

KNX Solutions Guide  
The worldwide STANDARD  
for home and building control



# Guide to KNX automation solutions for Theben high-performance intelligent buildings

Most of our products work behind the scenes: they turn off the light in the stairwell, heat your bathroom in the morning or lower your blinds when a storm is approaching. These little guardian angels have one avowed objective: to make your daily life as pleasant as possible while saving energy.

## Theben is a leader in the global market

- + 700 employees
- €100M + turnover
- Made in Germany
- Subsidiaries operating in Germany, Great Britain, France, Italy, Switzerland, Spain and Singapore, and + 50 establishments in the rest of the world

## Specialists in the fields of:

- Lighting Management
- Shutter and Blind Control
- HVAC management
- Time Management

## Our response

KNX is a protocol allowing all the equipment and systems of an electrical installation (e.g. heating, air-conditioning, lighting) to intercommunicate.

KNX is recognised as a worldwide standard and unique international norm (ISO/IEC 14543-3) for the technical management of buildings and habitats. It is an open (non-proprietary) system made by over 300 hundred manufacturers, with thousands of products..

THEBEN offers you its know-how and experience, presenting you with a wide range of products that will enhance comfort and optimise energy efficiency.

The KNX Bus is therefore the solution for interconnecting and integrating all of these electrical devices in each of these sectors.

Whatever your need, there is a THEBEN KNX solution that meets national energy efficiency requirements.

## KNX Solutions

- Heating controls,
- timers (internal, programmable, etc.),
- movement and presence detectors,
- actuators (for blinds, heating, and light dimmers, for example),
- sensors (for CO<sub>2</sub>, light, and temperature, for example),
- system devices (e.g. power supply, line couplers).



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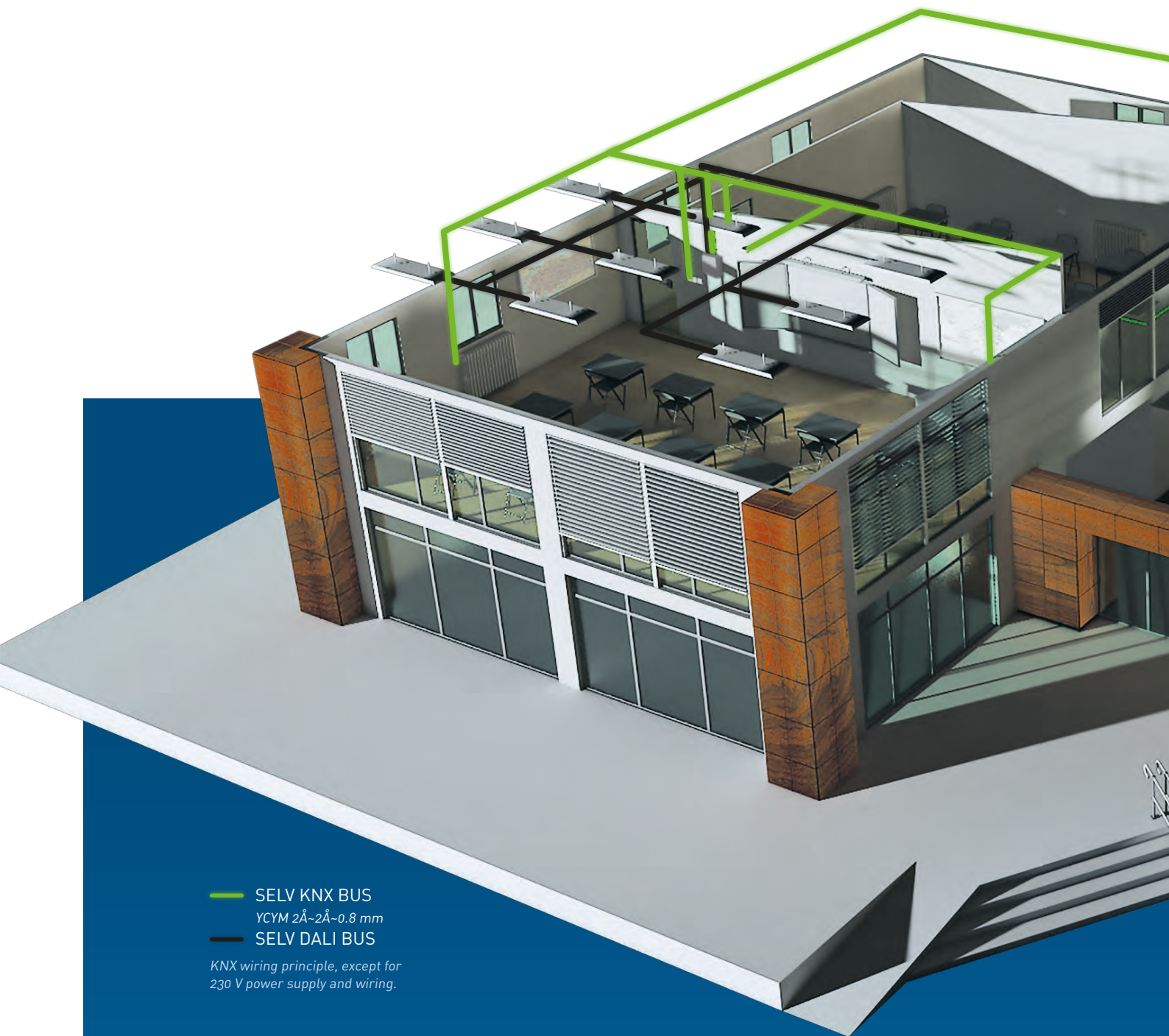
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- SELV KNX BUS  
YCYM 2Å-2Å-0.8 mm
- SELV DALI BUS

*KNX wiring principle, except for  
230 V power supply and wiring.*

# Education

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An intelligent building for education



Installing KNX equipment in a school building will significantly reduce energy consumption costs; but above all it will considerably enhance comfort for higher quality learning.

The automated management of functions such as lighting, heating, air quality and blinds will assure an ideal environment for both students and teachers. KNX makes it easy to manage school bells or clocks displays. Every room in the educational establishment benefits from an especially adapted solution that is upgradable, thanks to KNX automation; classroom, library, sports centre and University halls of residence.

Energy consumption, displayed on a KNX/IP interface, can also be used as an educational tool.

# Education Classroom

In a classroom, the student's comfort is paramount and Standard EN 12464-1 stipulates a minimum level of lighting. That is why lighting and sun protection should be automated. Manual control is still necessary for specific applications such as video projections. Heating control also plays an important role in both comfort and energy saving. Ultimately, air quality is essential for concentration and therefore ventilation must be managed.



### Benefits

- Energy efficiency in automatic mode.
- System flexibility using manual mode if necessary.
- Optimal comfort for students and teachers.

## Solutions

- Management of 3 different lighting circuits, 2 of which are managed automatically by presence detection (Corridor, and Windows).
- Management of blinds according to the position of the sun and room occupancy.
- Temperature control according to presence and school holidays.
- A KNX CO<sub>2</sub> sensor permanently measures air quality and automatically regulates ventilation.
- Manual control of lighting and blinds is possible using pushbuttons.

