

ACTIVE CONTROL OF LIGHTING, SHUTTERS, TEMPERATURE AND SOCKET OUTLETS











Optimised energy consumption

Designed ideally for low consumption accredited constructions, KNX solutions provide optimum management of lighting, shutters, socket outlets and ventilation: combined with energy management and supervision solutions, these "Smart Grid Ready" solutions allow you to optimise operating procedures in your installation according to your consumption. Legrand therefore contributes to reducing a building's overall operating costs and meeting the requirements of LEED and BREEAM buildings, etc. so that you can provide a perfect response to your customers' energy performance requirements.

Increased comfort

Legrand BUS/KNX solutions have the ability to manage all types of light source (LEDs, DALI, 1-10 V ballasts, etc.) in response to different situations (daylight, presence/absence, dimming, scenarios) making the user's daily life easier by adapting to their needs and living/working habits.

Even greater flexibility

With simple programming, Legrand BUS/KNX solutions make it possible to reconfigure the installation in a building really easily: no need for additional wiring!

SENERATION LIGHTING MANAGEMENT

A global specialist in electrical infrastructures in buildings and a major force in new generation buildings, Legrand is developing its system to provide complete control of a building: BUS/KNX solutions.





A worldwide protocol in building management systems, KNX is an open, interoperable standard providing any user with great freedom of use and long-life installations. Recognised by ISO/IEC 14543-3-x as the international standard for home and building control, KNX meets the requirements of two European standards, CENELEC EN50090 and CEN EN 13321-1.

COMPLETE BUILDING MANAGEMENT

Beyond providing optimum control of lighting and shutters, the KNX protocol is interoperable with all applications installed in commercial sector building (heating and ventilation, fire alarms, emergency lighting, etc.), whoever supplies them. It can therefore be integrated into an active general building management system, making it possible to display consumption or to be alerted when a fault occurs!





06

OPTIMISED CONTROL

A core business for Legrand, control is enhanced with multiple possibilities: lighting comfort, environment scenarios, combinations of several functions, etc. Discover the Legrand BUS/KNX offer, combining performance, aesthetics and comfort for a complete, optimised response to your customers' needs.

12

SIMPLIFIED INSTALLATION

Installed in a suspended ceiling or cabinet, controllers are easy to wire and can control all types of load.

16

FLEXIBLE, RELIABLE, AND CONSISTENT CONFIGURATION

Having access to ETS4, the only tool that connects all KNX devices to a strong, well known and shared configuration method, ensures a good operating system. Legrand also offers the option of using its special configuration tool to quickly manage operating settings; it combines ease of use with reliable settings.



OPTIMISED

An essential solution for special or occasional applications, the Legrand BUS/KNX control unit manages lighting (ON/OFF, dimming, scenes, forcing), roller shutters (raise/lower/stop), awnings, and other client devices. A core business for Legrand, control is enhanced with multiple possibilities: lighting comfort, environment scenarios, combinations of multiple functions, etc.

Discover the Legrand BUS/KNX offer, combining performance, aesthetics, and comfort, for a full and optimised response to your customers' needs.

Really clever, infinitely stylish!

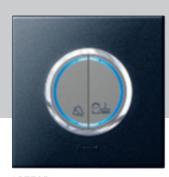


LIVING NOW

MANUAL **CONTROL UNITS**

One offer, six designs

Combining performance with aesthetics, control units are available in 7 decorative ranges.



ARTEOR



CÉLIANE



VALENA



AXOLUTE



MOSAIC



LIVINGLIGHT

A wide range of mechanisms for everyday comfort

There are several types of mechanism available for user convenience.



SIMPLE



WITH LABEL HOLDER



TOUCH

Functional diversity

KNX control units provide multiple functions for managing lighting, shutters, scenarios, socket outlets and temperature.

"Basic" functions

Optimised ergonomics thanks to programming

- ON/OFF switching
- Dimming up and down
- Roller shutters: raise, lower, stop
- Scenario: send a scenario number, save scenario
- Send one or two values: lighting level, position of shutters/slats, etc.



TEMPERATURE CONTROL UNIT



LIVING NOW

"Advanced functions" The Legrand plus!

As well as simple functions, Legrand offers you multi-control functions for a more comprehensive management of your installation:

- Send priority: ON/OFF locking and unlocking
- Send incrementing commands (by scrolling through the options): each press refers to a command. Example: 1st press = comfort (command 1), 2nd press = stand-by (command 2), 3rd press = eco (command 3), 4th press = comfort (command 1)
- Dual action transmission: send two commands. This function allows products which do not have a scenario function to be linked to a scenario.
- Mode 1/Mode 2 conditional transmission: send a command or a second different command, depending on a condition being met. The control unit has the ability to send commands to different circuits depending on an





MANUAL CONTROL UNITS

LEDs for clear information

All controls, whether a push-button or a touch plate, are fitted with RGB LEDs, each of which can produce twelve different colours: green, blue, white, orange, gold, yellow, turquoise, cyan, light blue, violet, magenta, purple.

Configurable using ETS software (see p. 16), LEDs display the load status and status feedback and can be used to customise the control unit status using colours, flashing, and brightness.

Status displays

- Status feedback from actuators/ controllers: ON or OFF
- System status feedback: context information indicated by the BUS. Examples: over-consumption, broken lamp, too much wind for roller shutters, etc.

Customizing the status

- Adjustment of the colour and behaviour through different modes. The default modes are:
- ON = steady green
- OFF = steady blue
- Alarm = flashing red (not modifiable)
- Control de-activated = steady orange Adjustment of brightness from 0 to
- 100% according to three values:
- Normal (adjustable value)
- Eco (adjustable value)
- Stand-by (non-adjustable value)



Wireless, no-battery controls

With one to four buttons and 2 or 4 inputs, they control lighting (ON/OFF, dimming) and shutters (raise/lower/ stop).

With the KNX wireless interface, wireless controls without batteries can communicate with BUS/KNX controllers for even greater flexible and effective control!

THE +

It's the ideal solution for open-plan offices where the installation has to be easily adaptable in case the working area is re-configured:

- no vertical wiring
- installed in a suspended ceiling
- battery-free operation

Thermoregulation control

The temperature control panel is a flush mounted 1,6" backlit display with 4 push buttons to manage HVAC systems as fan coil unit or floor heating.

THE +

- in line with Legrand design
- Flexibility: can be combined with several types of HVAC controller

More advanced control

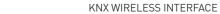
The 5.7" touch screen is an automation device able to manage up to 110 KNX functions. It is also able to receive and display system data such as an energy consumption profile (graph), temperature, dimming information and many more.

By simply pressing a key on the multiscenario touchscreen, pre-programmed scenarios are selected. Example: in a meeting room, the "Projection" scenario causes the screen to drop down, lowers the blinds and dims the lights.

THE +

- Convenient to use: comprehensive, centralized management operated from a single control unit.
- Performance: controls and displays up to 110 standard functions as well as a number of special ones.
- Flexibility: ability to switch between manual and programmed control.











