state
- “Illumination at specific environmental brightness” is executed.

If the light sensor is deactivated, the state is activated independently of the environmental brightness if movement is detected. After the configured shut-down delay period,

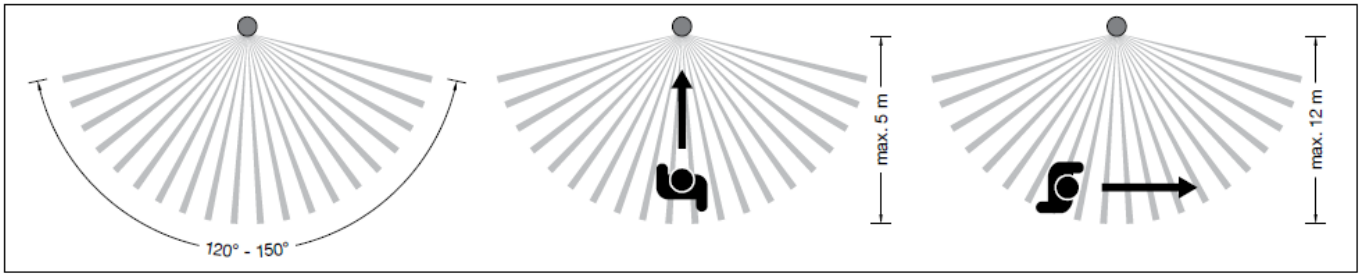
- “Illumination in default state” is activated.
- “Illumination at specific environmental brightness”
  - State which is activated when the environmental brightness falls below the configured threshold.
- “Illumination in default state”
  - State which is activated when the environmental brightness has exceeded the configured threshold value and no movement is detected.

The motion sensor as well as the light sensor can be switched off individually. This reduces the respective states. The shut-down delay is freely adjustable up to 4 hours. The current measured environmental brightness can be queried. This is shown by the grey sun symbol. The threshold value can also be set there.

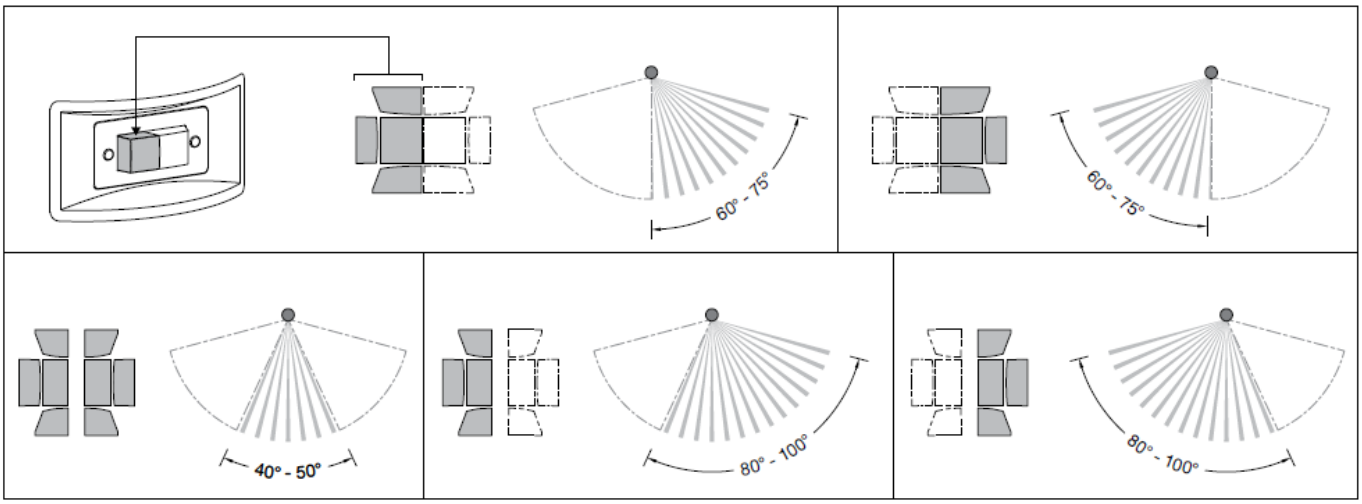
All other components in the BEGA Smart System can be allocated and configured to these states. Depending on

the additionally used BEGA Smart components, different light levels, light colours or colour temperatures can be set. The luminaire head of the bollard can only be switched on or off.

