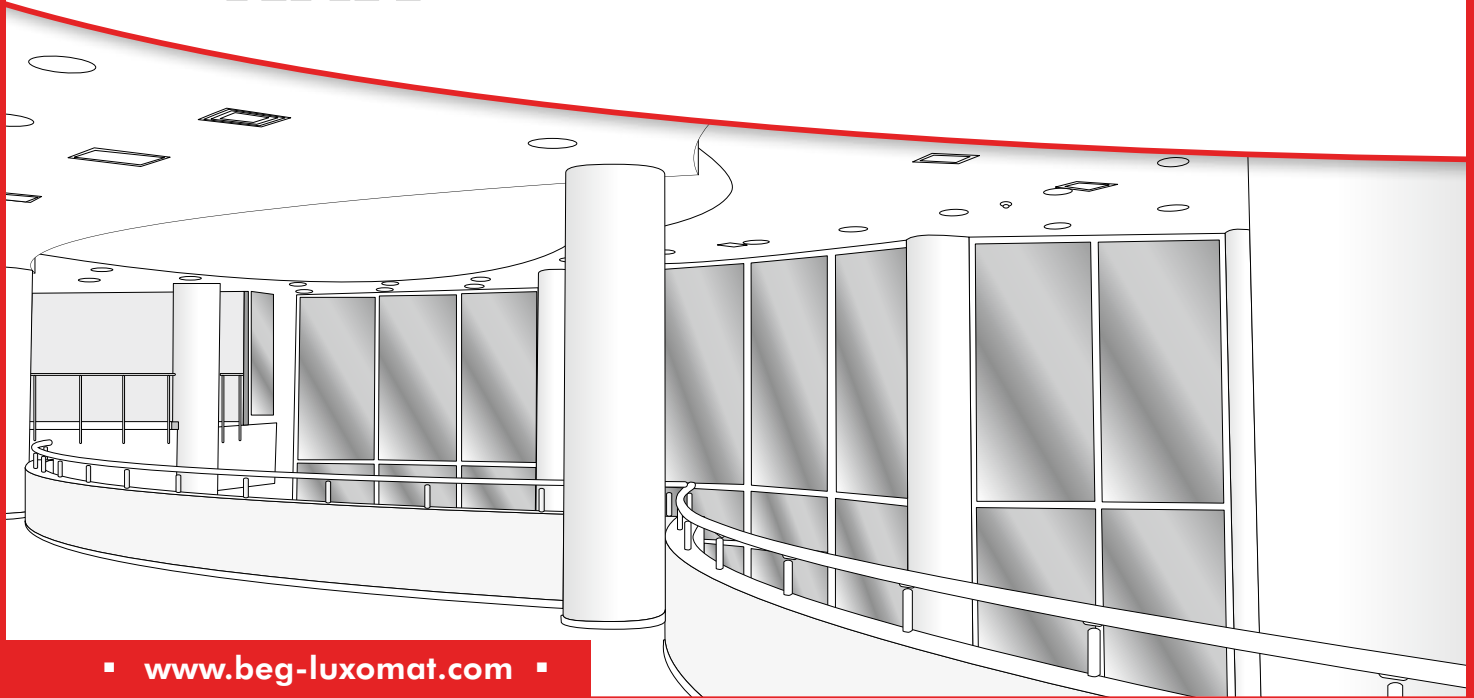


B.E.G. KNX



▪ www.beg-luxomat.com ▪

B.E.G. KNX

Intelligent solutions for your building



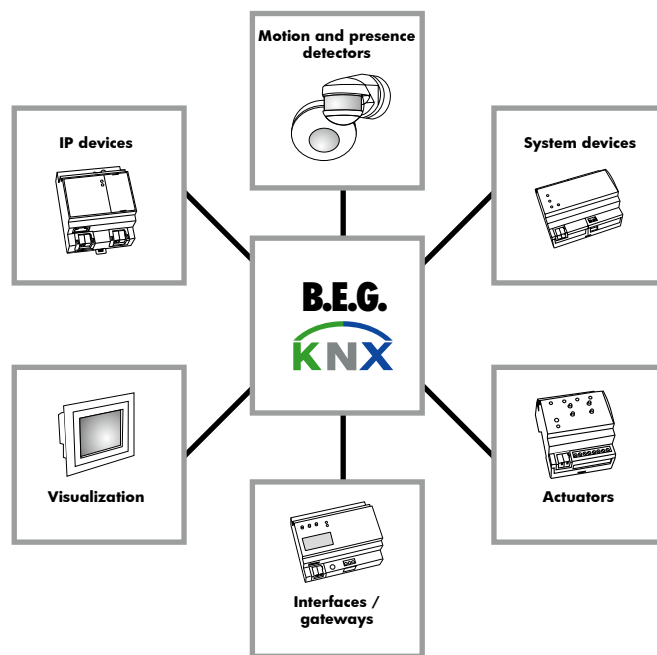
| Energy savings

| Safety

| Comfort

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B.E.G. – A COMPANY WITH OVER 35 YEARS OF EXPERIENCE

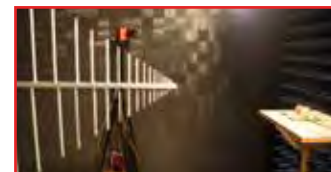
Quality already starts with product development. It is important to us that our products do not only fulfil customer expectations but that they exceed them. The high demands that we make on the quality of our products are also made on the services we provide to our customers. **B.E.G.** will support you throughout all the phases of your project:

Our field force will keep you up to date about new products, will provide training regarding installation, show you possible uses for our products and help you plan your projects. And on request, our specialists will also work with you to plan the optimum distribution of our motion and presence detectors on the basis of your CAD plans. We will of course also provide advice in the selection of the devices appropriate to your project.

The strict selection of logistics partners helps us ensure that the goods you have purchased arrive in perfect order and in the shortest time possible. We would be happy to accompany you with our comprehensive after-sales service should you have any questions – from installation right up to the final handover.

Our highly trained in-house staff will provide competent support in questions relating to applications and follow-up orders. And if you should ever experience technical problems with one of our products, you'll be able to contact our qualified technicians by phone at any time and, if required, they will also assist you at site.

With its comprehensive range and expert know-how, **B.E.G.** is the right partner for you!



Quality and innovation come from B.E.G



B.E.G. and KNX

– a strong team



Energy is becoming increasingly valuable as a commodity, which means that controlling and reducing energy consumption both in business and at home is becoming more and more important. KNX opens up an extensive range of products for the intelligent automation of buildings that does not only assist with E-metering and energy savings but also with automatic processes.

This means that blinds may be controlled with the help of a weather station, e.g. to prevent living space from being heated when it is not occupied. Automatically controlling lighting groups using one of **B.E.G.**'s KNX presence detectors also constitutes an effective way of saving energy. Because they allow lighting to only be switched when somebody is actually in the room and required, **B.E.G.**'s KNX presence detectors usually offer several types of control, e.g. normal light switching or dimming. The telegrams may, however, also be used to control alarm circuits or heating, ventilation and air-conditioning systems (HVAC).