DETECTORS

Energy performance and operating performance

A sustainable approach

Apart from simple ON/OFF and dimming controls, detectors provide access to the advanced automation functions required in any "green" building:

- stand-by/maintained dimming
- programmed lighting maintenance
- scenario triggering dependent on presence/absence, natural light levels or the time

Flexibility & Efficiency

- Detectors provide an installation with flexibility: their operation and programming can be adapted according to external parameters (over-consumption, alarm, etc.)
- Detectors constantly measure daylight levels. In combination with controllers they provide a better understanding of the detection area and makes it possible to adapt lighting in response to natural light levels. Note: it is possible for there to be several dimming levels within a single space!

Supervision informations

KNX detectors provide any supervision system with useful key information:

- indication of presence
- load status and dimming level (as a %)
- light level in real time (in lux)

Several fixing systems for optimum flexibility of installation

Suspended ceiling

The detectors are installed using springs (supplied) or in a Batibox or can be surface mounted.



SOLUTIONS FOR CORRIDORS, OUTDOOR CAR PARKS. **BASEMENTS** AND WORK AREAS

Wall - flush-mounting Products are installed in a Batibox.



SOLUTIONS FOR SMALL **PREMISES** AND BATHROOMS

Perfect detection in any location!

The power of two detection technologies

Infrared detection (PIR)

Suitable for detecting wide amplitude movements such as walking, infrared technology provides optimum lighting management in passage areas such as corridors.





PIR detection with 270° movable head Range 20 m Wall or ceiling surface mounting

PIR detection + with high density lens

Infrared technology is suitable to detect wide amplitude movements but with its high density lens this sensor is able to detect the thinest movement also and it is adapted for passage but working areas also.



CAT.NO 0 489 22 360° PIR detection Range 8 m IP 20 Ceiling mounted

Infrared + ultrasound detection (PIR/US)

The exclusive coupling of two technologies consolidates the presence information and guarantees the detection of smaller movements for greater effectiveness, which makes the difference in work areas.



CAT.NO 0 489 18 360° PIR/US detection Range 8 m Ceiling mounted

detection

Smart Thanks to the combination of ETS and the 0 882 40 smart configuration tool, it is possible to set/modify detector parameters simply and quickly for optimum detection!

→ SEE PAGE 16

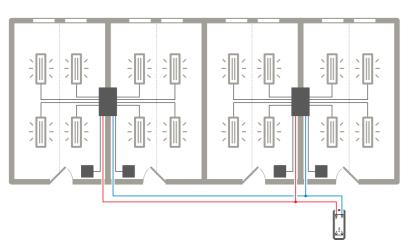


SIMPLIFIED INSTALLATION

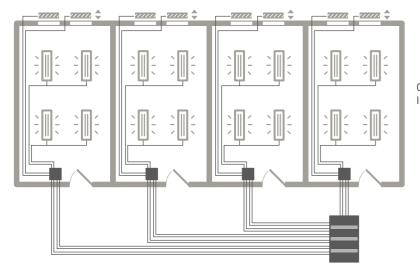
Equipped with different outputs, controllers (also called actuators) receive commands from the control units and act on lighting or shutter loads. Their installation may take one of two from factors.

DISTRIBUTED INSTALLATION

In a system it consists in having the controllers locally installed in false ceilings where there are the load and not in the main cabinet as usual.



DECENTRALIZED SMART INSTALLATION



CENTRALIZED INSTALLATION

False ceiling controllers for dimming

These power units control lighting loads. In order to operate, they have to be linked to one or more detectors and/or remote auxiliary control units. Because they are situated near the loads to be controlled, they provide savings in the cables to be routed and in wiring time.

They also save space in the consumer unit.



FOR DALI PROTOCOL, 4 OUTPUTS

FOR 1-10 V BALLASTS, 4 OUTPUTS

E Quicker and easier cabling

Room Control Unit

These modular controllers with integrated consumption measurement are fitted with output contacts for controlling:

- all types of ON/OFF load (lighting, roller shutters, contactors, motors, etc.)
- a DALI dimming output (64 ballasts max.)
- an on-board energy meter

Loads are managed by the control units to which they are linked: either BUS/KNX control units, or wired connection input terminals (switches, push-buttons, voltage free contacts).

They also provide a wide range of functions: ON/OFF or dimming lighting control, DALI, roller shutter and ventilation control.

These DIN controllers offer the



16 INPUTS 16 OUTPUTS 12 MODULES

(Available with 8 inputs, 10 outputs, 8 modules)

possibility of controlling several circuits (voltage free contacts included) within a reduced space, and include embedded automation: an ideal solution for hotel room management!

Installed in a modular cabinet, they are the ideal solution for small spaces (bedrooms, conference rooms, offices).





CENTRALIZED INSTALLATION

This consists of a traditional installation using modular products installed in the electrical panel. Note: all controllers can be controlled for each output by a detector and/or a BUS/KNX control unit.

Controllers

Modular controller ON/OFF

 Relay outputs to switch lighting loads with advanced operating mode.



MODULAR ON/OFF CONTROLLER



Modular controllers for Dimming

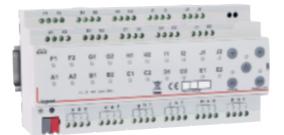
- DALI dimming management through DALI group control or individual DALI luminaire control.
- 1-10 V dimming management with switching operating mode.
- universal dimming manages all lights of lighting loads.



MODULAR DALI CONTROLLER

Modular controllers Multi-applications

- Relay outputs grouped through output channels configurable to manage different kind of equipements: lights, power sockets, shutters, HVAC.
- Independent input channel operating as universal interface with traditional wiring devices.



MODULAR CONTROLLER MULTI-FUNCTION

Modular controllers for HVAC

 ON/OFF and 1-10 V controllers manage any kind of fan coil units.

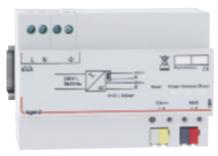


MODULAR FCU CONTROLLER

KNX INFRASTRUCTURE PRODUCTS

Power supply

- 320 mA and 640 mA power supplies provide power for one BUS/KNX line. There is a built-in filter to prevent the short-circuit of messages from the BUS.
- The line coupler provides galvanic insulation between lines. This is necessary to extand the system over 64 participants.



KNX 640 mA POWER SUPPLY

Interface

- BUS/KNX interfaces voltage free contact, available in a modular version or for flush-mounting, allow voltage free products (switches, push buttons, alarms, etc.) to be connected to BUS/KNX.
- A binary interface is also available allowing the connection of probes, sensors which need to ditinguish between two levels of signal.



BUS/KNX INTERFACE

Communication & Control

Legrand BUS/KNX modules can send/receive commands to different controllers in the system.

- A BUS/KNX IP router makes the links between the BUS/KNX infrastructure and the IP network remotely configure the installation with ETS or enable interconnection among different KNX networks via the IP infrastructure.
- A BUS/KNX coupler to connect BUS/KNS line with galvanic isolation.



KNX /IP ROUTER

Connection

- BUS/KNX cables are available in a single pair version (red/black) or 2 pairs (red/black, yellow/white).
- The black/red BUS/KNX connector is used to extend, split the cable or simply connect the products.