Range / Detection area
The specifications for the range and detection area of the PIR motion sensor are reference values. Detection range is 120° to 150° at a depth of 5 m up to max. 12 m, depending on motion direction (see illustration). Too minor temperature difference between the moving object and the ambient temperature can influence the detection range. Local conditions and external heat sources may affect both the range and the detection area.

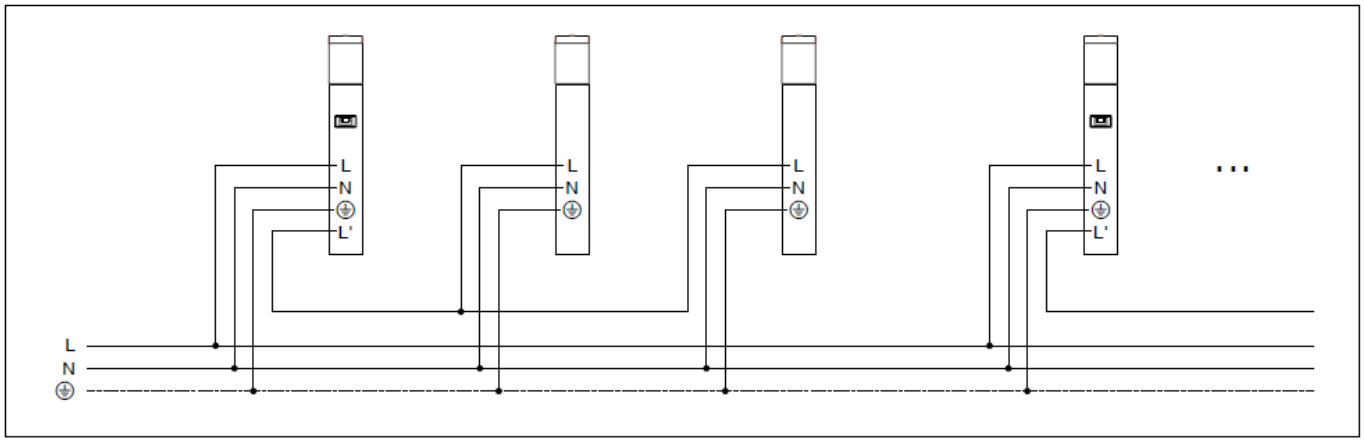


Reducing the detection range
Use the decals provided to reduce the vertical detection area of the sensor. The smaller decals reduce the detection area by around one third, the larger ones by around one half (see sketch). Clean the sensor with a soft cloth soaked in alcohol before applying the decals. Ensure exact positioning when attaching the decals.