B.E.G. has also included switching and dimming actuators as well as DALI/KNX gateways in its range that are able to control all types of lamps usually used in residential and business properties. The switching actuators may also be used to measure power consumption and so determine consumption values in kW/h. They will also check the connected lamps at specific maintenance intervals depending on the number of hours they have been in use. Error messages, e.g. relating to defective lamps, will then be displayed in the building-management system, giving the possibility of monitoring entire buildings.

B.E.G. delivers individual and highly functional KNX solutions that will not only save energy and protect the environment but will also reduce costs.

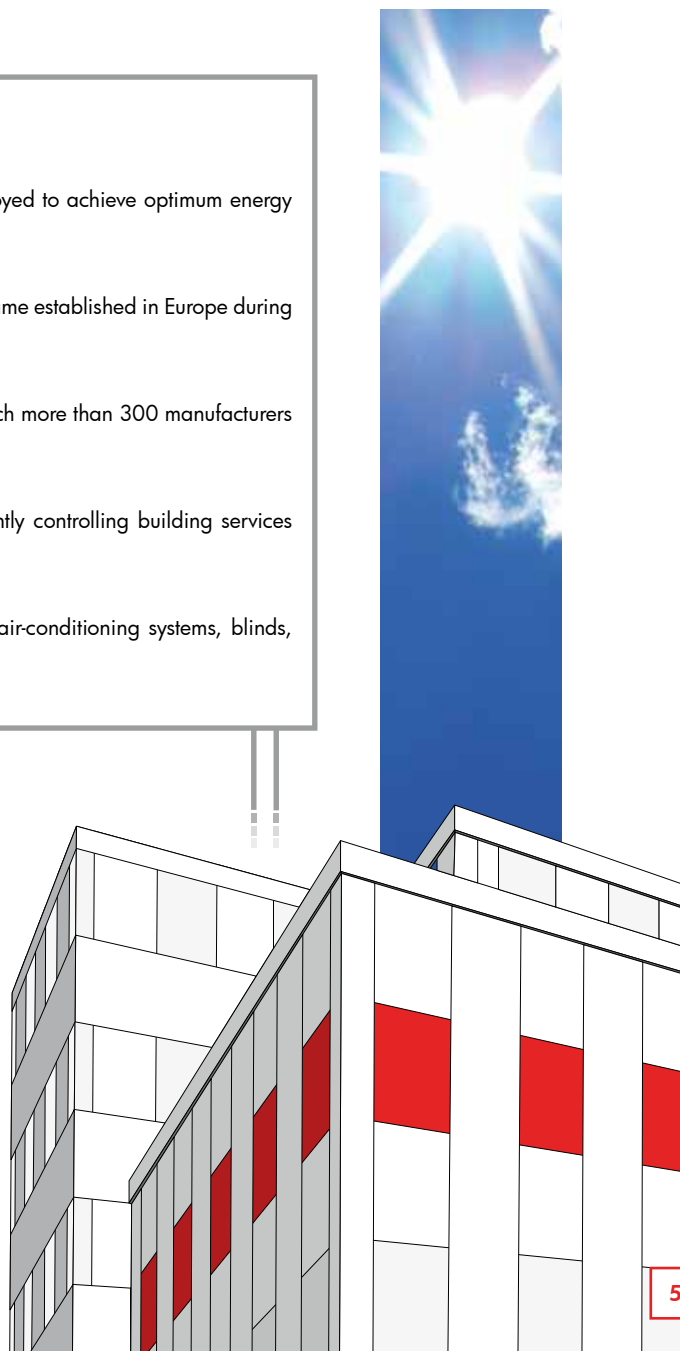
Complete solutions for your product and support directly from the manufacturer – **B.E.G.**'s KNX products always are the right choice! ■

Did you know...?

KNX presence detectors are supplied with power through the BUS connection. They also simultaneously send telegrams using these connections.

What is KNX?

- KNX is a bus system for controlling automated building functions – it is employed to achieve optimum energy savings, security and comfort.
- KNX is the successor to the familiar EIB (European Installation BUS), which became established in Europe during the early 1990s.
- KNX is an open standard (defined internationally in ISO/IEC 14543-3) to which more than 300 manufacturers have signed up.
- KNX considerably helps reduce power consumption in buildings by intelligently controlling building services engineering.
- KNX offers a wide range of functions and devices: For controlling heating, air-conditioning systems, blinds, ventilation, lighting and household appliances.



Application areas

– endless possibilities

KNX systems by **B.E.G.** may be employed in many different areas ranging from the simple automation of homes to the control of entire building complexes. Systems may be configured to meet the requirements of the intended purpose while allowing later modifications to be easily made. **B.E.G.** will specifically find individual solutions for out-of-the-ordinary demands on the basis

of its technical expertise and ensure that electricians and system integrators are provided with the necessary resources. **B.E.G.** has created an efficient and future-proof KNX platform that allows installations to be realized that extend far beyond those provided for by the general standard.

KNX applications by **B.E.G.** include, among other things:

Lighting



Blinds/shutters



Security



Energy management



Building management



Visualization



Air-conditioning



Heating



Holiday controls



Did you know...?

KNX also provides functions for controlling panic switches, ventilation, shading systems (awnings and so on), weather stations, timed switching...

Individuality and uniformity in a single system – that's also possible. The cross-system technology employed in KNX-capable devices is not restricted to specific manufacturers – it permits the appropriate use of any component within any KNX network. So **B.E.G.**'s KNX products make it easy to upgrade systems irrespective of whether they're by **B.E.G.** or another manufacturer. The available bandwidth allows technicians to fulfil any request a customer might have.