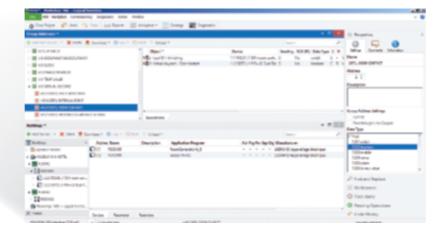


FLEXIBLE, RELIABLE AND CONSISTENT CONFIGURATION



ETS SOLUTION

ETS is a manufacturer independent software that has to be used to configure and commission KNX devices, as well as plan, design, commission and diagnose entire KNX installations with KNX certified products.



LEGRAND SOLUTION

Configuration

As a complement to the ETS software, KNX detectors offer the possibility of local configuration.

This mobile configuration tool is used to interrogate, display and modify the detector parameters:

- light level threshold
- delay
- detection sensitivity

Note: parameters can be saved and then copied to other detectors.





Configuration gateway Cat.No 0 882 40

SMART CONFIGURATION TOOL:
AN ASSET FOR COMMISSIONING
AND MAINTENANCE

LEGRAND CLOSE UP APP



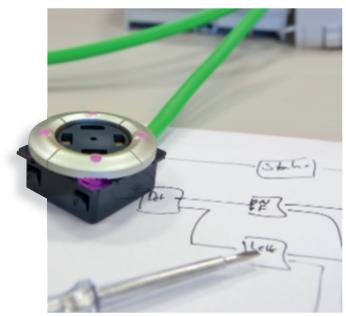
LEGRAND WILL ASSIST YOU

TRAINING

Legrand offers installers, operators and design offices dedicated training, allowing them to increase their overall building management expertise.

→ FIND OUT ABOUT OUR ONLINE TRAINING OFFER AT WWW.LEGRAND.COM





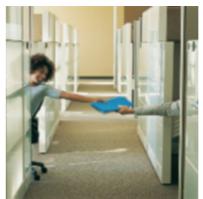


APPLICATION EXAMPLES



Dedicated "hotel" solution

Guest room









Dedicated
"commercial
sector
buildings"
solutions

- 22 Open space
- 24 **Meeting room**
 - Reception area
 - Classroom

6

Sockets: are managed

by the multi-application controller when presence

is communicated via the badge holder

6

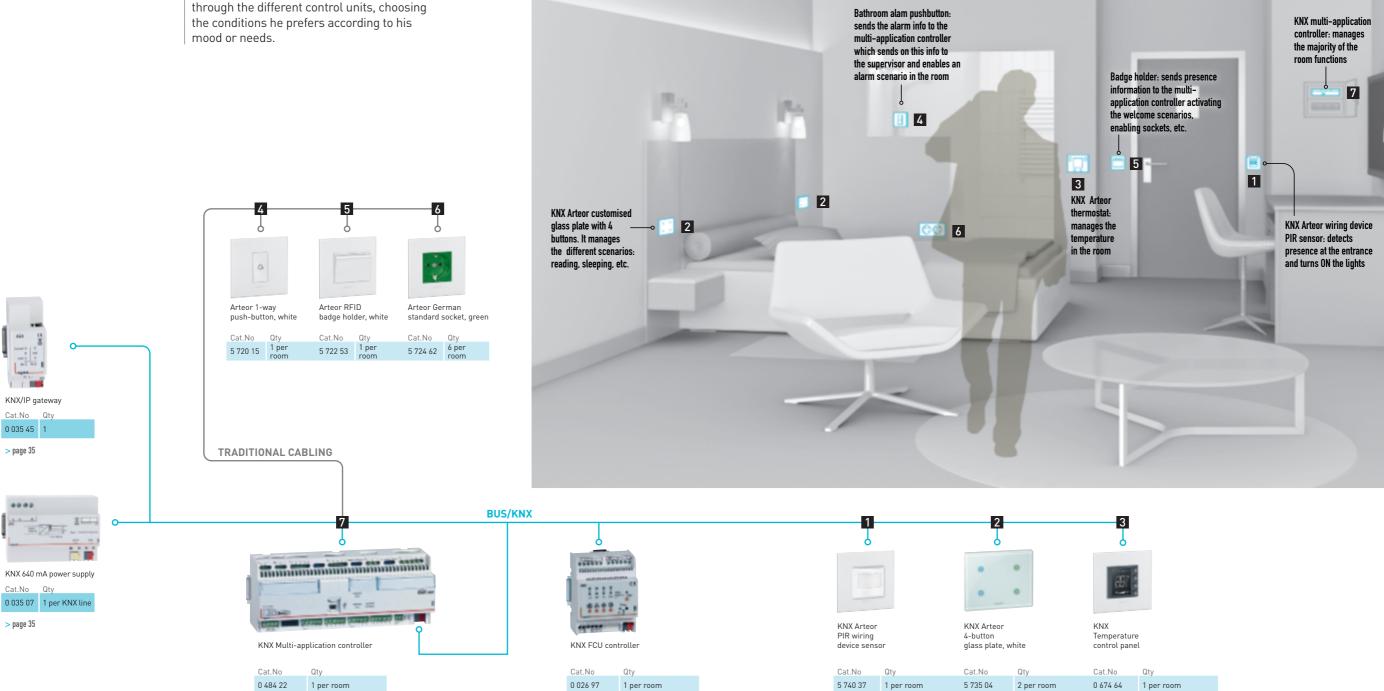
Hotel guest room

- Presence detection
- Temperature management
- Socket management
- Scenarios

In a hotel room there is the need to manage everything when the customer is present: lighting, sockets, HVAC.

When the customer enters the room the entrance lights are automatically turned ON and when he puts the badge in the holder the HVAC and the sockets are also enabled. The customer is able to manage everything through the different control units, choosing

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Common solution for several areas