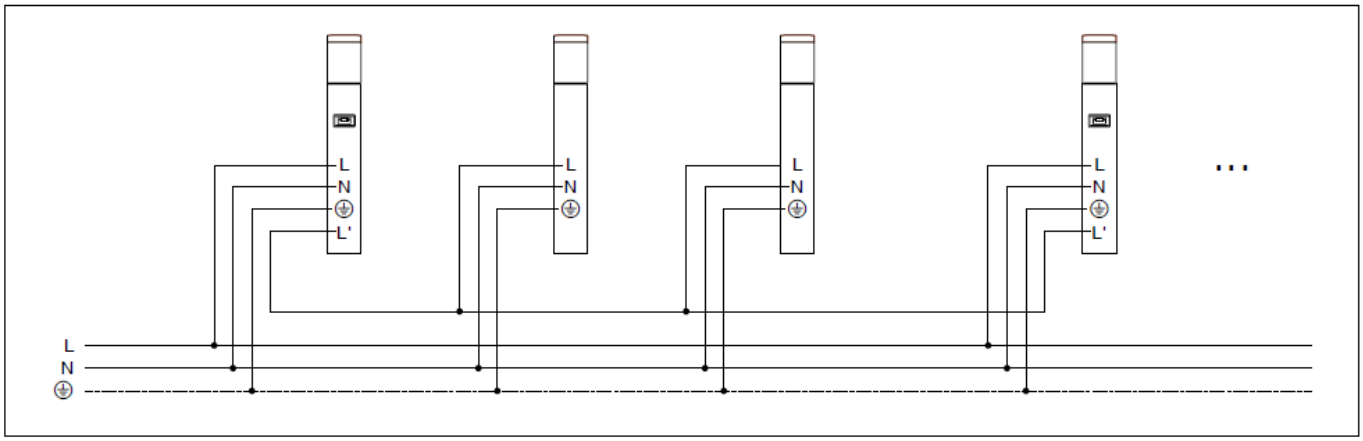


Circuit variants
Forwarding of the switching signal to additional luminaires can be achieved via the relay contact L' (see circuit diagram 1).

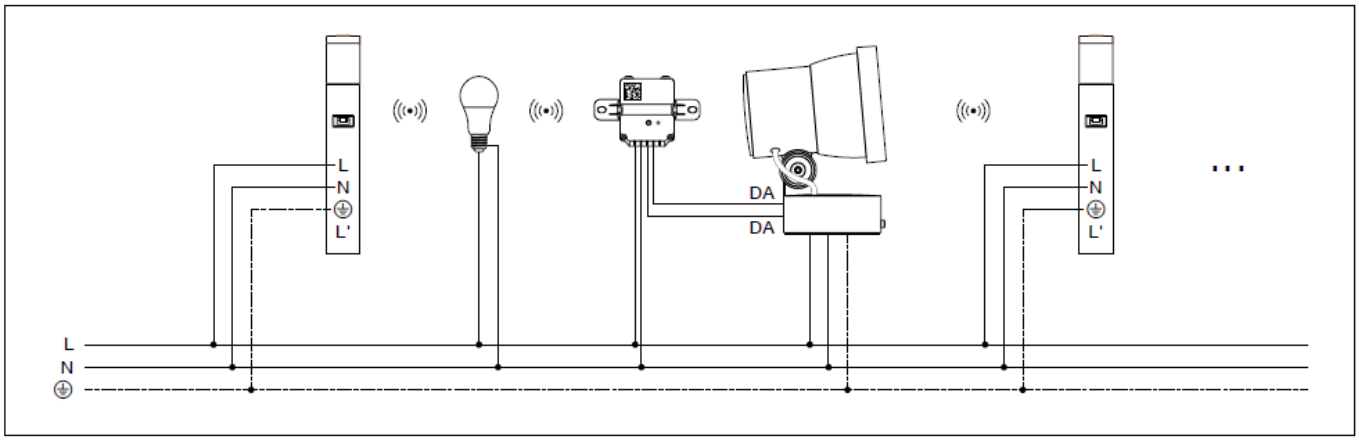
Circuit diagram 1:
The first sensor of a luminaire controls a group of luminaires, while the second luminaire sensor controls another group.



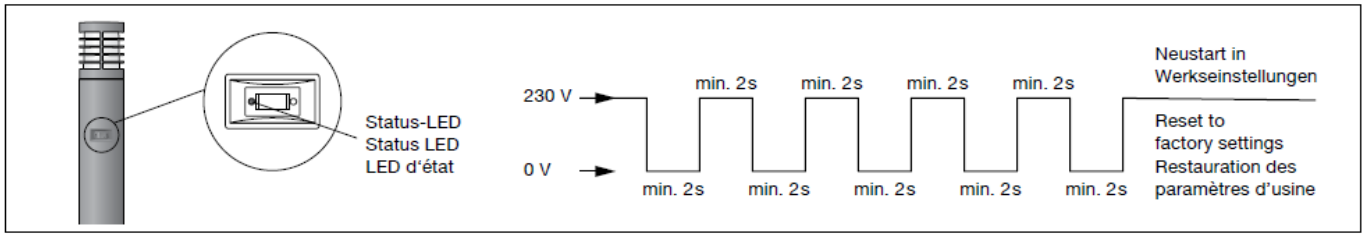
Circuit diagram 2:
Sensors of multiple luminaires control the same luminaire group. All luminaires in the group will be switched on as soon as one of the sensors detects movement. It is important to note that all sensors within one group are fed via the same phase.



