





THE **GLOBAL SPECIALIST** IN ELECTRICAL AND DIGITAL BUILDING INFRASTRUCTURES

GENERATION 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. 675

THE NEW LEGRAND BUS/KNX RANGE MEETS THE SPECIFIC NEEDS OF COMMERCIAL SECTOR BUILDINGS

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!





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!

COMPLETE HIGH-PERFORMANCE SOLUTIONS

The new Legrand BUS/KNX offer, with its complete high-performance solutions, meets the specific needs of a commercial sector building, so you can ensure that your customers have an optimised, flexible and open installation.



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.

SIMPLIFIED INSTALLATION

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

16

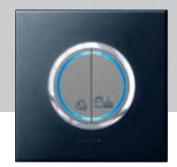
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FLEXIBLE, RELIABLE, AND CONSISTENT CONFIGURATION

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 CONTROL

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.



ARTEOR





LIVING NOW



CÉLIANE



VALENA

MANUAL CONTROL UNITS

One offer, six designs

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



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



тоисн

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 event.

>>>

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

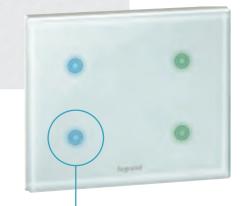
- Status feedback from actuators/ controllers: ON or OFF
- System status feedback: context information indicated by the BUS.
 Examples: over-consumption, broken lamp, too much wind for roller shutters, etc.

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)







G Set colour and brightness according to needs

Clegrand

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.





KNX WIRELESS INTERFACE





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



SOLUTIONS FOR SMALL PREMISES AND BATHROOMS

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





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.

> CAT.NO 0 489 21 PIR detection with 270° movable head Range 20 m IP 55 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 19 360° PIR double detection Lateral range 2 x 12 m IP 20 Ceiling mounted

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 IP 20 Ceiling mounted



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!

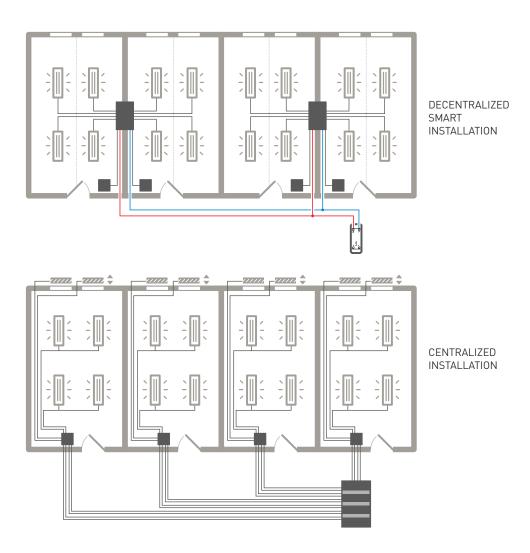
 \rightarrow SEE PAGE 16

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.



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

G 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

F easy maintenance

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.

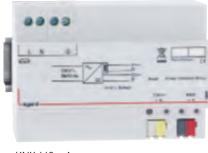


MODULAR FCU CONTROLLER

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

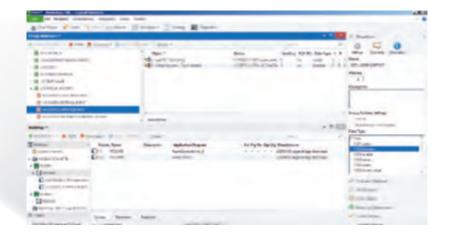
- BUS/KNX cables are available in a single pair version (red/black) or 2 pairs (red/black, yellow/white).
- The black/red BUS/KNX connector is used to extend, split the cable or simply connect the products.

FLEXIBLE, RELIABLE AND CONSISTENT CONFIGURATION



ETS SOLUTION

ETS is a manufacturer independant 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.