Open space

- Presence detection
- Movement detection
- Light level measurement
- Dimming

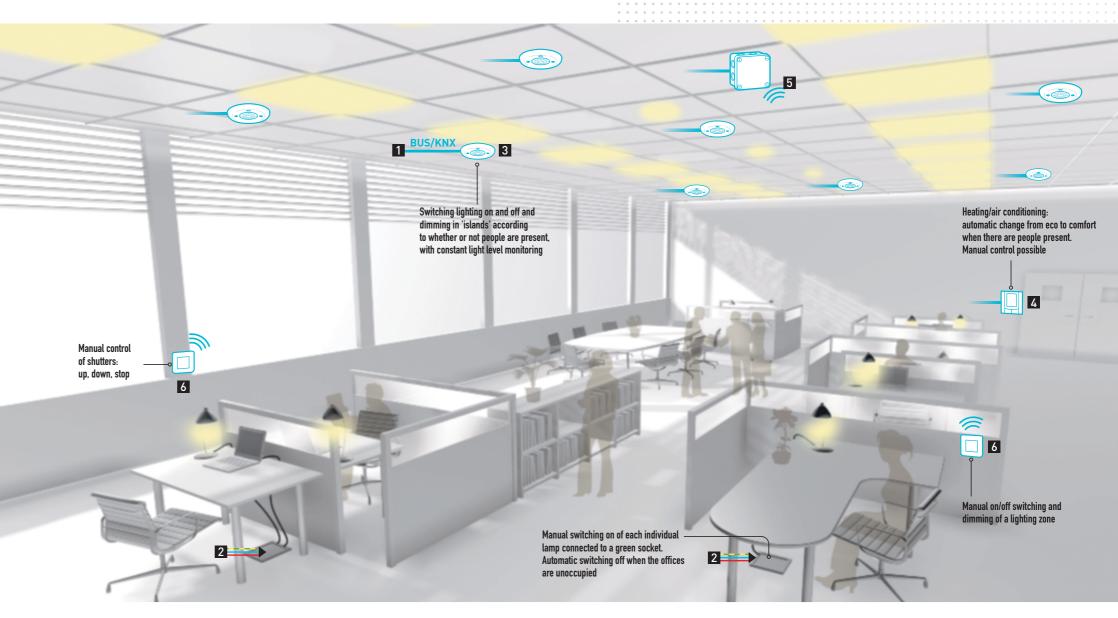
BUS/KNX SOLUTIONS PROVIDING AREAS WITH FLEXIBILITY

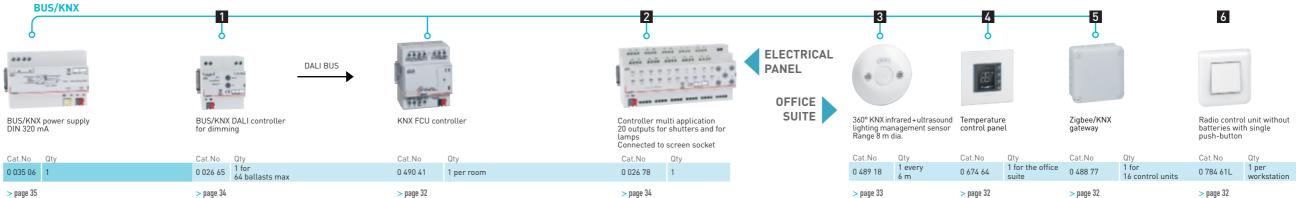
In an office suite, you need to be able to refurbish and re-arrange spaces without touching the wiring and without moving equipment. All you have to do is link detectors and control units to the luminaires, without restriction, with simple programming using the ETS software.



Common solution for several areas







Meeting room

- Presence detection
- Light level measurement
- Dimming
- Scenario control
- Manual switch-on
- Management of shutters, screens

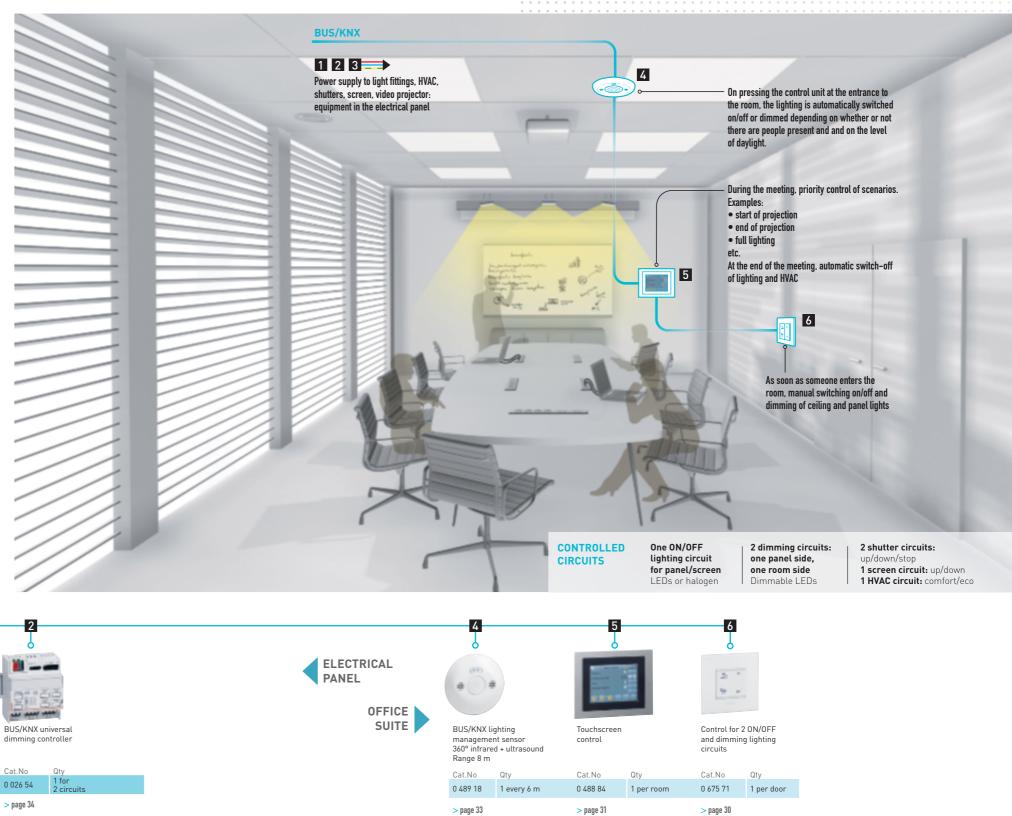
In a meeting room, you need to be able to control the lighting but also the shutters, screen, ventilation, etc. individually or via programmed

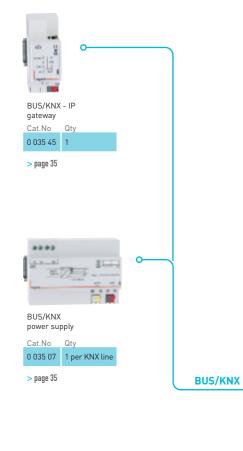
BUS/KNX controller multi-applicatons for lighting ON/OFF control and shutters control

0 026 74

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Common solution for several areas

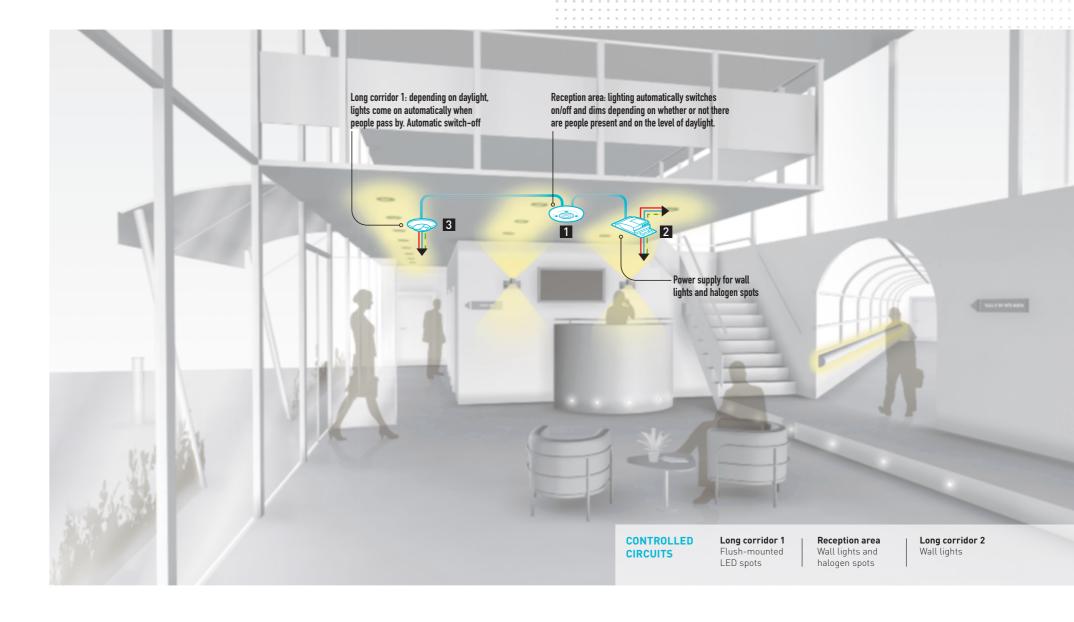
Reception area

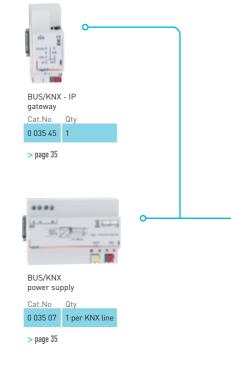
- Presence detection
- Movement detection
- Light level measurement
- Dimming

In a reception area, you need lighting to come on automatically when there are people present and for it to adjust according to the natural light level. In corridors you want lighting to come on only when people are passing by and only if the natural daylight is insufficient.