## Sensors

### Input module

1 Manual control of lighting and blinds / shutters

2 Lighting Presence detector

3 Heating - HVAC CO<sub>2</sub> temperature and hygrometry sensor

Shutters and Blinds Weather station

## Actuators

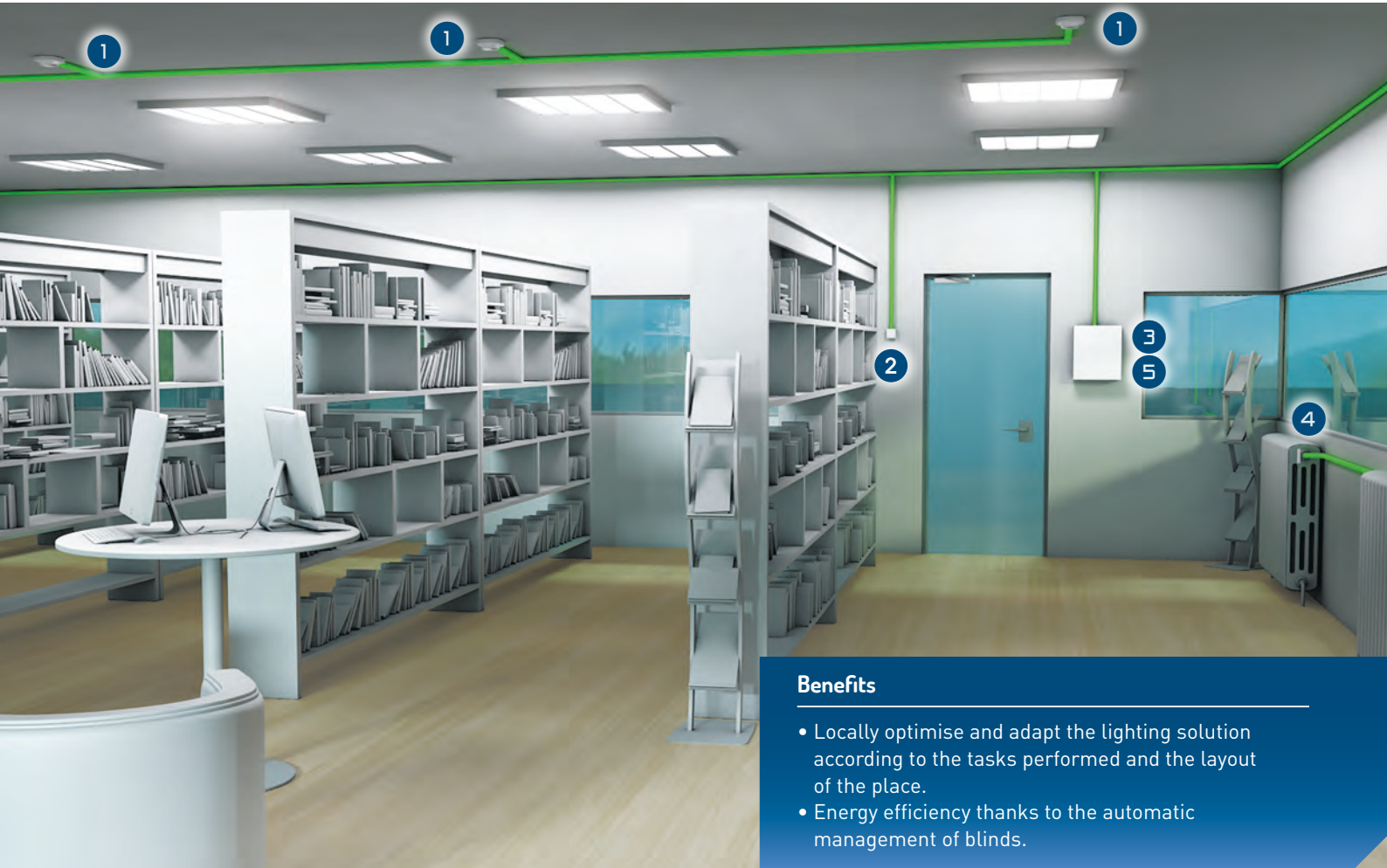
4 Dimmers 1-10 V or DALI

5 Servomotor and heating valve control [with its 2 inputs for window sensor and B.P.]

6 Blinds actuator For pushbutton Manual control of lighting and blinds / shutters

# Education Library

In libraries, it is only necessary to light the aisle in which a user is present and manage lighting ambiances suitable for reading, working or for document research. The automatic management of blinds adds visual comfort and intelligent heating control (by means of presence detector and window sensor, etc.) is essential. The time display is synchronised throughout the whole establishment.



### Benefits

- Locally optimise and adapt the lighting solution according to the tasks performed and the layout of the place.
- Energy efficiency thanks to the automatic management of blinds.

## Solutions

- Lighting management using presence detectors.
- Temperature control according to presence and school holidays.
- Synchronised clocks for displaying time.
- Management of blinds sun-screens according to the position of the sun and room occupancy.

## Sensors

### Lighting

- 1. Special shelving presence detector

### Heating

- 2. Individual temperature controller (with its 2 inlets for windowsensor and B.P.)

### Shutters and Blinds

- Weather station

## Actuators

- 3. Dimmers 1-10 V or DALI

- 4. Servomotor for heating valves

- 5. Blinds actuator

### Time distribution

- Time display

# Education Sports centre

In a gym, the lighting level must vary according to the activity (training, competition) and the automatic management of lighting in high-ceilinged buildings requires a special technology. Some electrical equipment must also be protected against accidental knocks.



## Benefits

- System can be easily adapted according to occupancy and conditions under which room is used.
- The system guarantees the lighting levels required in sports installations while respecting the principles of «active» ecological performance levels.

## Solutions

- Lighting management using presence detection, especially for high-ceilinged building that can be configured and used by remote control, together with light sensors.
- Protective grille for presence detectors to resist damage.
- Display and control required lighting scene via the Varia multi function display screen.