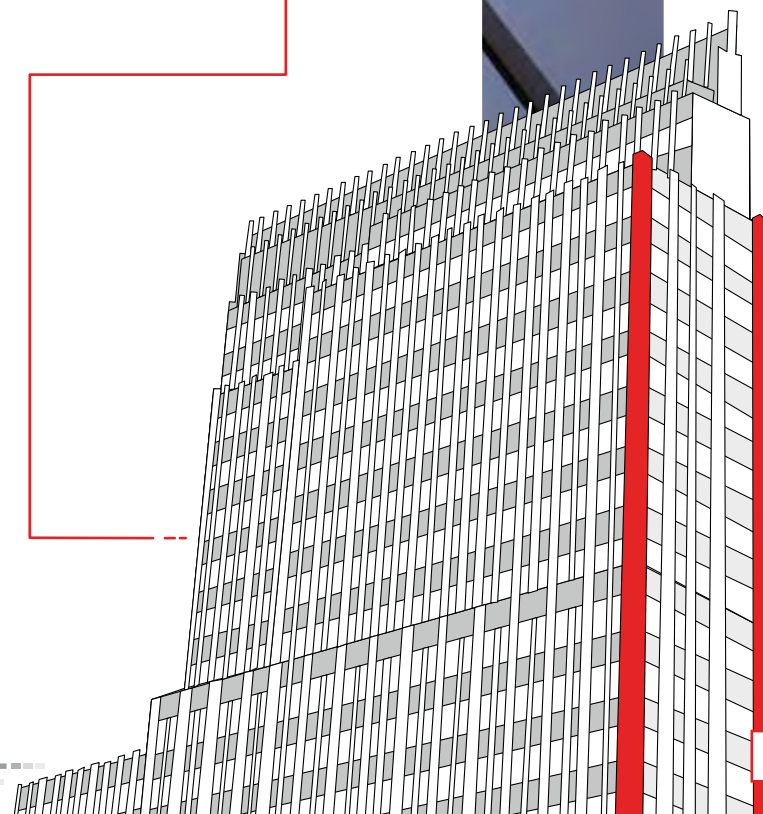
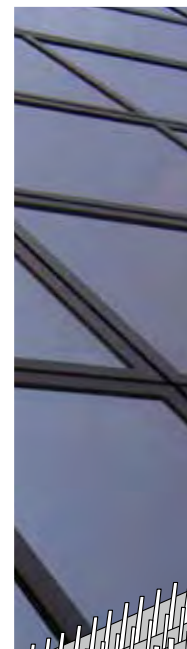
It's not only major projects by **B.E.G.** that benefit from this great flexibility and the corresponding know-how, home users may also enjoy the advantages that of building automation offer. Because everybody's interested in comfort, energy savings and consumption control.

The application examples presented on the pages

below reflect commonly encountered situations in which B.E.G.'s KNX products deliver benefits over conventional system solutions – with individual components or overall concepts. The constellations outlined in the following are not restricted to individual rooms. Up to 64 system subscribers may, for instance, be supplied from one power supply.

Did you know...?

The KNX network's decentral structure permits almost any type of wiring layout to be realized and will protect the system from total failures.



Application example Residential properties



Requirement:

Residents want to be safe and comfortable in their homes. And energy efficiency is also becoming increasingly important in these times of rising energy costs. It should be broadly possible to control all the required components from a central point.

Owners want to upgrade their buildings with modern and easy-to-understand technology. The residents want easy-to-understand and functional technology. The design also plays an important role: It must be possible for the technical equipment to either stand alone or be integrated into the home's furnishings.

B.E.G.'s solution:

All components in the KNX system may be centrally accessed and controlled from B.E.G.'s KNX Control Touch Panel. The extensive menu guarantees a clear overview of the current lighting conditions while displaying such climate data as temperature, brightness and wind speeds. Enhanced security may also be created, for example, with the help of the simulated-presence function, which switches the lights on and off and lowers and raises the shutters when the occupants are absent for extended periods of time. This makes the house look as if it's occupied thus creating a deterrent to any potential burglars.

The PD11-KNX-FLAT-FC presence detector controls the lighting scenes through the DALI/KNX gateway and may be manually switched using the control touch panel. The very flat design makes it almost invisible so that it doesn't spoil the appearance of the ceiling. The presence detector's control may also be temporarily deactivated, e.g. for film evenings in a cosy atmosphere.

Smartphones may be used to comfortably and easily access the KNXnet/IP Interface Web through a browser without requiring the additional installation of an app. Residents may, for example, dim the lights to the desired setting, raise shutters and monitor switching states.

■ Form and function – combined through modern-day technology!

■ Decorative

■ Functional

■ Comfortable



Presence detector
PD11-KNX-FLAT-FC



KNXnet/IP Interface Web
(optional)



=



=



=



=



Interface
KNX/DALI-Gateway IP-N

Switching actuator
KNX SA-8C-230V
Lights + HVAC-Channel

Control Touch-Panel
(optional)

Power supply
KNX PS 640 mA

Blind-actuator
KNX-SBA-4C-24V

B.E.G. KNX components employed:

Touch-Control Panel (optional)
Part.-No. 90120

KNXnet/ IP Interface Web
Part.-No. 90126

KNX PS 640 mA
Part.-No. 90212

KNX SA-8C-230V
Part.-No. 90200

PD11-KNX-FLAT-FC
Part.-No. 92893

DALI/KNX Gateway IP-N
Part.-No. 90134

KNX SBA-4C-24V
Part.-No. 90191

Application example Classroom



Requirement:

Classrooms are usually rooms possessing a window frontage, two light strips and lighting for the blackboard.

The windows allow light from the outside in, which means that the light inside becomes irregular. The rooms are only occupied as the timetable requires, optimum lighting conditions need to be created during class periods.

Lighting will be controlled depending on the available daylight and depending on whether the rooms are occupied, it must also be possible to manually switch the lights on and off and dim them (e.g. when projectors or overhead projectors are used...). It must also be possible to separately switch the light for the blackboard.

B.E.G.'s solution:

The pushbutton-interface controls the presence detector and the blinds actuator: Button 1 sends the commands Light on / off / increase or reduce light depending on how long the button is pressed. Button 2 switches the blackboard light on or off. Buttons 3 and 4 control the blinds.

The presence detector can only be activated through the button interface, which means that the lighting must be switched on manually. Thanks to the additional light-independent semi-automatic HVAC channel, it's also possible to switch the blackboard light on and off using a switching actuator.

The values measured by the presence detector are processed by its internal logic, the DALI/KNX gateway will control the lighting depending on the information received from the detector. The setting of an offset percentage value in the presence detector will mean that the side located furthest away from the window will be provided with more light.

The presence detector will monitor the continued running time and then automatically switch off the lights and blackboard light at the end of class. The blinds actuator will permit the comfortable exclusion of undesirable external sources of light by adjusting the blinds. ■

■ Optimum lighting conditions – automatically at the touch of a button!

■ Presence-controlled ■ Light-oriented ■ Freely configurable

Presence detector
PD11-KNX-FLAT-FC



Interface
KNX/DALI-Gateway IP-N

=



Switching actuator
KNX SA-8C-230V
Lights + HVAC-Channel

=



KNX push button

=



Power supply
KNX PS 640 mA

=



Blind-actuator
KNX-SBA-4C-24V

B.E.G. KNX components employed:

KNX Push button Interface 4C
Part.-No. 90131

PD11-KNX-FLAT-FC
Part.-No. 92893

KNX SA-8C-230V
Part.-No. 90200

DALI/KNX Gateway IP-N
Part.-No. 90134

KNX PS 640 mA
Part.-No. 90212

KNX SBA-4C-24V
Part.-No. 90191

Application example Offices



Requirement:

An office room with window frontage and two workplaces – it sometimes remains unoccupied during meetings and breaks. Lighting is created with the help of fitted and suspended lamps that provide indirect lighting. The temperature is controlled by an air-conditioning system.

Lighting and climate control need to be activated only when required, i.e. only when a person is present in the room (lighting) and when the room has been occupied for an extended period (climate control). It should also be possible to adjust the settings in the office itself.