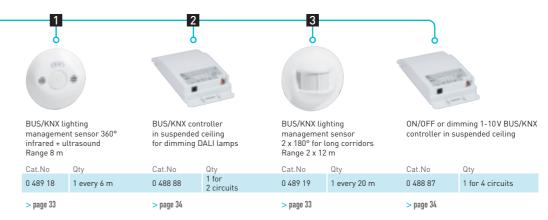






Common solution for several areas

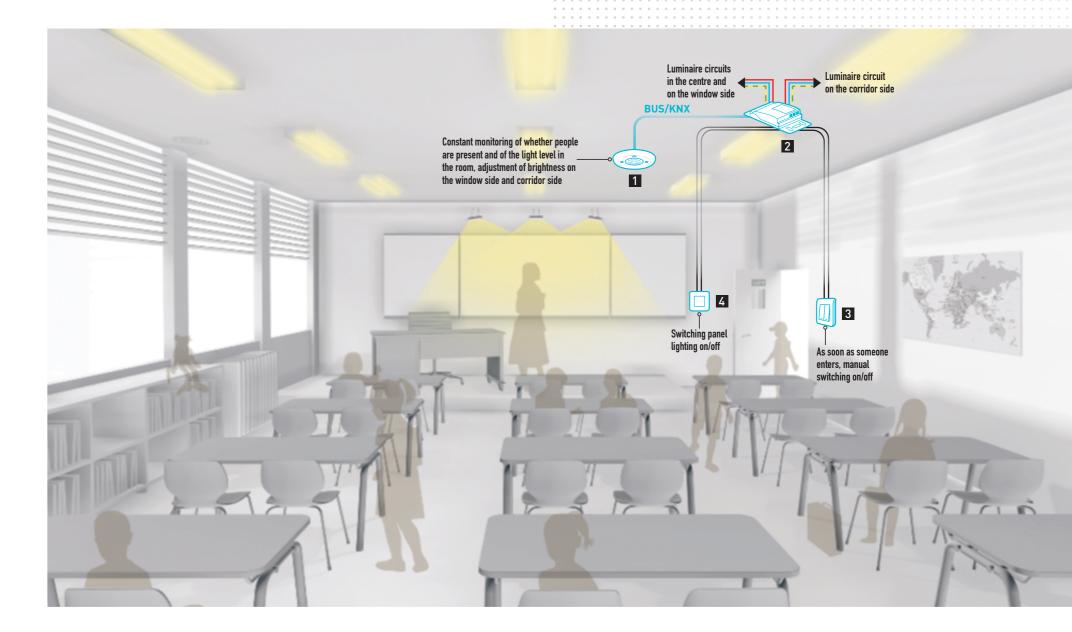
BUS/KNX

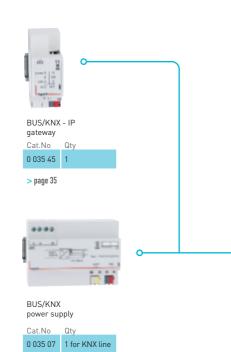


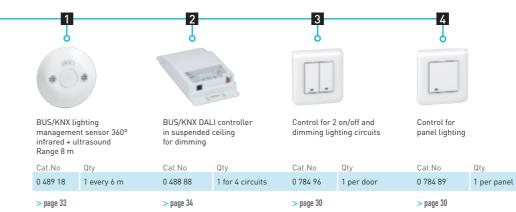
Classroom

- Presence detection
- Light level measurement
- Dimming

In a classroom, you need to pay attention to students' comfort by adjusting the brightness of lighting according to whether it is on the window or the corridor side. The teacher controls the panel lighting. All lighting switches off when the room is unoccupied.







Common solution for several areas

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BUS/KNX SOLUTIONS 29

BUS/KNX

Llegrand

Mosaic™, Céliane™, Arteor™, Valena™

BUS/KNX manual control units



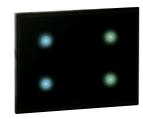
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5 735 05

Pack Cat.Nos Céliane wired control units (continued)

Connected directly to BUS/KNX cable (supplied with tap-off connector)

Used to control lighting (ON/OFF, dimming, scenario, forcing), roller shutters (up, down, stop), awnings, and other receivers Fitted with programmable RGB LEDs (12 colours available) for displaying load status and system status feedback (normal, forced, override, day/night pilot light, etc.) and alarms. For use in combination with Mosaic plates and Batibox support frames 1 0784 95			st be programmed using ETS software
scenario, forcing), roller shutters (up, down, stop), awnings, and other receivers Fitted with programmable RGB LEDs (12 colours available) for displaying load status and system status feedback (normal, forced, override, day/night pilot light, etc.) and alarms. For use in combination with Mosaic plates and Batibox support frames 1 0 784 99	Pack	Cat.Nos	Mosaic wired control units
1 0 784 89 1 button - 2 actuation points			scenario, forcing), roller shutters (up, down, stop), awnings, and other receivers Fitted with programmable RGB LEDs (12 colours available) for displaying load status and system status feedback (normal, forced, override, day/night pilot light, etc.) and alarms. For use in combination with Mosaic plates and
1 0 784 95 2 buttons - 2 actuation points	1	0 784 89	
1 0 784 94 2 buttons - 4 actuation points 4 buttons - 4 actuation points Supplied with label holder for button identification 1 0 784 91 Céliane wired control units Used to control lighting (ON/OFF, dimming, scenario, forcing), roller shutters (up, down, stop), awnings, and other receivers Fitted with programmable RGB LEDs (12 colours available) for displaying load status and system status feedback (normal, forced, override, day/night pilot light, etc.) and alarms 4 channels control unit without label display For use with cover plates, ring cover, Céliane plate, and Batibox support frame 4 buttons - 4 actuation points Fitted with white or titanium key cover Supplied with label holder for button identification For use with Céliane plate and Batibox support frame 0 675 70 White	1	0 784 95	1 button - 2 actuation points O White
4 buttons - 4 actuation points Supplied with label holder for button identification O 784 91 Céliane wired control units Used to control lighting (ON/OFF, dimming, scenario, forcing), roller shutters (up, down, stop), awnings, and other receivers Fitted with programmable RGB LEDs (12 colours available) for displaying load status and system status feedback (normal, forced, override, day/night pilot light, etc.) and alarms 4 channels control unit without label display For use with cover plates, ring cover, Céliane plate, and Batibox support frame 4 buttons - 4 actuation points Fitted with white or titanium key cover Supplied with label holder for button identification For use with Céliane plate and Batibox support frame O 675 70 White	1	0 784 94	
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For use with cover plates, ring cover, Céliane plate, and Batibox support frame 4 buttons - 4 actuation points Fitted with white or titanium key cover Supplied with label holder for button identification For use with Céliane plate and Batibox support frame 0 675 70 White			scenario, forcing), roller shutters (up, down, stop), awnings, and other receivers Fitted with programmable RGB LEDs (12 colours available) for displaying load status and system status feedback (normal, forced, override, day/night pilot light, etc.) and alarms
Fitted with white or titanium key cover Supplied with label holder for button identification For use with Céliane plate and Batibox support frame 1 0 675 70	1	0 675 71	For use with cover plates, ring cover, Céliane plate, and Batibox support frame
	1	0.675.70	Fitted with white or titanium key cover Supplied with label holder for button identification For use with Céliane plate and Batibox support frame