## Sensors

### Multi-function screen

Multi-function screen

### Input module

Input module for 3-position key switch

### Lighting

Presence detector especially for high-ceilinged buildings

Light sensor

Protective grille

### Shutters and Blinds

Weather station

## Actuators

### Time distribution

Time display

Dimmers 1-10 V or DALI

Blinds actuator

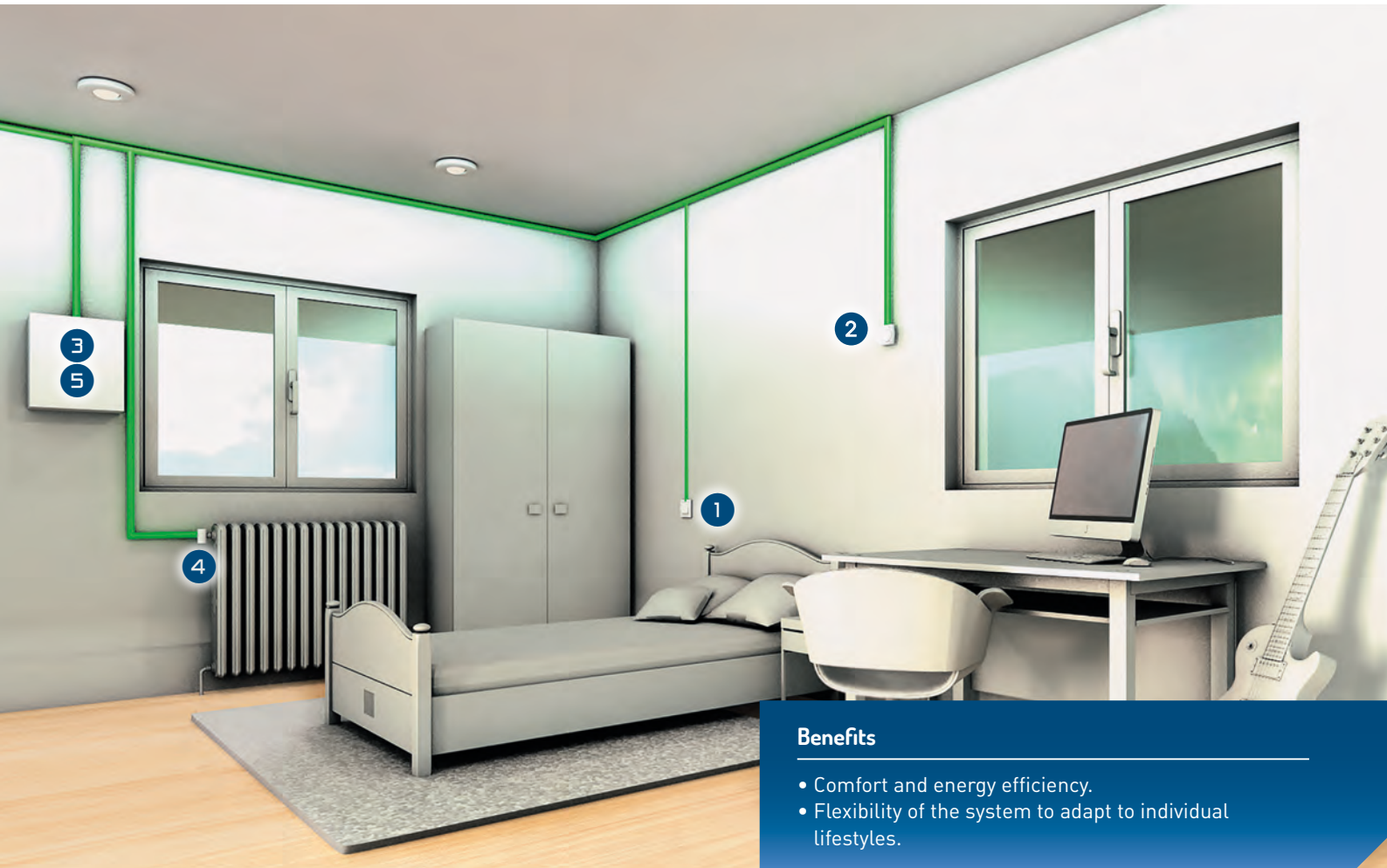


# Education

## University halls of residence

In a university halls of residence it is important to prioritise thermal comfort and to automate some lighting. Limit the thermostat control's range to not exceed temperature thresholds allows energy consumption to be optimised.

The control of lighting and heating in the event that the student forgetting, or being absent will make considerable energy savings.



### Benefits

- Comfort and energy efficiency.
- Flexibility of the system to adapt to individual lifestyles.

### Solutions


- Movement detector for managing lighting in toilets.
- Individual temperature controller that can limit the control range for setpoint.
- Window sensor to change from comfort mode to economy mode if window opens.

### Sensors


#### Input module

- 1  Pushbutton (manual lighting and blinds / shutter control)


#### Lighting

-  Movement detector


#### Heating


- 2  Individual temperature controller

#### Shutters and Blinds

-  Weather station

### Actuators

- 3  Switch actuator

- 4  Servomotor for radiator valves

- 5  Shutter /blind actuators



# Service sector

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## Efficiency and comfort to suit your needs

Thanks to KNX, you can offer occupants even more comfort. Create and modify environments that perfectly meet your needs using individual or centralised settings.

Whether in your office or in the meeting room, the heating, ventilation, air-conditioning, lighting devices and other electrical systems will be finely controlled. Easy to set up and use, the installation can be upgraded and modified without any heavy intervention. With the field bus you can also include alarm management, remote surveillance and supervisions via the IP.

By choosing KNX solutions, the atmosphere in each room will always be pleasant and you will reduce the energy bill for the whole building.



- SELV KNX BUS  
YCYM 2 $\hat{A}$ -2 $\hat{A}$ -0.8 mm
- SELV DALI BUS

KNX wiring principle, except for  
230 V power supply and wiring.

# Service sector Office

In offices, the visual comfort and quality of each workstation must be assured. Therefore, it is essential to illuminate offices with a combination of natural and artificial light, taking the specific layout of the office in to account. In office buildings it's imperative that all lighting is switched off and heating turned down when the staff have gone home to save energy.



## Benefits

- Flexibility of the installation according to the needs of the office.
- Less wiring thanks to pre-wired box.
- Energy savings achieved thanks to automations.

## Solutions

- Pre-wired box can manage the lighting, HVAC and roller blinds of several offices (according to number of circuits).
- Lighting and HVAC management using presence detection.
- Input module for manual control of lighting and blinds.

## Sensors

### Input module

- 1 Pushbutton (manual lighting and blinds / shutter control)

### Lighting

- 2 Presence detector

### Heating – HVAC

- 3 Individual temperature controller (with its 2 inlets for window sensor and B.P.)

### Shutters and Blinds

- Weather station

## Actuators

- Pre-wired box containing:

- 4 Dimmers 1-10 V or DALI

- 5 Fan coil actuator

- 6 Blinds actuator

# Service sector

## Meeting room

In a meeting room, proper management of the lighting favours concentration and assures the visual comfort of its occupants. Air quality also plays an essential role. Thus, the constant measuring of CO<sub>2</sub> levels allows ventilation to be regulated. Ultimately, scenarios can be created and managed according to the required activity (video projection, conference, etc.).



### Benefits

- Optimal comfort and quality of concentration for users.
- Easy to adapt the room to each situation.

### Solutions

- Lighting management using presence detection.
- Management of swivelling sun-screens according to the position of the sun and room occupancy.
- A KNX CO<sub>2</sub> sensor permanently measures air quality and automatically regulates ventilation, if necessary.
- A multifunction screen allows temperature control to be optimised according to presence (via the detector) and different scenarios can be managed according to the activity.