SMART CONFIGURATION TOOL: AN ASSET FOR COMMISSIONING AND MAINTENANCE



LEGRAND CLOSE UP APP

Configuration gateway Cat.No 0 882 40

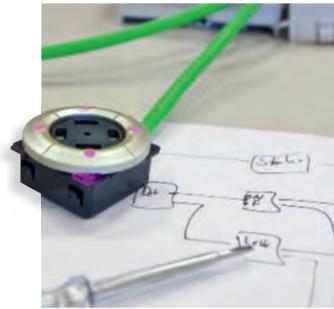
LEGRAND WILL ASSIST YOU

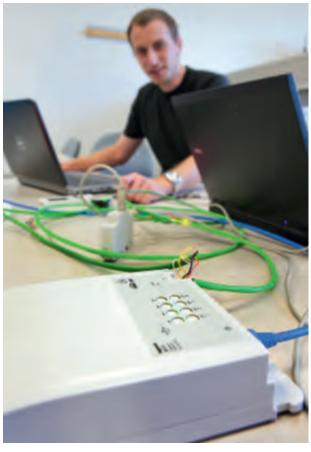
TRAINING

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

20 Guest room









Dedicated **"commercial sector buildings"** solutions

22	Open space
24	Meeting room
26	Reception area
28	Classroom

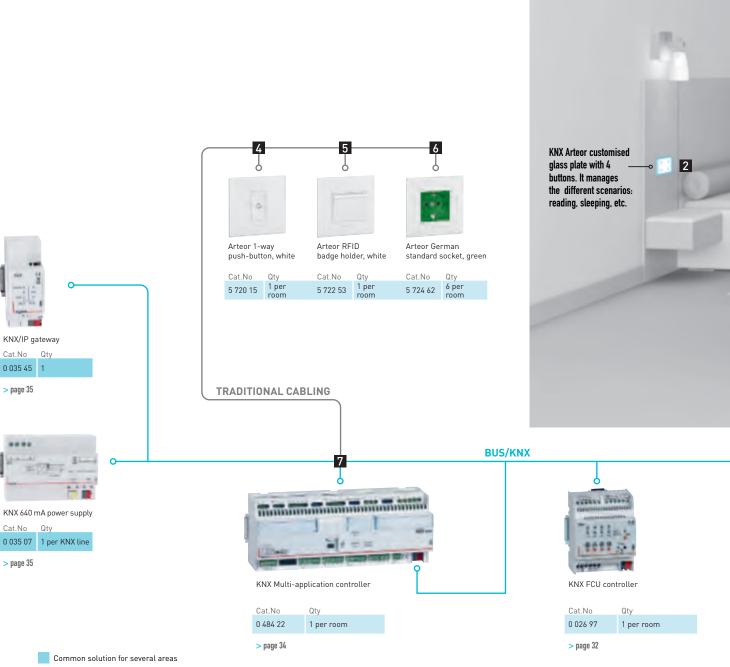
HOTELS

Hotel quest 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 the conditions he prefers according to his mood or needs.