		` '
1 1	0 675 72 0 675 74	4 buttons touch control units Supplied complete with white or black touch plate ○ Kaolin glass ● Graphite glass
		Arteor wired control units
		Used to control lighting (ON/OFF, dimming, scenario, forcing), roller shutters (raise, lower, stop), awnings, and other receivers Fitted with programmable RGB LEDs (12 colours available) for displaying load status and system status feedback (normal, forced, override, day/night pilot light, etc.), alarms To be fitted with Arteor plates and Batibox support frames
1	0 675 71	4 channels control unit without label display 4 actuation points To be equipped with key covers for control mechanism
1 1	5 742 03 5 744 04	Square version 4 actuation points - With label holder White Magnesium
1	5 735 02 5 735 03	Round version 4 actuation points - With label holder White Magnesium
1 1	5 735 04 5 735 05	4-buttons touch control units Supplied complete with white or black touch plates To be fitted with Batibox support frames White - for BS flush-mounting boxes Black - for BS flush-mounting boxes
1 1	5 735 12 5 735 13	6-buttons touch control units Supplied complete with white or black touch plates White Black
		Valena wired control units
		Used to control lighting (ON/OFF, dimming, scenario, forcing), roller shutters (raise, lower, stop), awnings, and other receivers Fitted with programmable RGB LEDs (12 colours available) for displaying load status and system status feedback (normal, forced, override, day/night pilot light, etc.), alarms To be fitted with Valena plates and Batibox support frames 4 channels control unit without label display
1	0 675 71	4 actuation points

To be equipped with key covers for control

Axolute, Livinglight, Living Now

BUS/KNX manual control units















HD4657M3KNX

HS4657M3KNX

K4651M2KNX





Connected directly to BUS/KNX cable (supplied with tap-off connector) The control unit must be programmed using ETS software

Pack	Cat.Nos	Livinglight wired control units	
		Used to control (ON/OFF, dimming, scenario, forcing), roller shutters (up, down, stop), awnings, and other receivers. Fitted with programmable RGB LEDs (12 colours available) for displaying load status and system status feedback (normal, forced, override, day/night pilot light, etc.) and alarms	
1	LN4651KNX	4 channels control unit without label display To be fitted with Livinglight cover plate, plate and support frame	
		4 channels control unit with label display Supplied with label holder for button identification To be fitted with Livinglight plate and support frame	
1 1 1	N4680KNX NT4680KNX L4680KNX	○ White ○ Tech • Anthracite	
		Axolute wired control units	
		Control (ON/OFF, dimming, scenario, forcing), roller shutters (up, down, stop), awnings, and other clients. Fitted with programmable RGB LEDs (12 colours available) for displaying load status and system status feedback (normal, forced, override, day/night pilot light, etc.) and alarms	
1	H4651KNX	4 channels control unit without label display To be fitted with Axolute cover plate, plate and support frame	
		4 channels control unit with label display Supplied with label holder for button identification To be fitted with Axolute plate and support frame	
1 1 1	HC4680KNX HS4680KNX HD4680KNX	Tech Anthracite White	
		6-buttons touch control unit Supplied with fitted touch plate	
1 1 1	HC4657M3KNX HS4657M3KNX HD4657M3KNX	Requires Axolute support frame White Black Transparent glass	

Living Now wired control units Pack Used to control (ON/OFF, dimming, scenario, forcing), roller shutters (up, down, stop), awnings, and other receivers. Fitted with programmable RGB LEDs (12 colors available) for displaying load status and system status feedback (normal, forced, override, day/night pilot light, etc.) and alarms 2 channels control unit - 4 buttons K4651M2KNX To be fitted with Living Now cover plate, plate and support frame 3 channels control unit - 6 buttons K4651M3KNX To be fitted with Living Now cover plate, plate and support Touch screen 5.7" control unit 0 488 84 Automation device allowing centralized management operated from a single control unit Able to manage up to 110 KNX functions for individual control with status display or scene control

Allows routine automation like time

scheduling, logical operation, graph monitoring, alarm console Delivered with cover plate, support frame and flush-mounting box

Radio extension

BUS/KNX







Pack	Cat.Nos	Zigbee/KNX wireless extension
		Used to control lighting (ON/OFF, dimming) and shutters (up, down, stop) For use with Zigbee/KNX interface Cat.No 0 488 77 Supplied complete with plate and support frame
1	0 784 61	Mosaic 1 button - 2 actuation points O White
		Zigbee/KNX interface
1	0 488 77	Interface providing communication between batteryless radio control units Cat.Nos 0 784 61 (up to 16 control units) and BUS/KNX controllers 180m (outdoor or far field) around the interface so 18m approx. indoor For suspended ceiling installation

Thermoregulation

BUS/KNX

KNX KNX certified







Connected directly to BUS/KNX cable (supplied with tap-off connector) The control unit must be programmed using ETS software

Pack	Cat.Nos	Temperature control panel
1 1 1 1 1	7 521 47	
		DIN FCU controller ON/OFF
1	0 026 97	Actuator with internal thermoregulation to control FCU or thermal valves In combination with the temperature control panel, can be used to manage ambient temperature according to end-user requests: operating mode, temperature adjustment - 2 folds valve ON/OFF control (2 A - 75~256 VAC) - 1 fold fan control – 3 speeds (6 A - 230 VAC) - 1 binary input check – window contact (9~265 VAC/DC) - Operating temperature -5 to 45°C - Operating voltage 230 VAC +/- 10% (50/60 Hz) 4 DIN modules 17.5 mm
		DIN FCU controller 0-10 V
1	0 490 41	Actuator with internal thermoregulation to control FCU, fan, thermal valves, electric load In combination with the temperature control panel, can be used to manage ambient temperature according to end-user requests: operating mode, temperature adjustment - 2 outputs 0-10 VDC to control thermal valves (5 mA) - 5 outputs (relays) to control fan (3 speeds) and/or thermal valves (10 A - 230 VAC) - Operating temperature -5 to 45°C - Operating voltage supplied by the KNX bus 4 DIN modules 17.5 mm Possibility to power the 0-10 V valves in using the transformer 24 VAC Cat.No 4 130 95