### Sensors

#### Multi-function screen

1 Manual control of lighting and blinds / shutters and scenarios, fan coils

#### Lighting

2 Presence detector

#### Air Quality Sensor

CO<sub>2</sub>, temperature, humidity sensor

#### Shutters and Blinds

Weather station

### Actuators

3 Dimmers 1-10 V or DALI

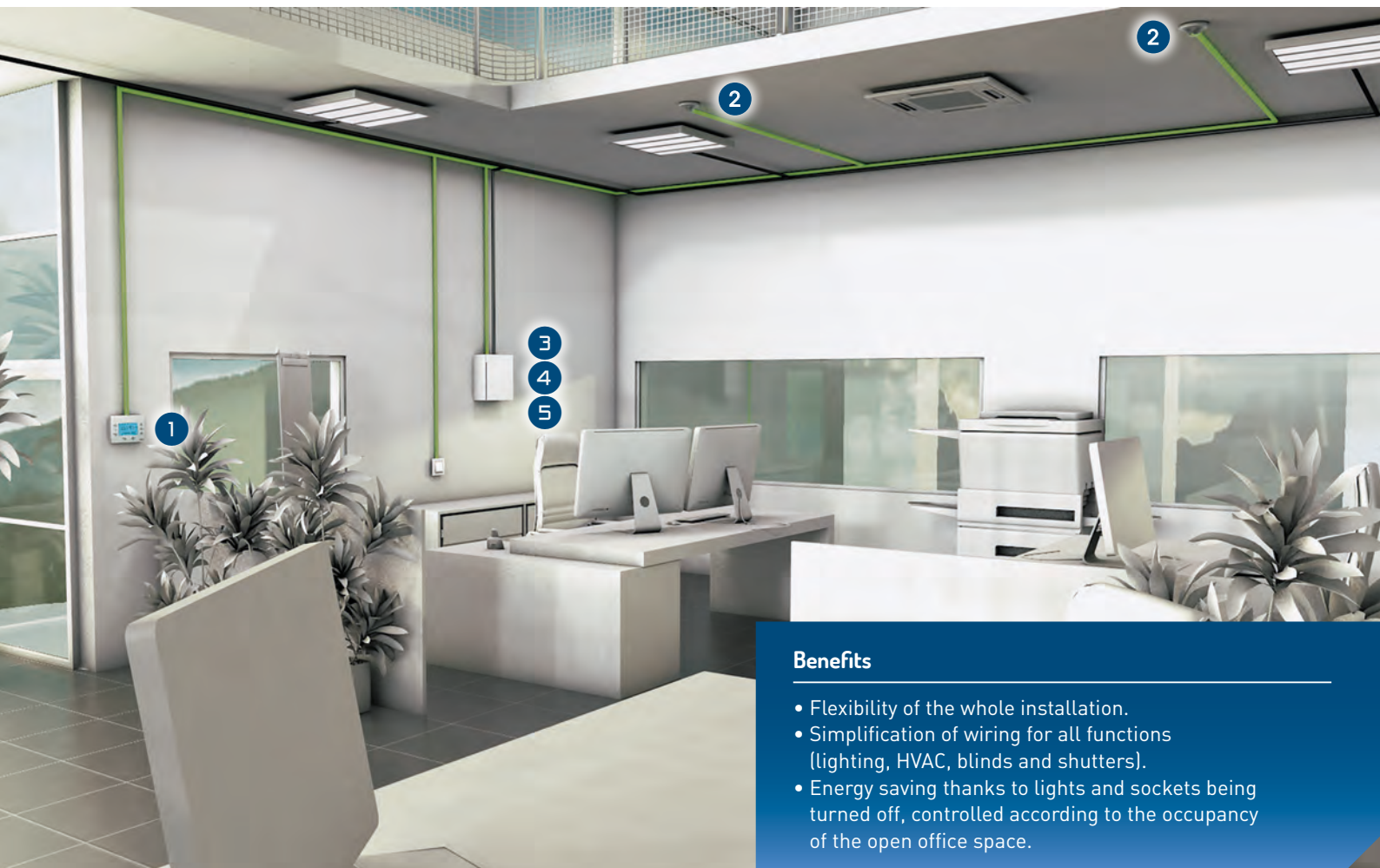
4 Fan coil actuator

5 Blinds actuator

# Service sector

## Open office space

In an open office space it must be easy to adapt the installation if the layout of the workspaces is changed. It must be possible to manage the lighting of each work station individually, but also according to presence and the natural light sources available. Furthermore, electrical sockets are managed according to the premises' occupancy hours, to avoid any unnecessary consumption by the electrical devices.



### Benefits

- Flexibility of the whole installation.
- Simplification of wiring for all functions (lighting, HVAC, blinds and shutters).
- Energy saving thanks to lights and sockets being turned off, controlled according to the occupancy of the open office space.

### Solutions

- Control of the lighting circuits by presence detectors.
- Possible to override the lighting and blinds using individual remote controls.
- Easier to configure lighting circuits using DALI bus.

### Sensors

#### Infrared remote control

Control of lighting and blinds / shutters

#### Multi-function screen

Manual control of lighting and blinds / shutters and scenarios, fan coils

#### Lighting

Presence detector

#### Heating - HVAC

CO<sub>2</sub> temperature - hygrometry fan coil sensor

#### Shutters and Blinds

Weather station

### Actuators

Dimmers DALI

Fan coil actuator

Blinds actuator

# Service sector

## Hotel room

In a hotel room, it is essential to automatically manage all the equipment (lighting, HVAC, electrical socket) according to room occupancy. When a user is present, they can manually adjust the lighting, blinds and heating (by limiting the range of the thermostat controller to not exceed temperature thresholds).

If the windows are opened, the automations must establish the actions necessary for limiting energy loss.



### Benefits

- Solution combining energy savings and user comfort.
- Savings on wiring thanks to pre-wired box.

### Solutions

- Presence detector for managing lighting in the bathroom.
- Badge reader to announce the arrival of the occupant and turn on the various items of equipment.
- Multi-function screen for viewing and controlling lighting, heating and blinds, for example.
- Window sensor to change from comfort mode to economy mode if window opens.
- Pre-wired box for managing the lighting, heating and blinds of several rooms.

### Sensors

#### Multi-function screen

Manual control of lighting and blinds / shutters and scenarios, fan coils

#### Input module

Pushbutton (manual control of lighting and blinds / shutters)

#### Lighting

Presence detector

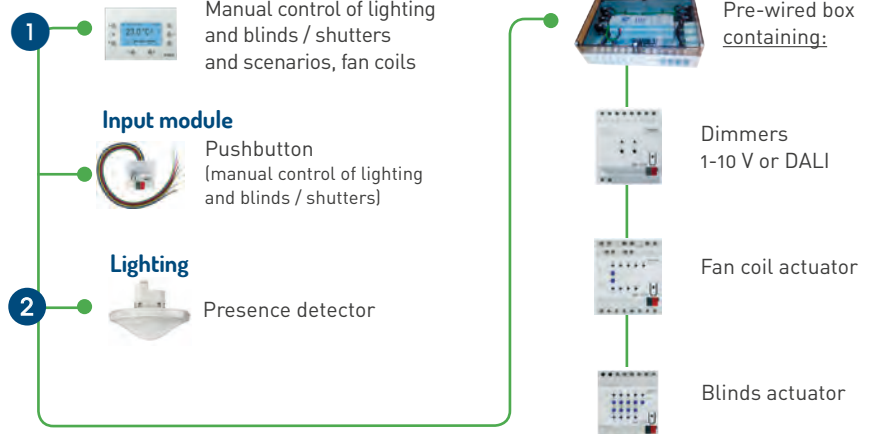
### Actuators

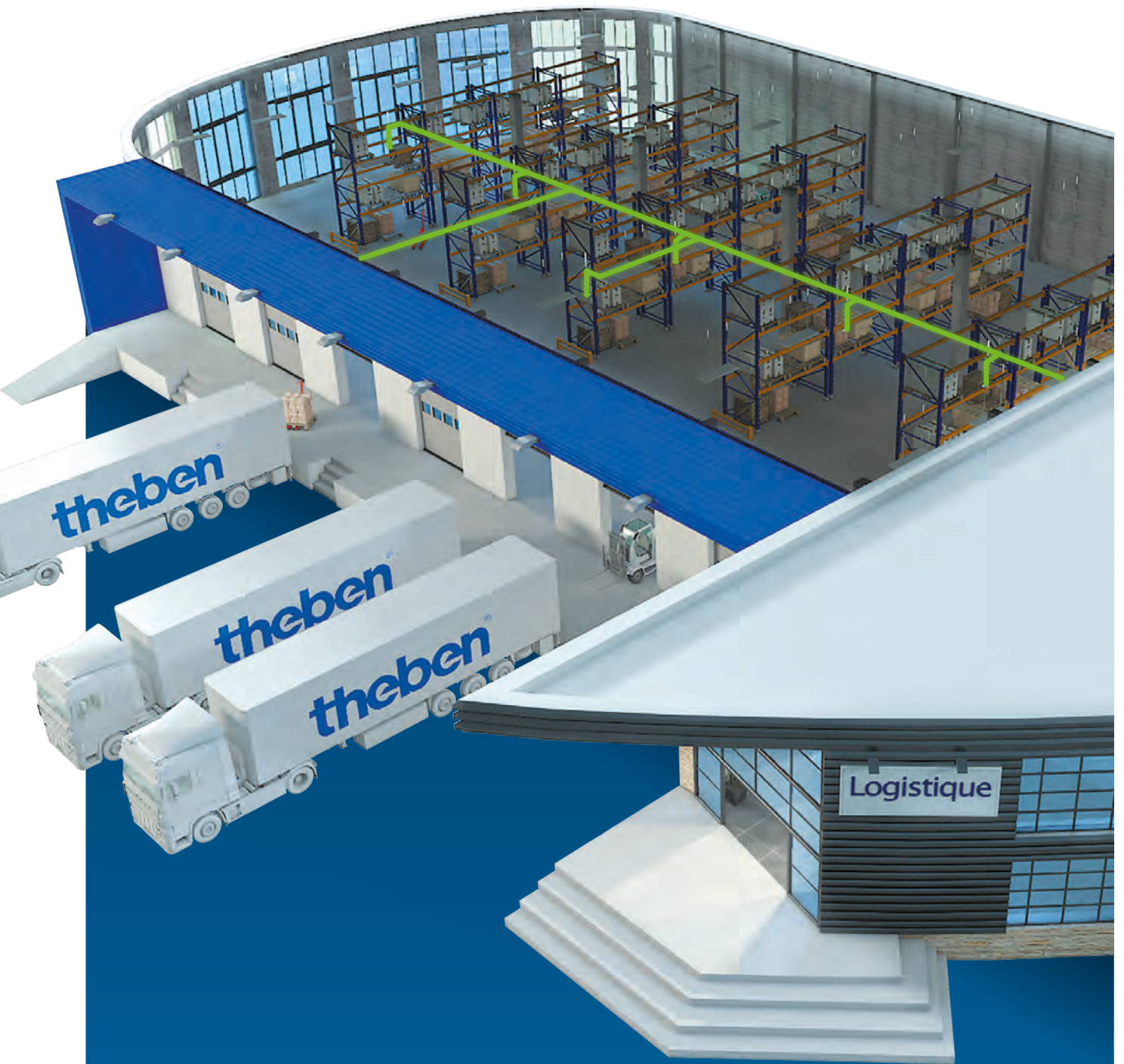
Pre-wired box containing:

Dimmers 1-10 V or DALI

Fan coil actuator

Blinds actuator





# Industry

Supervise the building using high-performance technology

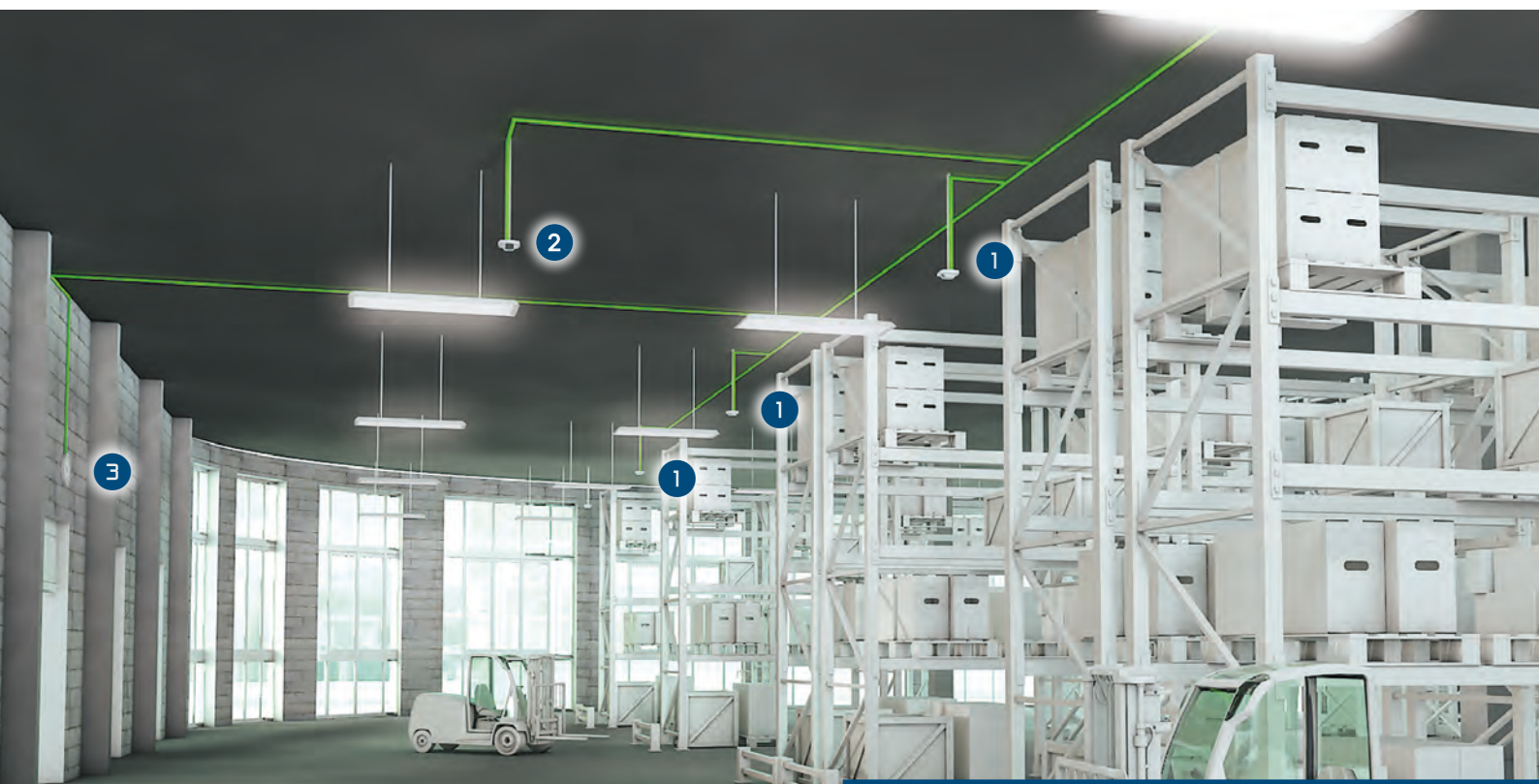
To ensure the efficient maintenance of the building, KNX transmits technical information and allows its supervision via IP. This high-performance technical management results in a lower energy bill.

— SELV KNX BUS  
YCYM 2Å-2Å-0.8 mm

*KNX wiring principle, except for  
230 V power supply and wiring.*



In a warehouse, the lighting must be managed locally (aisle by aisle) according to presence and luminosity, while taking the specifics of high-ceilinged buildings into consideration. Managing lighting according to warehouse opening and closing hours optimises the building's overall lighting management.



### Benefits

- Energy savings due to the local management and according to the operating hours of each warehouse area.

## Solutions

- Presence detector especially for aisles and high-ceilinged buildings for lighting management.
- Annual programming clock manages lighting circuits according to opening days and times. It also shares and synchronises the time on the time displays.

## Sensors

### Clock



Annual programming clock

### Lighting



Presence detector especially for shelving and high-ceilinged buildings



Special detector circulation

## Actuators

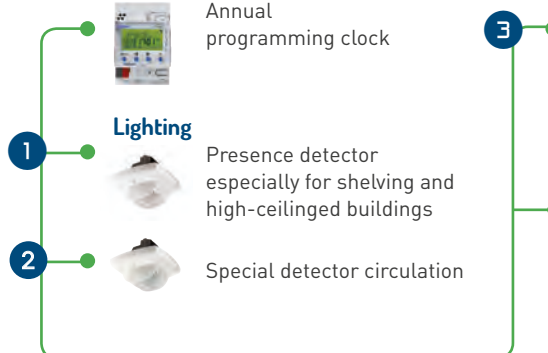
### Time distribution



Time display



Switch actuator





— SELV KNX BUS  
YCYM 2Å-2Å-0.8 mm

*KNX wiring principle, except for  
230 V power supply and wiring.*

# Residential

Functions adapted to your lifestyle,  
for enhanced comfort and well-being.

Our KNX solutions offer you flexibility and the possibility to upgrade at a reasonable cost, creating customised scenarios or easily modifying the installation to fulfil your wishes.

The functions of lighting management, temperature control and blinds management make home life very comfortable, as well as optimising energy costs in compliance with energy saving requirements.

Using the KNX protocol it is also possible to view the consumption data in real time and any irregularities can be identified faster in order to correct them. This therefore saves time, money and energy.

# Residential House

In a house, it is important that rooms can be modified over time without installing new circuits. The automations must simplify the day-to-day life and actions of the end user. It is useful to manage the heating according to times and room temperature whilst having the option to manually override or turn off this setting. Generating visual and heating comfort in the home using automations also allows savings to be made.



### Benefits

- Thermal and visual comfort inside the home in both summer and winter.
- Energy saving on lighting and heating devices.
- Flexibility of the KNX installation if the layout of any rooms is changed.