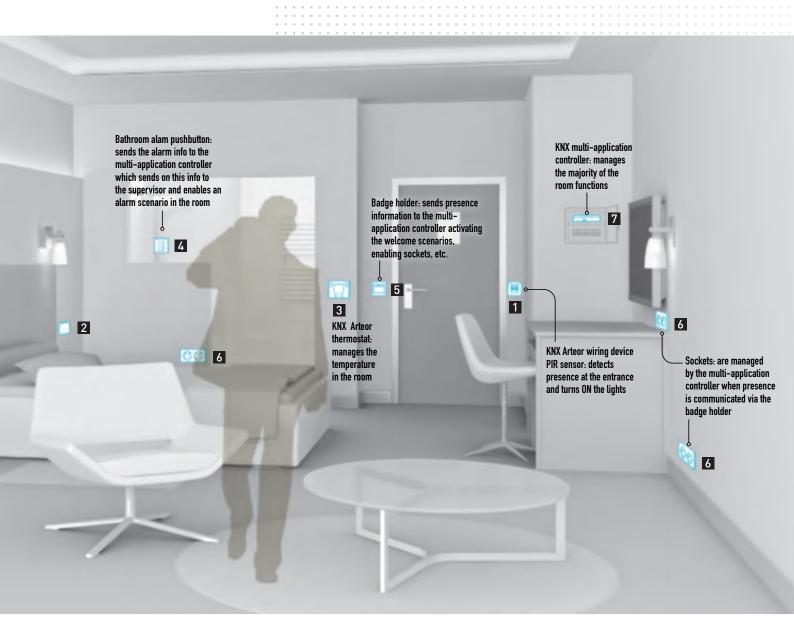












2 3 l KNX Arteor KNX Arteor KNX 4-button glass plate, white Temperature control panel PIR wiring device sensor Cat.No Cat.No Qty Qty Cat.No Qty 5 735 04 5 740 37 1 per room 2 per room 0 674 64 1 per room **>** page 33 **>** page 30 **>** page 32

Open space

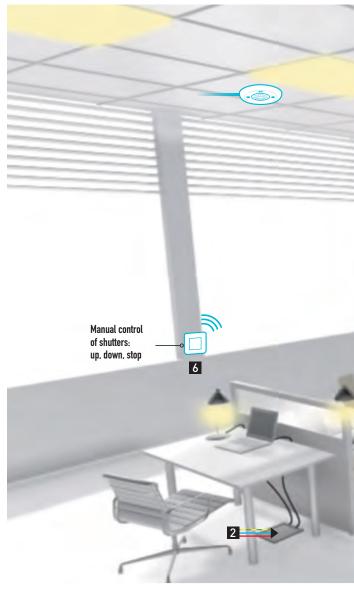
- Presence detection
- Movement detection
- Light level measurement
- Dimming

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.



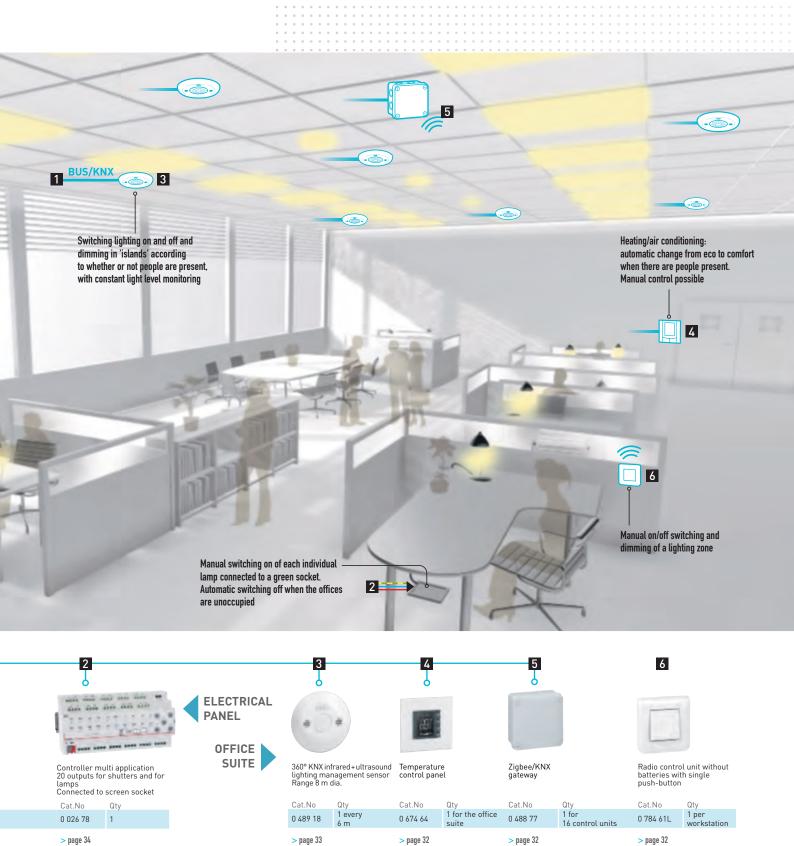




BUS/KNX		
	DALI BUS	ARAA AAA or Co gamma 0 THE 0
BUS/KNX power supply DIN 320 mA	BUS/KNX DALI controller for dimming	KNX FCU controller
Cat.No Qty	Cat.No Qty	Cat.No Qty
0 035 06 1	0 026 65 1 for 64 ballasts max	0 490 41 1 per room
> page 35	> page 34	> page 32
Common solution for several areas		