B.E.G.'s solution:

The pushbutton-interface integrated into the switch sends the switching commands to the KNX system. Buttons 1 and 2 activate, deactivate and dim the lighting. Buttons 3 and 4 either partially or fully raise or lower the blinds. Signals from buttons 1 and 2 are processed and realized by the presence detectors installed in the lamp. Switching and dimming commands to the DALI/KNX gateway will locally set the desired value previously specified for the lighting in the presence detector while taking account of the available daylight.

The blinds actuator will respond to commands sent from Buttons 3 and 4 to enable the manual adjustment and control of the slats. Automated operation may also be optionally realized, e.g. in conjunction with a weather station.

The space-saving and discreet presence detector built into the lamp will control the lighting directly above the workplaces.

The air-conditioning system will be triggered through the HVAC channel after a delay by a detector, switching actuator and the corresponding setting for how long the office needs to be occupied. ■

■ Consumer-control as the respective situation in the office requires!

Presence detector
PD11-KNX-FLAT-FC



Interface
KNX/DALI-Gateway IP-N

=



Switching actuator
KNX SA-8C-230V
Lights + HVAC-Channel

=



KNX push button

=



Power supply
KNX PS 640 mA

=



Blind-actuator
KNX-SBA-4C-24V

B.E.G. KNX components employed:

Push button interface 4C
Part.-No. 90131

KNX SBA-4C-230V
Part.-No. 90191

KNX PS 640 mA
Part.-No. 90212

PD11-KNX-FLAT-FC
Part.-No. 92893

DALI/KNX Gateway IP-N
Part.-No. 90134

KNX SA-8C-230V-CL
Part.-No. 90209

Application example Open-plan offices



Requirement:

Open-plan offices possess large areas and many workplaces. Changing usages, the creation of new group areas and the integration and expansion of departments make it necessary to frequently reconfigure the lighting. The joint use of the available space also makes cost accounting difficult.

The lighting for the entire office space needs to be efficiently controlled by presence detectors while it still needs to remain highly flexible where the creation of different scenarios is concerned. And it must be possible to precisely localize energy consumptions.

B.E.G.'s solution:

The ability to program **B.E.G.**'s KNX presence detectors as masters and slaves allows large areas to be monitored. The slaves send the information that the room is occupied to the master responsible for monitoring room brightness and timed functions and for switching and controlling lighting as required. The slave detectors may be reprogrammed to become masters when the office is reorganized, e.g. to control new departments.

DALI lamp groups may be reconfigured through the DALI/KNX gateway. The Web server integrated into DALI/KNX gateway makes it easy to define light groups and make them larger or smaller using smartphones or wireless networks.

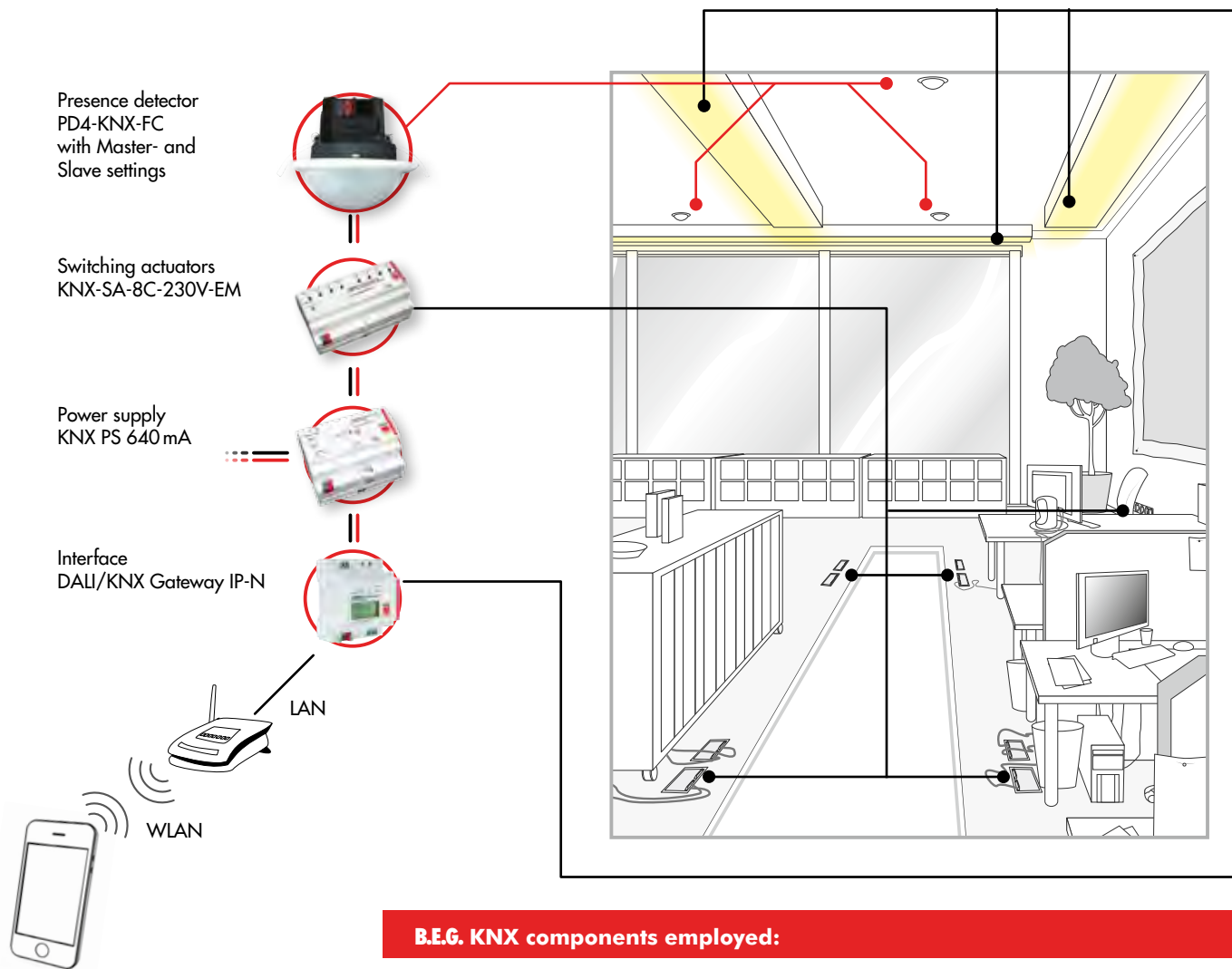
When the KNX SA-8C-230V-EM switching actuator is connected to the plug sockets, it will record and monitor power consumption and display it directly in kW/h. This means that each department's energy consumption may be simply recorded and directly assigned to the respective cost centres. This ability to measure energy consumptions also allows power-greedy equipment to be located more quickly and replaced with more energy-efficient devices. ■

■ Flexibility and clarity with energy costs and consumption!