## Solutions

- Automation of windows; a weather station monitors the sun and shade on the facades.
- OpenTherm\* controller covering the needs of the underfloor or radiator heating system.
- Regulation optimised according to occupancy hours, and indoor temperature thanks to multi-function thermostat.
- Movement detector for managing lighting (for example, in bathroom, hall, toilets)
- Possible to establish scenarios (light, heating, blinds) according to their daily use, using a multi-function screen.
- Possible to manually control lighting and blinds using pushbuttons.

\* OpenTherm is a standard communication protocol used in central heating systems.

## Sensors

### Multi-function screen

- 1 Manual control of lighting and blinds / shutters and scenarios, fan coils

### Input module

- 2 Pushbutton (manual control of lighting and blinds / shutters)

### Lighting

- 3 Movement detector for toilets and passageways
- Presence detector for bathroom

### Shutters and Blinds

- Weather station

## Actuators

- Gateway KNX / OT BOX

- Dimmers 1-10 V or DALI

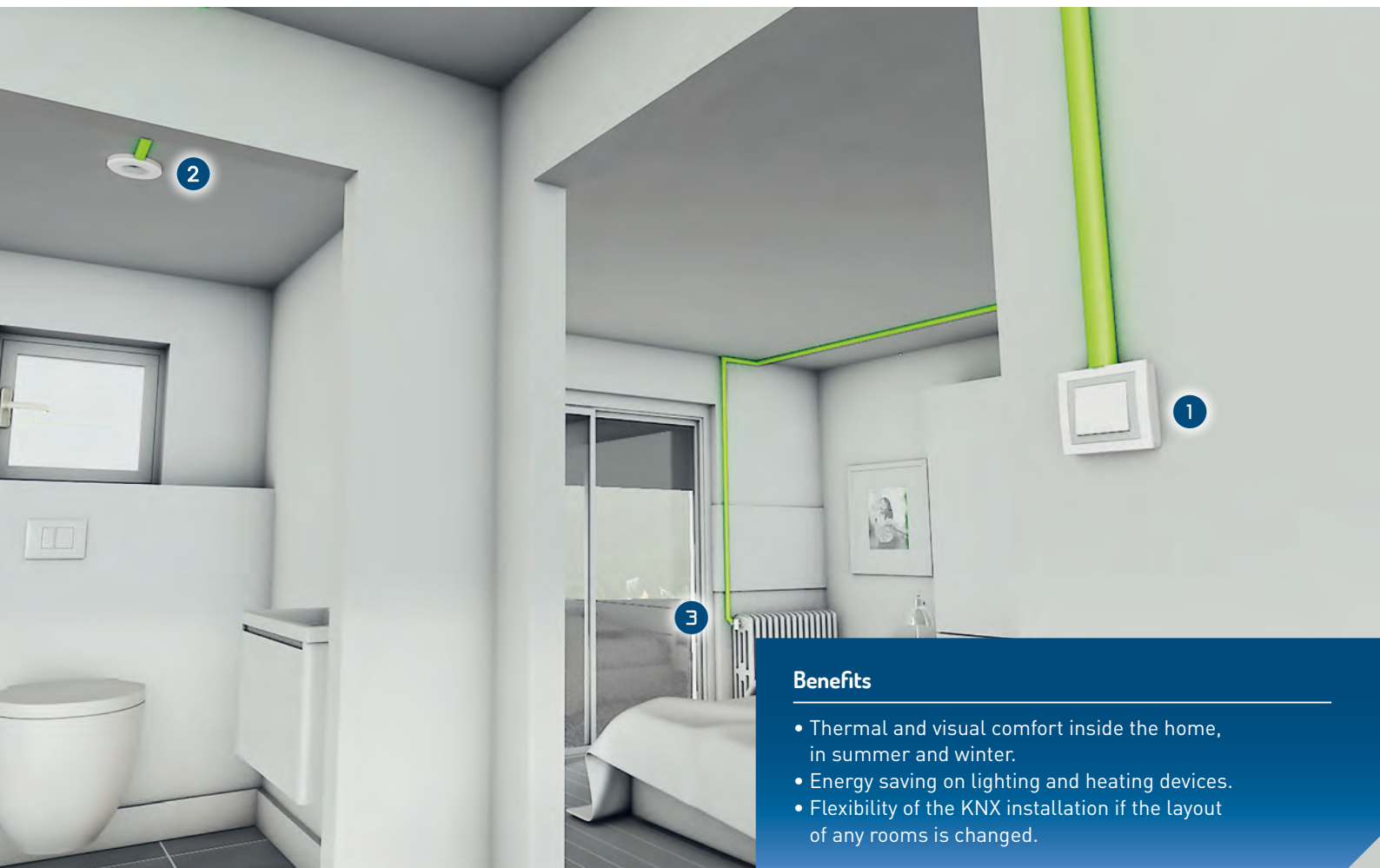
- Switch actuator

- Roller blinds and terrace awnings actuator

# Residential Social Housing

Energy saving is a priority so good control is a must.. The control of heating, which is the biggest costs in typical property must give good comfort, but be set back to standby when the occupier is not present along with lighting. By managing the heating according to hours (weekly/holiday absence) and room temperature, additional savings can be made.

Ultimately, it is also possible to centralise or create personalised scenarios for all devices (lighting, HVAC, blinds, etc.).



## Benefits

- Thermal and visual comfort inside the home, in summer and winter.
- Energy saving on lighting and heating devices.
- Flexibility of the KNX installation if the layout of any rooms is changed.

## Solutions

- OpenTherm\* heating regulation is optimised according to occupancy hours and indoor temperature of rooms thanks to multi-function thermostat.
- Management of lighting in bathrooms, corridors, and bathrooms using movement detector.
- Possible to establish scenarios (light, heating, roller blinds) according to their daily use, using a multi-function screen.
- Possible to manually control lighting and roller blinds using pushbuttons.

\* OpenTherm is a standard communication protocol used in central heating systems.

## Sensors

### Multi-function screen



Manual control of lighting and blinds / shutters and scenarios, fan coils

### Input module



Pushbutton (manual control of lighting and blinds / shutters)

### Lighting



Movement detector for toilets and passageways



Presence detector for bathroom

## Actuators



Gateway KNX / OT BOX



Switch actuator



Switch actuator



Roller blinds and terrace awnings actuator

# Common applications

## Corridor

In passageways the lighting is only switched on when someone passes through and any natural light available in the passageways must be taken into consideration. If presence detection is used in public access buildings and shared housing, the detection must cover the whole space concerned and 2 successive detection areas must have no gaps in the detection field.



### Benefits

- Visual comfort and safety for users.
- Savings on Lighting.
- Maintenance easier thanks to the measurement of the current.

### Solutions

- Management of lighting by special presence detector in corridors (long lengths).
- Turn on the lighting with current measurement, so that any fault which may occur in the lighting circuit can be raised.

### Sensors

#### Lighting

1



Special presence detector for passageways

### Actuators



Switch actuator

# Common applications

## Stairwell

In stairwells, the lighting should only be turned on if someone is passing through. For more safety, the lighting of the upper and lower levels are triggered at the same time as the floor on which the user's presence is detected, thus anticipating their movements.

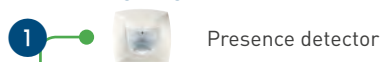


### Solutions

- Intelligent management of lighting circuits by presence detector according to user's movements.