COMMERCIAL SECTOR BUILDINGS

Meeting room

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

BUS/KNX - IP gateway Cat.No

BUS/KNX power supply Cat.No Qty 0 035 07 1 per KNX line

> page 35

Qtv 0 035 45 1 **>** page 35

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

BUS/KNX

1

BUS/KNX controller

Cat.No

0 026 74

> page 34

multi-applicatons for lighting ON/OFF control and shutters control

1 for 4 circuits

dimming controller

Qty

1 for 2 circuits

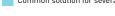
Cat.No

0 026 54

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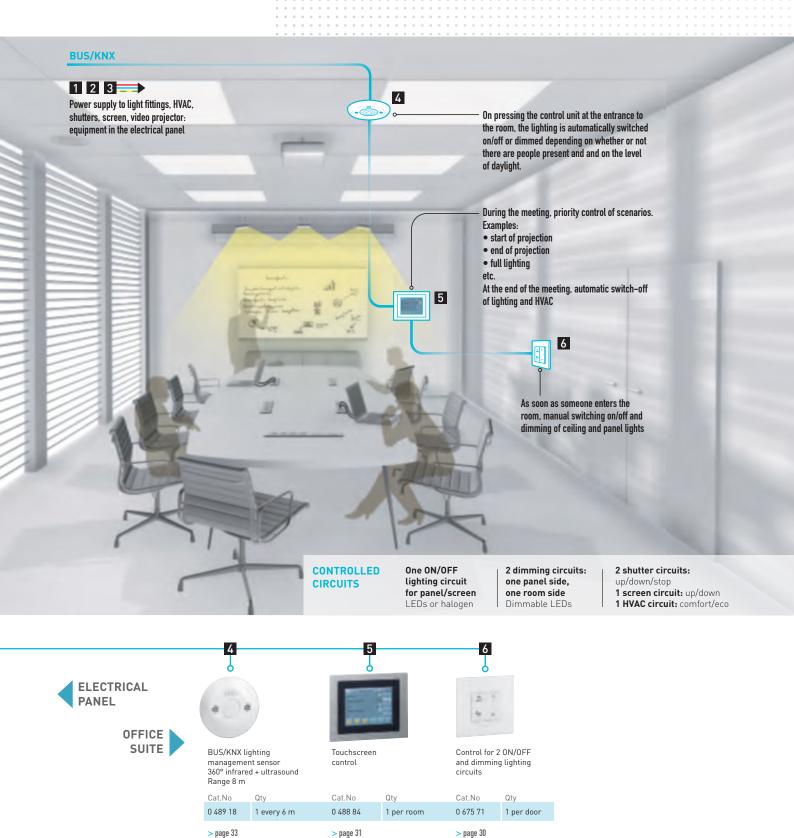


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Reception area

- 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.