■ Flexible

■ Adapted

■ Precise



B.E.G. KNX components employed:

KNX-SA-8C-230V-EM

Part.-No. 90210

PD4-KNX-FC

Part.-No. 92883

DALI/KNX Gateway IP-N

Part.-No. 90134

KNX PS 650 mA

Part.-No. 90212

Application example Halls/corridors



Requirement:

Halls and corridors connect individual rooms within buildings. This is where entrances and exits, doors to offices, conference and technical rooms may be found. In contrast to offices, halls and corridors are longer but narrower and may also possess window frontages, which means that the available daylight then also becomes a factor in lighting control.

Their function as passageways also means that it must be possible to detect the presence of people very rapidly. On the other hand, their narrowness means that the people using them will only make small tangential movements. But complicated detection solutions still need to be avoided.

B.E.G.'s solution:

Thanks to special sensor and lens systems, the PD4-KNX-C allows ranges of up to 40 metres to be realized at conventional installation heights. The coverage may even be increased with the help of slave circuits. Even extremely long passageways may in this way be reliably and easily covered.

B.E.G.'s wall brackets may be used to fit surface-mounted detectors above doors for the purposes of optimizing coverage. This will help detect movements earlier and more precisely.

The PD4-KNX-C will, when it detects that somebody is present, control the dimming actuator and adjust the lighting to the set value, using either 0% or 100% as the starting point.

The lighting may either be switched off or dimmed so that it helps orientation (e.g. to 15% of the normal lighting) when the passageway is unoccupied – an important aspect for hospitals and residential homes where continuous corridor lighting is important.

■ A reliable way of monitoring large passageways!

■ Simple

■ Rapid response

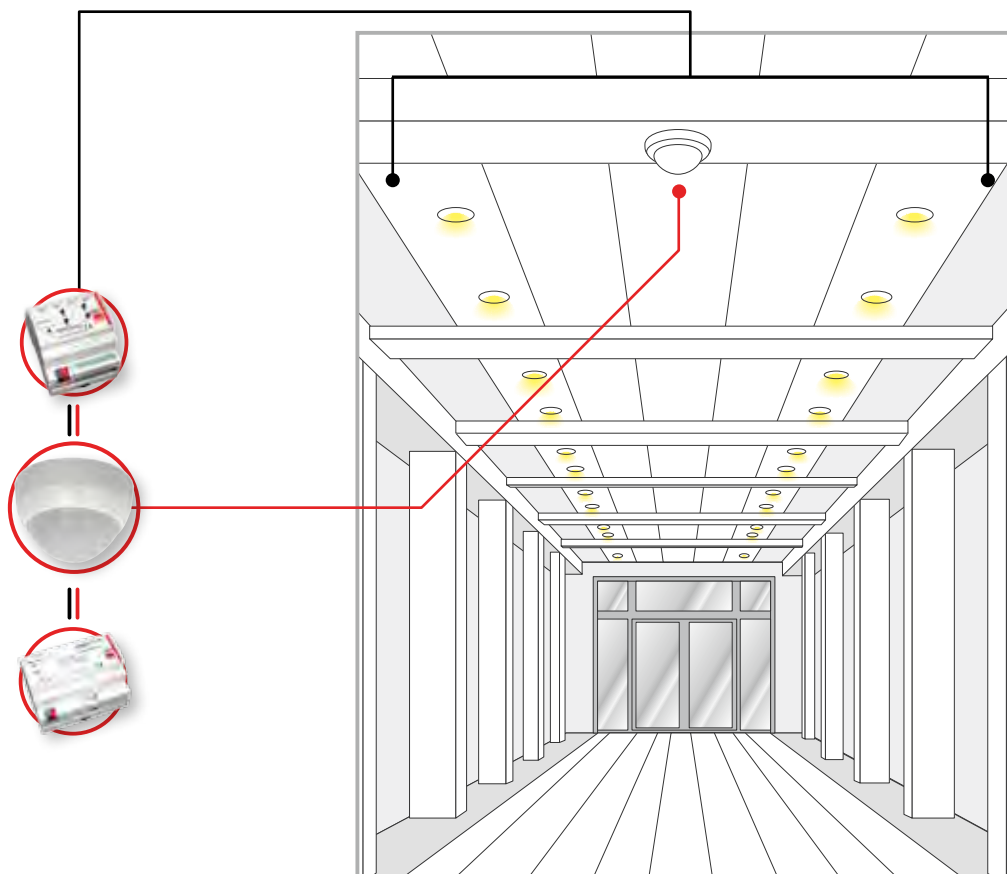
■ Intelligent



Dimming actuator
1-10 V KNX CD-4C

Presence detector
PD4-KNX-C-AP

Power supply
KNX PS 640 mA



B.E.G. KNX components employed:

KNX PS 640 mA

Part.-No. 90212

PD4-KNX-C-AP

Part.-No. 92886

KNX CD-4C 1-10 V

Part.-No. 90180

Application example High-bay warehouses



Requirement:

High-bay warehouses possess long passages between the racks of shelving – and heights ranging between seven and nine metres are also not infrequent. It's difficult to use conventional detectors in these areas because they usually detect tangential movements and need to be installed at elevated heights- which also makes measuring the light values reflected from the ground problematic.

An intelligent lighting control that works reliably in spite of being installed so high needs to be set up.

B.E.G.'s solution:

Using the specially developed GH presence detector, **B.E.G.**'s KNX is easily able to overcome the problems created by having to install the products at elevated heights. Thanks to the optical systems that have been perfectly adapted to each other, the PD4-KNX-GH series installed at a height of nine metres will detect at distances of up to 44 metres and guarantee reliable detection within any warehouse passage. The PD9-KNX-GH detector, which has been designed for installation heights of 10 metres, may also be optionally employed.

The light sensors may be adapted to the elevated installation height by entering a light-reflection factor that optimizes the light sensors for the local conditions.

The many warehouse passages require a corresponding number of switching channels and make the use of space-saving actuators necessary – which is where **B.E.G.**'s KNX SA-16C-230V comes into its own.

The actuator is up to 50% smaller than normal actuators and is able to control up to 16 light groups – it therefore constitutes the ideal choice for space-efficient installations. ■