### Sensors

#### Lighting



Presence detector

### Actuators

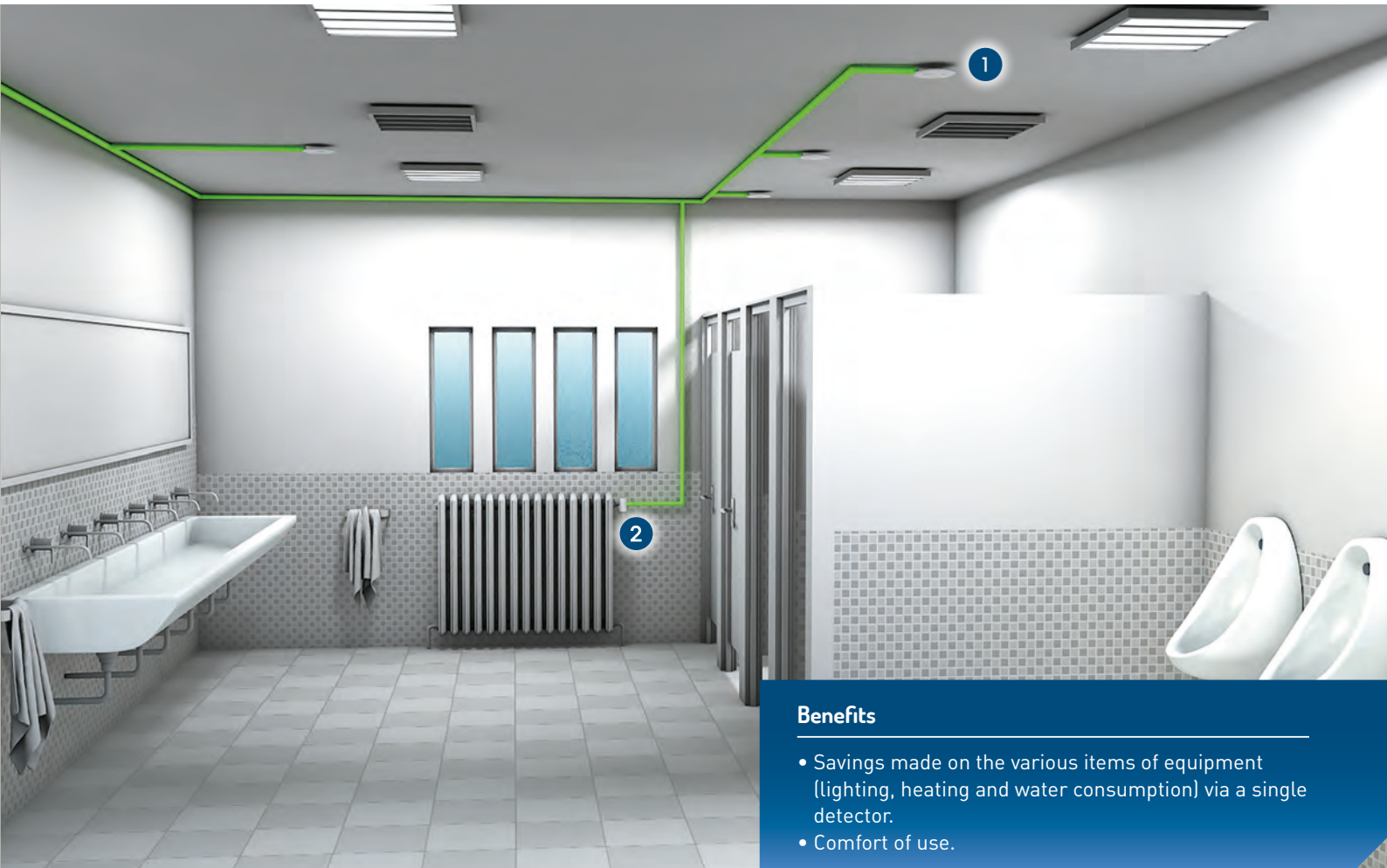


Switch actuator

# Common applications

## Toilets

In toilets, the lighting must be turned on and off automatically according to presence to avoid any unnecessary consumption. Furthermore, the electro-valves supplying water to the men's toilets will only operate when the toilets are in use. Ultimately, the automatic management of mechanical ventilation and heating in the toilets is essential.



### Benefits

- Savings made on the various items of equipment (lighting, heating and water consumption) via a single detector.
- Comfort of use.

### Solutions

- Lighting, mechanical ventilation and electro-valves managed thanks to the movement detector.
- Temperature can also be controlled via the movement detector (change from economy mode to comfort mode when someone is present on the premises).
- Additionally time control can be used for part of the scheme.

### Sensors

#### Lighting, mechanical ventilation and water circulation



Movement detector

#### Heating and HVAC



Individual temperature controller

### Actuators



Switch actuator



Servomotor for heating valves

# Common applications

## Changing rooms (shower)

In a changing room, the lighting, heating and mechanical ventilation must be managed according to presence. The presence detectors must be fitted with a protective grille suited to the wet environment (shower). To save energy, the thermostat has no control on the building's facade to avoid inappropriate temperature demands.



### Benefits

- Equipment suitable for wet premises.
- Comfort and savings made on lighting and heating devices.

### Solutions

- Management of lighting, heating and mechanical ventilation by presence detector.
- Temperature controlled by thermostat (setpoint cannot be modified on the appliance).

### Sensors



#### Input module

- 1  For pushbutton  
Manual control


#### Lighting


- 2  Presence detector

#### Heating / VMC

- 3  Individual temperature controller  
 CO<sub>2</sub> Sensor

### Actuators

-  Switch actuator  
(situated in terminal panel)

-  Servomotor  
for heating valves

-  Underfloor heating



# Common applications

## Utility room

Few people pass through a utility room. Lighting must therefore be switched off automatically, as it would become a big and unnecessary expense if a user forgets to turn it off. This room generally contains the electrical box in which the space reserved for automations must be optimised.



### Benefits

- Savings made on lighting equipment thanks to a simple solution.

### Solutions

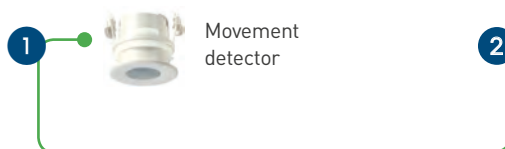
- Lighting management using movement detection.

### Sensors

#### Lighting



### Actuators



# Common applications

## Canteen / dining room

In a canteen, the lighting must be managed by area according to presence and luminosity. The heating must only operate in comfort mode when the room is occupied. A time display in the canteen is useful, whether it is in a school or business. In a restaurant/bar, it is also desirable to create luminous ambiances according to the eating hours (using the DALI).



### Benefits

- Only turn on lighting in useful areas for greater optimisation of lighting consumption.
- Environment at the ideal temperature only during meal times.

### Solutions

- Lighting managed using presence detection or manual control (for cleaning staff).
- Clock to display time.
- Management of heating by temperature controller and presence detector.

### Sensors

#### Input module

- 1 Pushbutton (manual control of lighting and blinds / shutters)

#### Lighting

- 2 Presence detector

#### Heating

- 3 Individual temperature controller (2 additional inlets. E.g. window sensor)

### Actuators

#### Time distribution

- 4 Time display

- 5 Switch actuator (Canteen)

- DALI dimmers (Dining room)

- 6 Servomotor for heating valves

# Common applications

## Outdoor

Outdoor lighting can be for car parks, walkways, architectural, security, etc. Where possible energy should and can be saved. Lights only need to come on at sunset, they can be turned off at the required time. For example when no one is presence, the car park is closed, etc. the right control for the right application.



### Benefits

- Lighting is switched on only when necessary, allowing energy savings to be made.

### Solutions

- Astronomical annual clock for managing outdoor lighting according to the sunrise and sunset times. Also allows lighting to be switched off at 1 o'clock in the morning until business resumes.
- Management of lighting in car parks, thanks to the outdoor movement detector adapted to the passage of people.