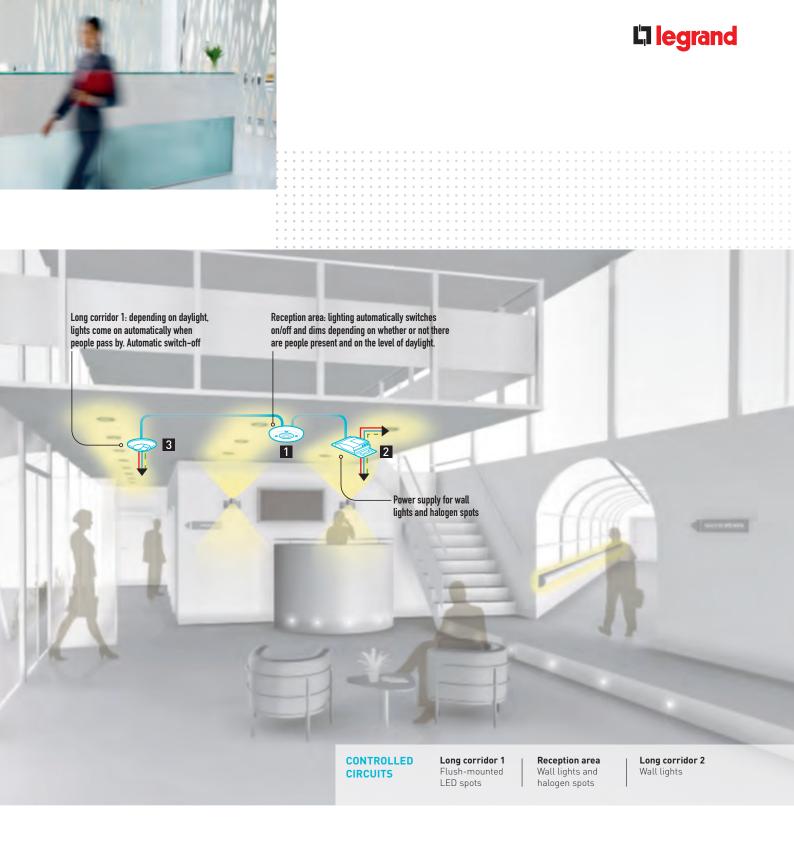




BUS/KNX - IP gateway Cat.No Qty 0 035 45 1 > page 35 BUS/KNX power supply Cat.No Qty 0 035 07 1 per KNX Line

> page 35

BUS/KNX





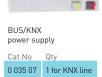
COMMERCIAL SECTOR BUILDINGS

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.





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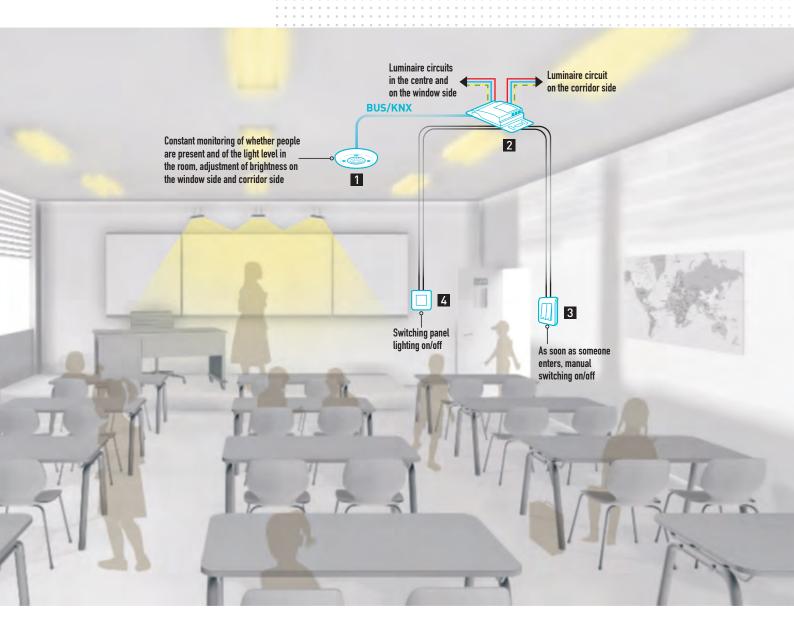
BUS/KNX - IP gateway Cat.No Qty

Cat.No Qty 0 035 45 1 > page 35

Common solution for several areas







4 2 3 BUS/KNX lighting management sensor 360° infrared + ultrasound Range 8 m BUS/KNX DALI controller Control for 2 on/off and Control for in suspended ceiling for dimming dimming lighting circuits panel lighting Cat.No Cat.No Cat.No Cat.No Qty Qty Qty Qty 0 489 18 0 488 88 1 for 4 circuits 0 784 96 0 784 89 1 every 6 m 1 per door 1 per panel **>** page 33 **>** page 34 **>** page 30 **>** page 30