Circuit diagram 3:
Apart from wired control, the sensor also offers the option of wireless communication with Zigbee lamps or other BEGA Smart actuators, e.g. 71149



Reset to factory settings
The luminaire must be switched off five times within 30 seconds for at least 2 seconds each time to manually reset it to factory settings (see sketch). The luminaire can furthermore be reset to the factory settings via the BEGA Smart app. The reset is confirmed with five flashes of the luminaire. The smartphone will be disconnected.



Status display

Status LED flashes green:
The luminaire is searching for a nearby network and is ready for configuration. If no start-up procedure is executed within 180 seconds, the status LED goes out. Status LED flashes green and the luminaire is already configured: The luminaire opens the network for new participants in the BEGA Smart System.

Overvoltage protection
The electronic components installed in the luminaire are protected against overvoltage in accordance with DIN EN 61547. To achieve an additional protection against e. g. transients, etc. we recommend separate overvoltage protection components. You can find them on our website at **www.bega.com.** The ideal protection of all electronic components installed in the luminaires is achieved by using bounce-free switching contacts such as an electronic relay (solid-state relay), e.g. BEGA 71 320.

EU Declaration of Conformity
BEGA Gantenbrink-Leuchten KG hereby declares that the radio system type 85 061 complies with Directive 2014/53/EU (RED). The complete text of the EU Declaration of

Conformity is available at the following Internet address: https://www.bega.com/conf/de/85061

Cleaning · Maintenance
Clean luminaire regularly with solvent-free cleansers from dirt and deposits. Do not use high pressure cleaners.

Replacing the LED module
The designation of the LED module is noted on a separate label in the luminaire or on the underside of the specific LED module. The light colour and light output of BEGA replacement modules correspond to those of the modules originally fitted. The module can be replaced by qualified persons using standard tools. Disconnect the system and open the luminaire. Please follow the installation instructions for the LED module. Inspect and, if necessary, replace the luminaire gaskets. Defective glass must be replaced. Close the luminaire.

Spares

- Spare glass: 11 003 514 .1
- LED power supply unit: DEV-0303/350
- LED module 3000 K: LED-0794/830
- LED module 4000 K: LED-0794/840
- PIR and light sensor graphite: 75 005 857
- PIR and light sensor silver: 75 005 859
- Gasket glass: 83 001 998

FAQ:

Q: Can I install the LED Luminaire myself?
A: Installation and commissioning should only be carried out by a qualified electrician to ensure safety and proper

functionality.

Q: How do I replace the lamp module?
A: To replace the lamp module, follow the manufacturer's instructions provided in the user manual carefully to ensure correct installation and operation.

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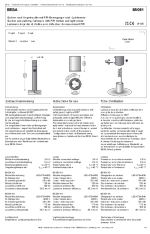
Documents / Resources

	BEGA 85 061 Garden and Pathway Luminaire With PIR Motion and Light Sensor [pdf] Instruction Manual 85061K3, 85061K4, 85 061, 85 061 Garden and Pathway Luminaire With PIR Motion and Light Sensor, Garden and Pathway Luminaire With PIR Motion and Light Sensor, Pathway Luminaire With PIR Motion and Light Sensor, Luminaire With PIR Motion and Light Sensor, PIR Motion and Light Sensor, Light Sensor, Sensor

References

- BEGA Smart - Apps on Google Play
- BEGA Smart on the App Store
- BEGA · Das gute Licht.
- User Manual