### Sensors

#### Lighting



### Actuators

# Our functions



## Annual programmable clocks with astronomical programme



REF. 6489212  
8 channels with synchronisation  
**DCF et GPS**  
TR 648 top2 RC KNX

REF. 6489210  
8 channels with synchronisation  
**DCF 77**  
TR 648 top2 RC DCF KNX

## Signal emitter



REF. 6009200  
**ZS 600 DCF KNX**

## Power supply



REF. 9070364  
KNX power supply **640 mA**  
REF. 9070699  
KNX power supply **320 mA**  
REF. 9070701  
KNX power supply **160 mA**

## Interface and line coupler



REF. 9070397  
**KNX USB Interface**  
REF. 9070398  
**KNX line coupler**

## Binary inputs



MODULAR (6-18 CHANNELS)  
REF. 4910230 Basic module **BMG 6 KNX**  
REF. 4910231 Extension Module **BME 6 KNX**



FOR RECESSED BOXES  
REF. 4969202 2 inputs interface **TA 2 KNX**  
REF. 4969204 4 inputs interface **TA 4 KNX**  
REF. 4969206 6 inputs interface **TA 6 KNX**

## Multi-function screen



REF. 8269200 White glass facade **VARIA 826 WH KNX**  
REF. 8269201 Black glass facade **VARIA 826 BK KNX**

## Temperature controller



REF. 7139201 Individual temperature controller **RAM 713 S KNX**  
REF. 7139200 Individual temperature controller **RAM 712 KNX**  
REF. 7139202 For fan coils **RAM 713 FC KNX**

## CO<sub>2</sub> Sensor



REF. 7169200 CO<sub>2</sub>, relative humidity and temperature **AMUN 716 KNX**

## Movement detectors



REF. 1059203 Outdoor wall mounted **SPHINX 105-300 KNX**  
REF. 1079211 Indoor - recessed ceiling mount 1 channel **SPHINX 331 KNX**  
REF. 1079211 Indoor - recessed ceiling mount 2 channels **SPHINX 332 KNX**

## Presence detectors



REF. 2009000 Ceiling mounted **PRESENCELIGHT 360 KNX**  
REF. 2009050 Wall mounted **PRESENCE LIGHT 180 KNX**  
REF. 2019290 Special corridor **COMPACT PASSAGE KNX**  
REF. 2019280 Special aisle **COMPACT PASSIMO KNX**  
REF. 2059102 Ultra-flat fitted **PLANO-CENTRO KNX**  
REF. 2079000 8 x 8 m Detection area **thePrema P360 KNX**  
REF. 2079500 10 x 10 m Detection area **thePrema S360 KNX**

## Weather stations



REF. 1329201 Weather station **KNX**  
REF. 1329205 Basic weather station **basic KNX**  
REF. 1409203 Meteodata station **140 GPS KNX** (monitors sun)  
REF. 1409200 Meteodata station **140 KNX** (monitors sun)

## Light and temperature sensors



REF. 1319201 Light and temperature sensor **LUNA 131 S KNX**  
REF. 1339200 Light sensor **LUNA 133 KNX**  
REF. 1349200 Light sensor 10 channels **LUNA 134 KNX**

### Charge actuators C 4-12 Channels



RANGE MIX 2 (with current measurement)  
 REF. 4930210 Basic module **RMG 4 I KNX**  
 REF. 4930215 Extension module **RME 4 I KNX**



MIX RANGE  
 REF. 4910206 Basic module **RMG 4 C-Last KNX**  
 REF. 4910207 Extension module **RME 4 C-Last KNX**

### Switch actuators



8-24 CHANNELS MIX 2  
 REF. 4930220 Basic module **RMG 8 S KNX**  
 REF. 4930225 Extension module **RME 8 S KNX**



4-12 CHANNELS MIX  
 REF. 4910204 Basic module **RMG 4 S KNX**  
 REF. 4910205 Extension module **RME 4 S KNX**

### Light dimmers



DIMMERS 2-6 CHANNELS MIX  
 REF. 4910273 Basic module **SMG 2 S KNX**  
 REF. 4910274 Extension module **SME 2 S KNX**



UNIVERSAL DIMMER 2-6 CHANNELS MIX  
 REF. 4910270 Basic module **DMG 2 S KNX**  
 REF. 4910271 Extension module Mix **DME 2 S KNX**  
 REF. 4910272 Dimming booster **DMB 2 S KNX**



UNIVERSAL DIMMER 2-6 CHANNELS MIX 2  
 REF. 4930270 Basic module **DMG 2 T KNX**  
 REF. 4930275 Extension module Mix **DME 2 T KNX**  
 REF. 4930279 Dimming booster **DMB 1 T KNX**



DALI PASSAGEWAY  
 REF. 9070722 **DALI Gateway Module KNX**

LIGHTING



### Heating actuators



4-12 CHANNELS MIX  
 REF. 4910210 Basic module **HMG 4 KNX**  
 REF. 4910211 Extension Module **HME 4 KNX**



EN TRIACS 6-12 CHANNELS  
 REF. 4900273 Basic module **HMT 6 KNX**  
 REF. 4900274 Extension Module **HMT 12 KNX**

### Radiator Controls



BUILT-IN THERMOSTAT  
 REF. 7329201 **CHEOPS Control KNX**

DRIVE ONLY  
 REF. 7319200 **CHEOPS Drive KNX**

### Fan coil actuator



REF. 4920200 Module **FCA 1 KNX**

### KNX to OpenTherm Gateway



REF. 8559200 **KNX OT-KNX**

HEATING



### Blinds / shutters actuator



4-12 CHANNELS MIX  
 REF. 4910250  
 Basic module **JMG 4 S KNX**  
 REF. 4910251  
 Extension module **JME 4 S KNX**

SHUTTERS  
BLINDS



### Time display clock



REF. 5009200  
 Diameter 250 mm  
**OSIRIA 220 AR KNX**

Other diameters and display models available  
 (consult the catalogue)

TIME  
DISTRIBUTION



# Theben a KNX specialist

Theben is known worldwide as a specialist in the fields of timing, lighting and heating management. That is why we combine these three competencies with KNX technical management.

In fact, as a specialist, we offer solutions that improve the comfort and energy efficiency, using the technical characteristics specific to THEBEN.

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## Presence detection

- **«Eco» behaviour:** trigger timing with constant auto-learning.
- **Brief time-out presence:** a rapid passage through a room will trigger a time-out of only 2', whatever the time-out period has been set.
- **Room surveillance:** surveillance of premises with selective movement detection.
- **Square detection area:** for simple and reliable planning.
- **Multi-functions:** remote controls for controlling the lighting, blinds and scenarios using the detector.
- **5-year guarantee:** for the ThePrema range

## Clock

- **Remote programming:** possibility of programming or forwarding clock information via KNX or IP
- **All-in-one:** Annual astronomical function programme, date and time synchronisation with other devices connected to the bus...

## MIX 2 series Range

The Mix series is a range of appliances consisting of Basic modules and extension modules.

Each Basic module of this series can receive up to 2 extension modules. The latter allows very favourably optimised prices per channel.

The compatibility of Mix provides great flexibility and a popular general system with lots of benefits.

Several Mix modules can be combined for managing the lighting, blinds, heating, and binary inputs...

THEBEN has been a KNX member for 20+ years. We have helped make KNX technology the international benchmark for technical building management, and we have supported KNX throughout this journey. Each year, our Research and Development Department prepares actuators, weather stations and innovative screen products at our Head Office in Haigerloch Germany.



## Some examples from Theben's KNX portfolio:



### **FIRE STATION:** KNX building systems control for a quicker call out

You have to move fast if there's a fire: In this reference you can learn how Theben KNX presence detectors, push button interfaces and KNX thermostats help the Geretsried Fire Brigade to respond faster to call outs.



### **ADMINISTRATIVE BUILDING:** Energy-efficient constant light control at MediaCityUK

Read how high-quality constant light control guarantees maximum energy saving and, at the same time, ensures reliable lighting.



### **OFFICE BUILDING:** Light management with PlanoCentro KNX presence detector

From March 2012 flush ceiling-mounted PlanoCentro KNX presence detectors from ThebenHTS have detected all movements in Aesculap AG's open-plan office in Tuttlingen.

## Contact us

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