Clegrand

Mosaic™, Céliane™, Arteor™, Valena™

BUS/KNX manual control units

KNX ⁻ KNX certified						0 0	
				0.675 71 (Mehagen		0 675 72	5 735 05
0 784 89	d directly	0 784 94	0 784 91	0 675 71 (Mahogan	y)	001572	c 5735 US
	ol unit mus	to BUS/KNX cable (su st be programmed usi	ng ETS software	r connector)			
Pack	Cat.Nos	Mosaic wired con			Pack	Cat.Nos	Céliane wired control units (continued)
		Used to control lighting scenario, forcing), ro awnings, and other ro Fitted with programma available) for display status feedback (norn pilot light, etc.) and a For use in combination	ller shutters (up, d eceivers nable RGB LEDs (1 ing load status and mal, forced, overri larms. on with Mosaic pla	own, stop), l2 colours d system de, day/night	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
		Batibox support fram 1 button - 1 actuation					Arteor wired control units Used to control lighting (ON/OFF, dimming,
1	0 784 89	O White					scenario, forcing), roller shutters (raise, lower, stop), awnings, and other receivers
1	0 784 95	1 button - 2 actuation White	on points				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
1	0 784 94	2 buttons - 2 actuation O White	ion points		1	0 675 71	frames 4 channels control unit without label display 4 actuation points To be equipped with key covers for control mechanism
1	0 784 96	e e e			1 1	5 742 03 5 744 04	Square version 4 actuation points - With label holder White Magnesium
		4 buttons - 4 actuation Supplied with label h	i on points older for button ide	entification			
1	0 784 91	O White			1 1	5 735 02 5 735 03	Round version 4 actuation points - With label holder White Magnesium
		Céliane wired con Used to control lighting		aina			4-buttons touch control units
		scenario, forcing), ro awnings, and other re Fitted with programm available) for display status feedback (nor pilot light, etc.) and a	ller shutters (up, d eceivers hable RGB LEDs (1 ing load status and mal, forced, overri	own, stop), 12 colours d system	1 1	5 735 04 5 735 05	Supplied complete with white or black touch plates To be fitted with Batibox support frames O White - for BS flush-mounting boxes Black - for BS flush-mounting boxes
1	0 675 71		cover plates, ring o tibox support fram	cover, Céliane	1 1	5 735 12 5 735 13	6-buttons touch control units Supplied complete with white or black touch plates White Black
		Fitted with white or tit Supplied with label h	older for button ide				Valena wired control units
1 1	0 675 70 0 675 79	For use with Céliane frame O White Titanium		δάρμοιτ			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

4 actuation points To be equipped with key covers for control mechanism

Axolute, Livinglight, Living Now BUS/KNX manual control units



















LN4651KNX

NT4680KNX

H4651KNX

HD4680KNX

HS4657M3KNX



K4651M2KNX



K4651M3KNX



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
		4 channels control unit without label
1	LN4651KNX	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	N4680KNX	White
1	NT4680KNX L4680KNX	Tech Anthracite
	LICCONTRAC	
		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
		4 channels control unit without label display
1	H4651KNX	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	HC4680KNX	Tech
1	HS4680KNX HD4680KNX	Anthracite White
		6-buttons touch control unit Supplied with fitted touch plate
1	HC4657M3KNX	Requires Axolute support frame
1	HS4657M3KNX	Black
1	HD4657M3KNX	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Pack	Cat.Nos	Living Now 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 colors available) for displaying load status and system status feedback (normal, forced, override, day/night pilot light, etc.) and alarms
1	K4651M2KNX	2 channels control unit - 4 buttons To be fitted with Living Now cover plate, plate and support frame
1	K4651M3KNX	3 channels control unit - 6 buttons To be fitted with Living Now cover plate, plate and support frame
1	0 488 84	Touch screen 5.7" control unit 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

Clegrand

Radio extension BUS/KNX





0 784 61

0 488 77

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 0 784 61 O White 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

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		Flush mounted 1.6" backlight display with 4 push- buttons and embedded a temperature probe Used to manage different types of heating/cooling system (FCU, heating/cooling valve, fan, electric load,) in combination through KNX with dedicated HVAC controller (Cat.Nos 0 026 97 or 0 490 41) - Monitoring the ambient temperature with desired unit - Adjustment of the temperature set-point and/or fan speed - Selection of operating mode (comfort, eco, protection, OFF) To be installed in flush-mounting boxes 2 modules Arteor Axolute Livinglight Valena Life Valena Allure
		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 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