■ **Reliable and economic even at elevated heights!**

- **Optimized**
- **Reliable**
- **Space-saving**

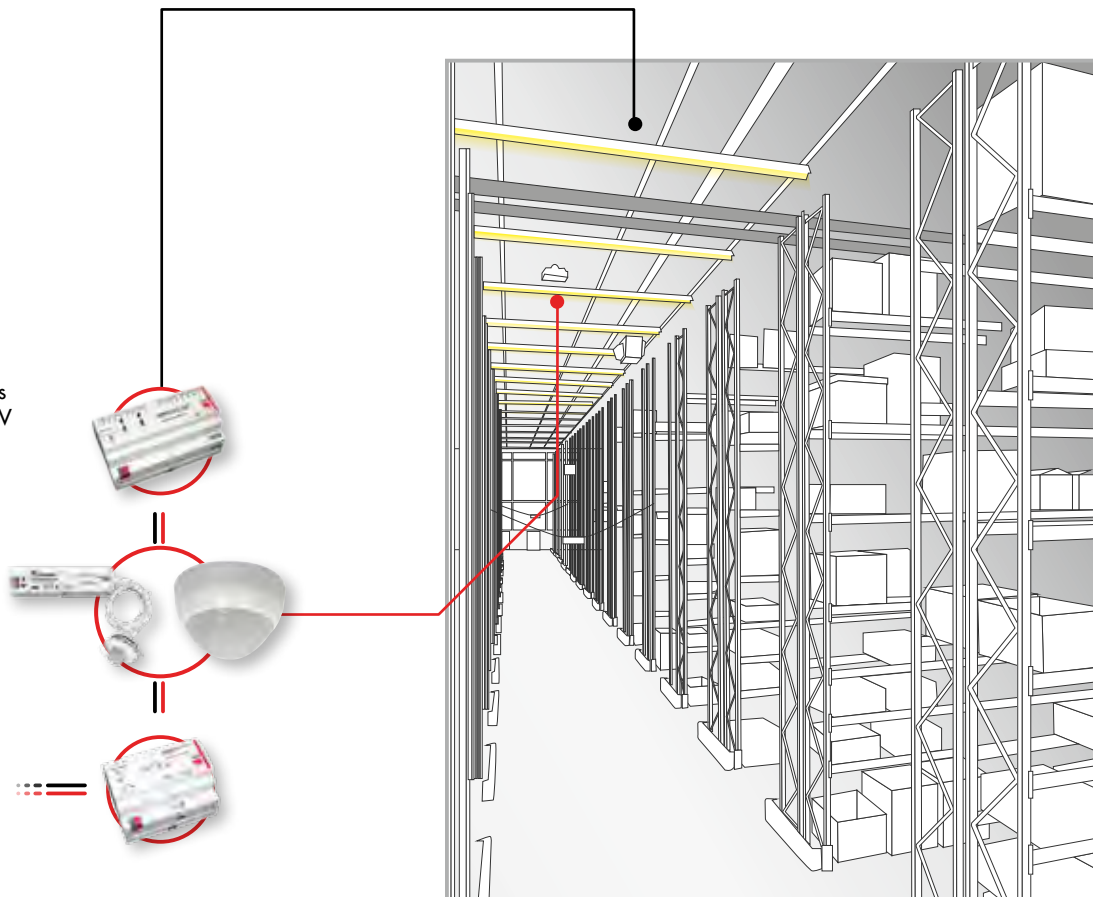
Switching actuators
KNX SA-16C-230V

Presence detector
PD9-KNX-GH-FC

or

Presence detector
PD4-KNX-GH-SM

Power supply
KNX PS 640 mA



B.E.G. KNX components employed:

KNX PS 640 mA

Part.-No. 90212

PD4-KNX-GH-SM

Part.-No. 92889

KNX SA-16C-230V

Part.-No. 90201

PD9-KNX-GH-FC

Part.-No. 92891

Application example Gymnasiums



Requirement:

Modern gymnasiums are often equipped with temporary partitions to allow the available space to be utilized in the best possible way, thus allowing, for instance, three small halls to be converted into one or two large halls for different events.

The lighting for a gymnasium that may be divided into three separate halls is to be controlled with an intelligent building system. The demands to be made on the lighting control are not only defined by the fact that it is possible to partition the hall but also by the type of use: Competitions that use the entire space require a different lighting than the teaching of three different classes or the cleaning of the premises.

B.E.G.'s solution:

A master and two slave presence detectors are used in each section of the hall – the master controls the respective light settings, the slaves increase the range. Each part of the hall is controlled separately. B.E.G.'s detectors are protected by wire baskets.

When the partitions are raised with the help of the KNX Control Touch Panel, the end switches, which are connected to a two-way switch interface, will be contacted. The system's logic will be activated via a query telegram, which will set the master presence detector in the middle as the sole master and the other two as slaves. The master presence detector now controls the lighting for the entire hall through the DALI/KNX gateway.

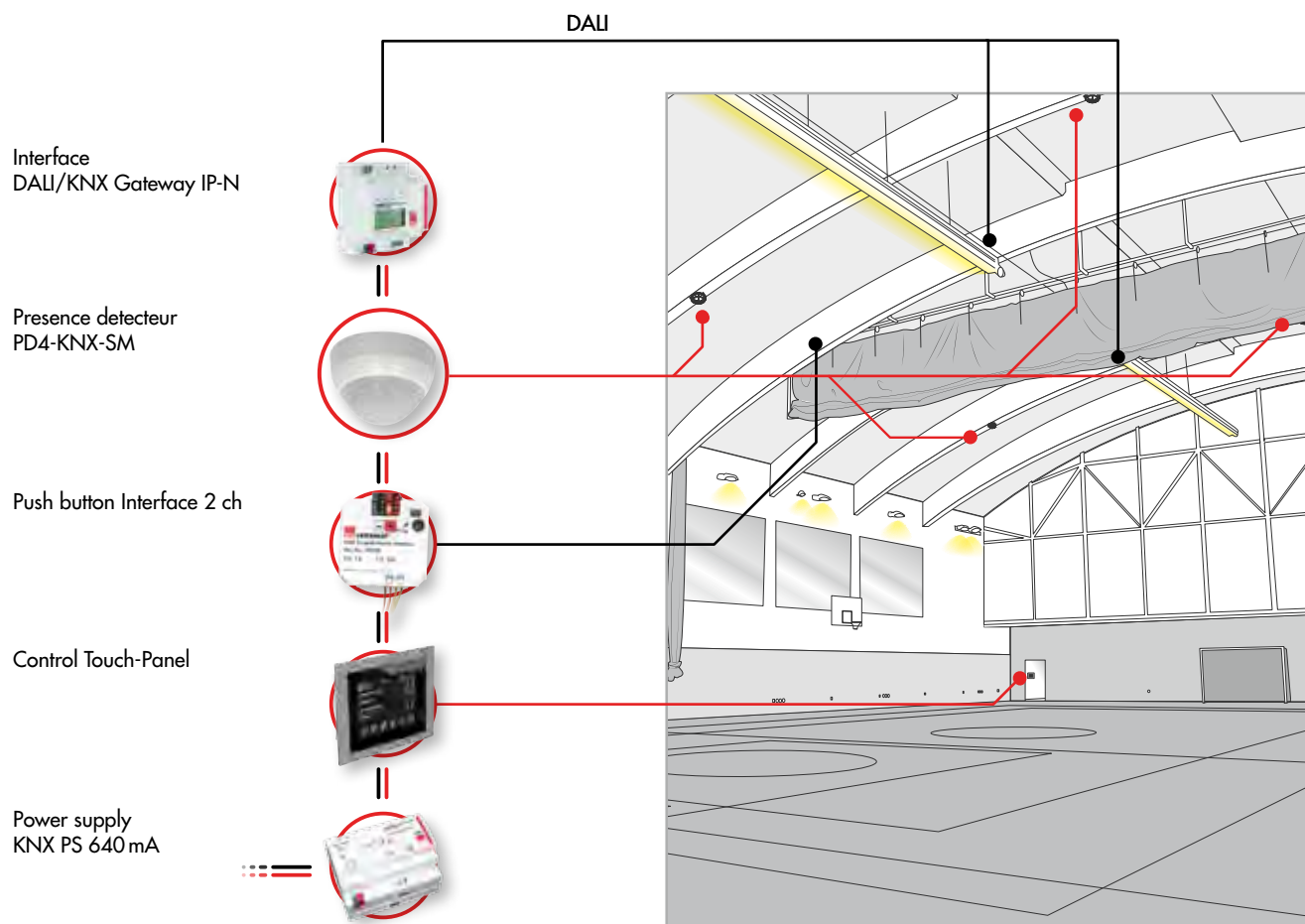
The fact that the KNX Control Touch Panel is simple to use in conjunction with the presence detector also means that the desired lighting values may be changed quickly: The touch of a button, for instance, may switch lighting from 300lux for cleaning, to 500lux for school classes and to 100% for competitions and so perfectly adapt light settings to the respective requirements. ■

■ Ideally set up for all uses !