Sensors

BUS/KNX











Constantly check for presence and light levels, switching OFF as soon as the natural light level is sufficient. Switch ON and OFF automatically Accurate set-up on site with configuration device Connected directly to BUS/KNX cable (supplied with tap-off connector) The detector must be programmed using ETS software

Valena

0 675 77 180° passive infrared detection, range 8 m

- a Batibox support frame

For use with

- Valena Life cover plate Cat.No 7 548 84 (white),
7 548 93 (Ivory), 7 548 94 (Aluminium)

- Valena Allure cover plate Cat. No 7 549 03 (white),
7 549 04 (Ivory), 7 549 13 (Aluminium)

- a Valena plate and the plate of the control of the cat.

		to BUS/KNX cable (supplied with tap-off connector) be programmed using ETS software			
ack	Cat.Nos	Special corridor motion sensor	Pack	Cat.Nos	Special motion sensor for small premises and bathrooms (continued)
1	0 489 19	Ceiling mounted Double passive infrared detection 360°, lateral range 2 x 12 m IP 20 Consumption 0.2 W Recommended fixing height: 2.5 m Optimum distance between two sensors: 20 m Fits directly in suspended ceiling with springs (supplied) or is installed in a 50 mm deep Batibox Cat.No 0 893 58 Surface mounted on ceiling using accessory Cat.No 0 488 75	1 1 1	HD4658KNX HS4658KNX HC4658KNX	Axolute 180° passive infrared detection, range 8 m IP 41 For use with: - an Axolute plate - an Axolute support frame White Anthracite Tech Livinglight
1	0 489 21	Special motion sensor for outdoor car parks and cellars Wall or ceiling mounted - surface mounting Passive infrared detection with 270° adjustable head, range 20 m IP 55 Consumption 0.5 W Recommended fixing height: 2.5 m	1 1 1	N4658KNX L4658KNX NT4658KNX	Anthracite Tech
		Can be fixed in a corner with a special accessory Cat.No 0 489 72			Special presence sensors for work areas Suitable for meeting rooms,
1	0 784 93 0 675 77	Special motion sensors for small premises and bathrooms Wall mounted - flush or surface mounting Recommended fixing height: 1.2 m Consumption 0.2 W Optimum distance between two sensors: 6 m Mosaic White 180° passive infrared detection, range 8 m IP 41 For use with Mosaic plate and Batibox support frame 2 modules Céliane 180° passive infrared detection, range 8 m IP 41 For use with - cover plate Cat.No 0 682 99 (white) or 0 685 99	1		classrooms, open areas, etc. Ceiling mounted 360° passive infrared and ultrasound detection, range 8 m IP 20 Consumption 0.5 W Optimum distance between two sensors: 6 m Fixes directly in suspended ceiling with springs (supplied) or is installed in a 50 mm deep Batibox Surface mounted on ceiling using accessory Cat.Nos 0 488 75 Connection by KNX red/black connector 360° passive infrared detection with high density lens range 8 m IP 20 Consumption 0.5 W Optimum distance between two sensors: 6 m Fixes directly in suspended ceiling with springs (supplied) or in installed in a 50 mm deep Batibox
1	5 7/10 37	(titanium) - ring cover Cat.No 0 680 00 (white) or 0 683 00 (titanium) - a Céliane plate - a Batibox support frame Arteor 180° passive infrared detection, range 8 m IP 41 - Céliane Arteor plate - a Batibox support frame			(supplied) or is installed in a 50 mm deep Batibox Surface mounted on ceiling using accessory Cat.No 0 488 75 Connection by KNX red/black connector

range 8 m for work areas Dual technology sound detection, o sensors: 6 m iling with springs mm deep Batibox ing accessory connector with high density lens o sensors: 6 m iling with springs) mm deep Batibox ing accessory onnector

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Llegrand

Controllers

false ceiling and modular BUS/KNX

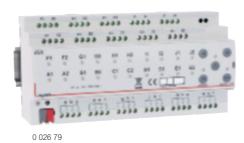




0 488 88







Connected with the BUS/KNX cable Configuration using ETS programming software

Pack	Cat.Nos	False ceiling controllers for dimming
		Each output can be controlled by a sensor and/or BUS/KNX control unit
1	0 488 88	For DALI control 4 outputs 32 ballasts maximum per output
1	0 488 87	For 1-10V control 4 outputs 1000 VA maximum per output Also control 4 ON/OFF circuits
		Modular controllers for dimming
		Each output can be controlled by a sensor and/or BUS/KNX control unit
1	0 026 65	For DALI control 1 output DALI bus (64 DALI ballasts max) to control up to 16 DALI groups and up to 64 DALI scenes 4 DIN modules
1	0 026 99	1 output DALI bus (64 DALI ballasts max) to control individually up to 64 DALI luminaires and up to 16 DALI scenes 4 DIN modules
1	0 026 68	For 1-10V control 10 outputs 1-10 V also controlling 10 ON/OFF circuits (16 A max) 10 DIN modules
1	0 026 54	For LED and all others LV and ELV loads 2 outputs 2 x 300 W/VA maximum per output 4 DIN modules
1	0 026 86	For LV and ELV loads only 2 outputs 2 x 500 VA maximum per output
1	0 026 87	4 x 500 VA maximum per output 4 outputs 4 x 500 VA maximum per output 12 DIN modules

	Pack	Cat.Nos	Modular ON/OFF controller
	1	0 026 80	Each output can be controlled by a sensor and/or BUS/KNX control unit 4 x 16 A outputs 4 DIN modules
			Modular multi-applications ON/OFF controllers
			Each output can be controlled by a sensor and/or BUS/KNX control unit Multi-applications controllers with independent input channels and outputs configurable to control lighting loads, power sockets, roller shutters, and HVAC
	1	0 026 72	equipment 8 x 16 A outputs 6 DIN modules
ol	1	0 026 73	8 x 16 A outputs - 8 inputs 6 DIN modules
	1	0 026 74	12 x 16 A outputs 6 DIN modules
ol	1	0 026 76	16 x 16 A outputs 10 DIN modules
	1	0 026 78	20 x 16 A outputs 10 DIN modules
ıits	1	0 026 79	20 x 16 A outputs - 18 inputs 10 DIN modules
			Room Controller Unit
			Power modules equipped with output contacts for controlling: - different types of ON/OFF load (lighting, roller shutters, contactors, motors, etc.) - a DALI dimming output for 64 ballasts max. Loads are managed by the controls to which they are linked: either by BUS/KNX controls, or by wired connection input terminals (switches, push-buttons, volt-free contacts) Multiphase connection and consumption measurement
	1	0 484 18	8 inputs - 10 outputs 8 DIN modules
	1	0 484 22	16 inputs - 16 outputs 12 DIN modules

Infrastructure products

BUS/KNX











Connected with the BUS/KNX cable Configuration using ETS programming software

Pack	Cat.Nos	BUS/KNX interface - voltage contact
		Connects voltage free contacts devices (switches, push-buttons, alarms, etc.) to the BUS/KNX
1	0 026 93	Modular 4 inputs 0 to 265 AC/DC powered 2 DIN modules
1	0 026 92	Flush mounting For installation in a flush-mounting box 4 inputs - 4 outputs
		Line coupler
1	0 035 46	Provides galvanic isolation between lines Necessary in an installation where there are more than 64 KNX participants 2 DIN modules
		IP/KNX router
1	0 035 45	Can acts asmain line or backbone coupler Links differerent KNX networks to each other via the IP infrastructure 2 DIN modules

Pack	Cat.Nos	Modular power supplies
		Powers one BUS/KNX line Integrated filter to prevent the short-circuit of BUS messages Voltage 230 V ∼ - 30 V = With additional 30 V unfiltered output 7 DIN modules
1	0 035 06	320 mA
1	0 035 07	640 mA
		BUS/KNX connector
	0.400.70	
1	0 488 79	Black and red Supplied in boxes of 50
		BUS/KNX cables
		Length 500 m 0.8 mm dia. quad Isolation 4000 V
1	0 492 91	1 pair: red/black
1	0 492 92	2 pairs: red/black and yellow/white

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Controllers

BUS/KNX load tables

Load table at 230 V a.c. 50-60Hz										
			*			+				
Cat.Nos	Outputs	Halogen lamp	ELV halogen lamp with ferromagnetic or electronic transformer	Fluorescent tube	LED and compact fluorescent lamp	Fluorescent lamp with 1-10 V ballast	DALI	Motors		
False ceiling con	trollers									
0 488 88	4	-	-	-	-	-	4 x 32 ballasts	-		
0 488 87	4	4 x 800 W	4 x 800 VA	4 x 1000 VA	4 x 1000 VA	4 x 1000 VA	-	-		
0 026 65	1	-	-	-	-	-	64 ballasts (group control only)	-		
0 026 99	1	-	-	-	-	-	64 ballasts (individual control)	-		
0 026 68	10	-	-	-		4000 VA	-	-		
0 026 54	2	2 x 300 W	2 x 200 VA	2 x 300 VA	2 x 75 W	-	-	-		
0 026 86	2	2 x 500 W	2 x 500 W	-	-	-		-		
0 026 87	4	2 x 500 W	4 x 500 W	-	-	-	-	-		
0 026 80	4	2 x 3680 W	4 x 1000 VA	4 x [10 x (2 x 36 W)]	4 x 500 VA	-	-	4 x 500 VA		
0 026 72	8	8 x 4000 VA	8 x 1800 VA	8 x 2400 VA	8 x 400 VA	-	-	8 x 1000 VA		
0 026 73	8	8 x 4000 VA	8 x 1800 VA	8 x 2400 VA	8 x 400 VA	-	-	8 x 1000 VA		
0 026 74	12	12 x 4000 VA	12 x 1800 VA	12 x 2400 VA	12 x 400 VA	-	-	12 x 1000 VA		
0 026 76	16	16 x 4000 VA	16 x 1800 VA	16 x 2400 VA	16 x 400 VA	-	-	16 x 1000 VA		
0 026 78	20	20 x 4000 VA	20 x 1800 VA	20 x 2400 VA	20 x 400 VA	-	-	20 x 1000 VA		
0 026 79	20	20 x 4000 VA	20 x 1800 VA	20 x 2400 VA	20 x 400 VA	-	-	20 x 1000 VA		
0 484 18	4 4 2	4 x 500 W 4 x 1000 W 2 x 3680 W	4 x 250 VA 4 x 500 VA 2 x 1000 VA	4 x [2 x (2 x 36 W)] 4 x [4 x (2 x 36 W)] 2 x [10 x (2 x 36 W)]	4 x 80 VA 4 x 160 VA 2 x 500 VA	-	1 x 64 ballasts	4 x 250 VA 4 x 500 VA 2 x 500 VA		
0 484 22	4 8 4	4 x 500 W 8 x 1000 W 4 x 3680 W	4 x 250 VA 8 x 500 VA 4 x 1000 VA	4 x [2 x (2 x 36 W)] 8 x [4 x (2 x 36 W)] 4 x [10 x (2 x 36 W)]	4 x 80 VA 8 x 160 VA 4 x 500 VA	-	1 x 64 ballasts	4 x 250 VA 8 x 500 VA 4 x 500 VA		

*: Compatible with dimmable LED and compact fluorescent lamps

ON/OFF
Dimming
Automation

Sensors

BUS/KNX coverage patterns

Cat. Nos	Installation technology type	Range	Detection area	Examples of applications
0 489 18		6 m (US) 5 m (PIR)	2.5 m 1.2 m m: 3 2.5 0 2.5 3 (US) (PIR) (PIR) (US)	Classroom, meeting room, open plan office
0 489 19		2 x 12 m	2.5 m m: 12 0 12 12 9 0 9 12	Long corridor
0 489 21	派	18 m	2.5 m m: 3 0 5 10 15	High ceiling areas (warehouses, gymnasium) outdoor car park, basement, laboratory
0 784 93 - 0 675 77 - 5 740 37 5 740 79 -HC4658KNX HD4658KNX - HS4658KNX L4658KNX - N4658KNX NT4658KNX		8 m	1.2 m E S S S S S S S S S S S S S S S S S S	Bathroom, stairways
0 489 22		8 m	2.5 m- m: 4 2 1 0 1 2 4	Individual office, corridor, stairways, restrooms etc.

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0 026 54	34	1	84	31	1	94	30	1	HD4658KNX	33	1
65	-	1	87	34	1	95	-	1	HD4680KNX	31	1
68	-	1	88	-	1	96	-	1	HS4657M3KNX	-	1
72	-	1		0 489 00			5 735 00		HS4658KNX	33	1
73	-	1	0 489 18	33	1	5 735 02	30	1	HS4680KNX	31	1
74	-	1	19	-	1	03	-	1	K4651M2KNX	-	1
76	-	1	21	-	1	04	-	1	K4651M3KNX	-	1
78	-	1	22	-	1	05	-	1	L4658KNX	33	1
79	-	1		0 490 00		12	-	1	L4680KNX	31	1
80	-	1	0 490 41	32	1	13	-	1	LN4651KNX	-	1
86	-	1		0 492 00			5 740 00		LN4691KNX	32	1
87	-	1	0 492 91	35	1	5 740 37	33	1	N4658KNX	33	1
92	35	1	92	-	1	79	-	1	N4680KNX	31	1
93	-	1		0 674 00			5 742 00		NT4658KNX	33	1
97	32	1	0 674 64	32	1	5 742 03	30	1	NT4680KNX	31	1
99	34	1		0 675 00			5 744 00				
0 035 00			0 675 70	30	1	5 744 04	30	1			
0 035 06	35	1	71	-	1		7 521 00				
07	-	1	72	-	1	7 521 47	32	1			
45	-	1	74	-	1		7 527 00				
46	-	1	77	33	1	7 527 47	32	1			
0 484 00			79	30	1	H4651KNX	31	1			
0 484 18	34	1		0 784 00		H4691KNX	32	1			
22	-	1	0 784 61	32	1	HC4657M3KNX	31	1			
	0 488 00		89	30	1	HC4658KNX	33	1			
0 488 77	32	1	91	-	1	HC4680KNX	31	1			





Head office

and International Department 87045 Limoges Cedex - France Tel. + 33 (0) 5 55 06 87 87 Fax + 33 (0) 5 55 06 74 55