■ Purpose-oriented

■ Functional

■ Easy to use



B.E.G. KNX components employed:

Control Touch-Panel
Part.-No. 90120

PD4-KNX-SM
Part.-No. 92883

KNX Push button Interface 2 ch
Part.-No. 90130

DALI/KNX Gateway IP-N
Part.-No. 90134

KNX PS 640 mA
Part.-No. 90212

System components

B.E.G. KNX power supply: The solution for intelligent living



The power supply provides KNX networks with the necessary bus voltage and therefore constitutes the most fundamental component within the KNX system. It is equipped with internal inductors that balance voltage fluctuations and short-term failures – to help the power supply remain stable and constant.

B.E.G. has included two different types for conventional requirements in its range (640 mA and 160 mA). The 640 mA version also comes with a

30 VDC voltage output without inductor for supplying corresponding equipment with power. Following simple cap-rail installation in the power current distribution, 16 (with the 160 mA version) or 64 (with the 640 mA version) KNX subscribers on a single line may be supplied with power.



B.E.G. KNX-actuators: Simple switching and dimming

B.E.G.'s KNX actuators convert the signals generated in the KNX BUS system into actions. It is in this way that switching actuators receive KNX telegrams and switch consumers independently of each other. Several blinds may be separately raised or lowered and the slats adjusted with the blinds actuators. Dimming actuators, on the other hand, may be used to switch the lighting to set values.

An additional feature is the metering of consu-

med power that has been incorporated into the KNX SA-8C-EM. It allows consumption to be determined either for each individual channel or as the sum of all channels. The actuator also possesses an operating-hour counter and monitors service intervals – ideal for extending building management!

The DIN-rail devices may be easily, quickly and flexibly incorporated into KNX systems and re-programmed at any time.



B.E.G. DALI/KNX-Gateway: For controlling lighting with DALI

B.E.G.'s DALI/KNX gateway connects the cross-system KNX installation bus with the DALI BUS that has been designed solely for the purposes of controlling lighting.

B.E.G.'s DALI/KNX gateway allows up to 64 ballasts to be switched or dimmed in 16 groups. The device serves as the master and power supply for the connected ballasts.

The integrated display and buttons or the software tool may be used to take the device into operation. **B.E.G.** has also included an alternative RJ45 interface in the device to be connected to an existing IP network and taken into operation with the help of the integrated Web server.

**B.E.G. KNX IP-devices:
Configuration via Ethernet
and the Internet**

B.E.G.'s KNXnet/IP Interface acts specifically as a hardware interface that allows KNX systems to be connected to TCP/IP networks.

The KNXnet/IP Interface Web alternatively provides an integrated Web server for comfortable system visualization, for example, with the help of smartphones or tablet and desktop PCs.

This makes systems for visualization, alarm management, data recording and building management very future-proof



**B.E.G. presence and motion detectors:
Efficiently switching and dimming lights**

B.E.G. provides KNX presence detectors for different ranges (up to 44 metres and a radius of 360°) that are able to satisfy almost any of the demands that are made on professional lighting-control systems, e.g. at schools, gymnasiums, department stores, warehouses, offices, corridors, swimming baths, private homes, museums and staircases.

Controlling buildings with KNX does not only allow lighting to be adjusted depending on the available daylight and whether rooms are occupied or not, it also permits individual settings to be made, e.g. for interior lighting, heating and ventilation. This means that individual and flexible solutions may also be realized in a cost-efficient and energy-saving manner for both old and new buildings.



**B.E.G. KNX Control Touch-Panel:
Attractive and clear**

B.E.G.'s varied range also includes a KNX Touch Control Display for directly carrying out visualizing and monitoring tasks in "intelligent buildings".

When used for visualization and operation, the multifunctional KNX Control Touch Panel allows up to 110 KNX functions to be controlled and up to 64 scenes to be configured. All the KNX

system's important standard functions along with additional messages may be simply set using the 5.7" TFT colour display.



**B.E.G. IR-PD-KNX:
The remote control which offers an easy
handling to the user**

With the optional remote control IR-PD-KNX, settings can be made at the detector without ETS. For example, it can be used as a mobile light switch and for subsequently changing the light value and follow-up time. The LED function

indicators can be activated and deactivated. Furthermore, it is possible to put the detector into programming mode using an IR command.



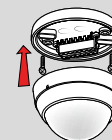


Accessories: Upgrading and adapting

Our customers face new challenges every day and are always looking for complex and individual solutions. That's why **B.E.G.** included a large selection of special accessories – to be able to respond to all requirements.

Surface mounted sockets for B.E.G.'s KNX presence detectors

■ LUXOMAT® Surface-mounted sockets and bases – Part.-No. 92375 / 92161



■ **Surface-mounted IP sockets** and bases permit the level of protection to be increased at a later point in time to safeguard the devices against water and moisture. This allows **B.E.G.**'s KNX products to perform and remain durable even in difficult conditions.

Blinds for B.E.G.'s detectors

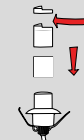
■ LUXOMAT® PD2, PD4 – surface-mounted – Part.-No. 92260



The blinds possess predetermined breaking points at regular intervals.



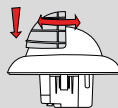
■ LUXOMAT® PD9-GH (great heights) – Part.-No. 33207/ 92952/ 92953



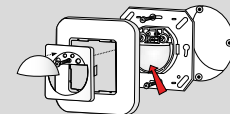
■ LUXOMAT® PD4 – Fake-ceiling / Flush-mounted – Part.-No. 92301



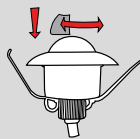
The blinds possess predetermined breaking points at regular intervals.



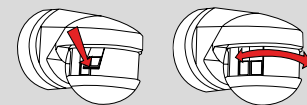
■ LUXOMAT® Indoor 180 – Part.-No. 33233



■ LUXOMAT® PD9 – Part.-No. 32702



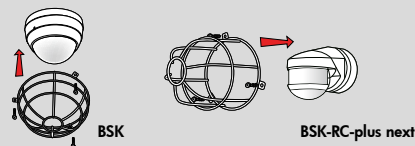
■ LUXOMAT® RC-plus next – Part.-No. 32697



■ **Blinds** allow the detector's coverage to be adapted to the local requirements at site. Sources of interference or areas that do not need to be covered may thus be excluded from the area of detection. Blinds are already included in the scope of delivery. Additional blinds may also be ordered if necessary.

Wire baskets for B.E.G.'s KNX detectors

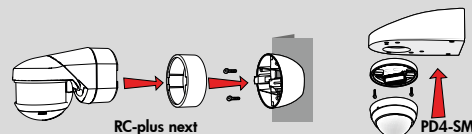
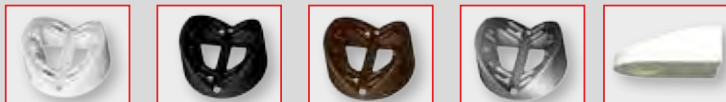
- Wire basket BSK/ BSK-RC-plus next – Part.-No. 92199/ 92467



- **Wire baskets** protect detectors against any external intervention, e.g. in public buildings, gymnasiums, etc.

Wall mount and base for B.E.G.'s KNX detectors

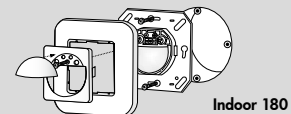
- LUXOMAT® Wall mount / corner base RC-plus next – Part.-No. 92441/ 97004/ 97024/ 97014/ 97043



- **Mount and base** make it easier to install detectors, increase the number of possible installation locations and thus optimize the detection range. The RC-plus next corner base is available in the corresponding colours.

Covers for B.E.G.'s KNX wall switches

- LUXOMAT® Covers for Indoor 180 – Part.-No. 92139/ 92630/ 92631/ 92632/ 92633/ 92634



- **Covers** for B.E.G.'s Indoor 180 Wall Switch may be matched with furnishings; it fits in all commercially available in-wall sockets. A cover that increases the level of protection to IP 54 is also available

Frame for B.E.G.'s KNX Control Touch Panel

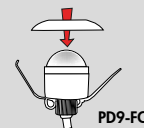
- LUXOMAT® Frame for KNX Control Touch Panel – Part.-No. 90127/ 90137/ 90138/ 90142



- **Frames** convert B.E.G.'s KNX Control Touch Panel from a central control unit into a designer object – either as part of the interior furnishings or as a highlight within the interior design. Form and function combined in modern-day technology!

Cover rings for B.E.G.'s KNX presence detectors

- LUXOMAT® Cover rings for PD9-KNX-FC – Part.-No. 92235/ 92237/ 92238



- **Cover rings** either allow the PD9-KNX-FC presence detector to be incorporated into the overall appearance of the room or help reduce its visibility.

Part.-No. Description	Part.-No. Description	Part.-No. Description
32697 Blind for RC-plus next	90210 KNX SA-8C-EM	92891 PD9-KNX-GH-FC
92301 Blind for PD4-FC/-FM	90211 KNX PS-160 mA	92441 Wall bracket for PD4-K-SM
32702 Blind for PD9	90212 KNX PS-640 mA	92889 PD4-KNX-GH-SM
33233 Blind for Indoor 180	92139 Covering IP54, pure white	92886 PD4-KNX-C-SM
90120 KNX Control Touch-Panel	92141 SM-Socket for Indoor 180	92887 PD4-KNX-C-FC
90134 DALI/KNX Gateway IP-N	92161 Socket IP54 PD2-SM, PD4-GH	92888 PD4-KNX-C-FM
90123 DALI-Programming Tool	92199 Wirebasket BSK	92467 Wire basket RC-plus next
90126 KNXnet/IP Interface Web	92235 Cover ring for PD9, anthracite	92630 Covering IP20, pure white
90127 Glass frame black	92237 Cover ring for PD9, Stainless steel	92641 Covering IP20, traffic white
90128 FM-box		92632 Covering IP20, cream white
90130 KNX sensor interface, 2x	92238 Cover ring for PD9, white	92633 Covering IP20, Stainless steel
90131 KNX sensor interface, 4x	92260 Blind PD2, PD4-SM	92634 Covering IP20, anthracite
90137 Metal frame Aluminium	92375 SM-Socket IP65 for PD4-SM	97004 Corner socket RC-plus next, white
90138 Metal frame Stainless steel	92880 PD2-KNX-SM	
90142 Glass frame white	92881 PD2-KNX-FC	97024 Corner socket RC-plus next, black
90180 KNX CD-4C	92882 PD2-KNX-FM	
90190 KNX SBA-4C-230 V	92883 PD4-KNX-SM	92893 RC-plus next (KNX), white
90191 KNX SBA-4C-24 V	92884 PD4-KNX-FC	92894 RC-plus next (KNX), black
90192 KNX SBA-8C-230 V	92885 PD4-KNX-FM	92952 Blind for PD9-GH, remote zones
90200 KNX SA-8C-230 V	92892 Sensor insert for Indoor 180-KNX	92953 Blind for PD9-GH, remote and 1/2 near zones
90201 KNX SA-16C-230 V		
90209 KNX SA-8C-230 V-CL	92890 PD9-KNX-FC, white	92123 IR-PD-KNX

B.E.G. is naturally happy to answer any questions you may have about its products.

**Just call us:
+44 870 850 5412**





The necessity of saving energy

The subject of saving energy has become increasingly important in recent years both for governments and consumers. This is, on the one hand, due to the fact that energy reserves are not inexhaustible and, on the other, that the phasing out of nuclear power and the expansion of renewable energies – although they must be regarded as positive measures – come at a considerable cost. Energy is a valuable commodity that is also becoming increasingly expensive.

The production and utilization of energy is also currently so harmful that it is destroying our living environment. Accordingly, a massive reduction in emissions of the greenhouse gas CO₂ has become a challenging obligation for industrial nations.

Great savings potentials may be found in building automation – both for commercial and residential properties. One way to realize such potential is to adjust the lighting to requirements in such a way that natural daylight is augmented only by the amount of artificial light that is actually needed. Measurements taken in typical offices located in central Europe have shown that daylight during the summer months can provide up to 80% of the required light so that the amount of artificial light used may be reduced to 20%.

B.E.G. has included a large spectrum of products in its range that can help protect the environment, e.g. energy-efficient lamps, HVAC circuits, energy-management systems, timer switches, light sensors and presence detectors.

With its many different types of presence detectors and energy-saving bulbs for lamps and spotlights as well as controls that regulate heating depending on whether rooms are occupied or not, **B.E.G.** is contributing to the reduction of CO₂ emissions as well as to the conservation of resources and the minimization of costs both in commercial and residential applications.

For an environment
worth living in! ■



B.E.G. ALSO OFFERS:



Motion and occupancy detectors



DALI/KNX



Lights



Floodlights



VBoxes



Time switches



photo electric switches



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Environmental-
management



Quality-
management