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

Pack	Cat.Nos	Special corridor motion sensor	Pack	Cat.Nos	Special motion sensor for small premises
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	Anthracite
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 Can be fixed in a corner with a special accessory	1 1 1	N4658KNX L4658KNX NT4658KNX	IP 41 For use with: - a Livinglight plate - a Livinglight support frame White Anthracite
1	0 784 93	Cat.No 0 489 72 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	1		Suitable for meeting rooms, classrooms, open areas, etc. Dual technology 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
1	5 740 37	IP 41 For use with - cover plate Cat.No 0 682 99 (white) or 0 685 99 (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 Q White Magnesium			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.No 0 488 75 Connection by KNX red/black connector
1	0 675 77	Valena 180° passive infrared detection, range 8 m IP 41 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 - a Batibox support frame			

Controllers

false ceiling and modular BUS/KNX

KNX **KNX** certified

Pack

1

1

1

1

1

1



0 488 88

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





0 026 73



0 026 79

Cat.Nos False ceiling controllers for dimming Cat.Nos Modular ON/OFF controller Pack Each output can be controlled by a sensor and/or BUS/KNX control unit Each output can be controlled by a sensor and/or BUS/KNX control unit 0 0 2 6 8 0 4 x 16 A outputs For DALI control 4 DIN modules 0 488 88 4 outputs 32 ballasts maximum per output Modular multi-applications ON/OFF For 1-10V control controllers 0 488 87 4 outputs Each output can be controlled by a sensor and/or 1000 VA maximum per output Also control 4 ON/OFF circuits BUS/KNX control unit Multi-applications controllers with independent input channels and outputs configurable to control lighting loads, power sockets, roller shutters, and HVAC equipment Modular controllers for dimming Each output can be controlled by a sensor and/or BUS/KNX control unit 8 x 16 A outputs 6 DIN modules 0 026 72 For DALI control 1 output DALI bus (64 DALI ballasts max) to control up to 16 DALI groups and up to 64 DALI scenes 0 0 26 73 1 8 x 16 A outputs - 8 inputs 0 0 2 6 6 5 6 DIN modules 12 x 16 A outputs 6 DIN modules 0 0 2 6 7 4 1 4 DIN modules 1 output DALI bus (64 DALI ballasts max) to control individually up to 64 DALI luminaires and up to 16 DALI scenes 0 026 99 16 x 16 A outputs 0 0 2 6 7 6 10 DIN modules 1 0 0 26 78 20 x 16 A outputs 4 DIN modules 10 DIN modules For 1-10V control 0 0 2 6 7 9 20 x 16 A outputs - 18 inputs 1 0 026 68 10 outputs 1-10 V also controlling 10 ON/OFF circuits 10 DIN modules (16 A max) 10 DIN módules **Room Controller Unit** For LED and all others LV and ELV loads Power modules equipped with output contacts for 2 outputs 2 x 300 W/VA maximum per output controlling: - different types of ON/OFF load (lighting, roller 0 0 2 6 5 4 4 DIN modules shutters, contactors, motors, etc.) - a DALI dimming output for 64 ballasts max. For LV and ELV loads only 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, 0 026 86 2 outputs 2 x 500 VA maximum per output 8 DIN modules 0 026 87 volt-free contacts) 4 outputs Multiphase connection and consumption 4 x 500 VA maximum per output measurement 12 DIN modules 0 484 18 8 inputs - 10 outputs 8 DIN modules 16 inputs - 16 outputs 12 DIN modules 0 484 22

Infrastructure products BUS/KNX

KNX certified







0 020 92

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



0 035 07

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
1	0 488 79	BUS/KNX connector Black and red Supplied in boxes of 50
		BUS/KNX cables
1	0 492 91 0 492 92	Length 500 m 0.8 mm dia. quad Isolation 4000 V 1 pair: red/black 2 pairs: red/black and yellow/white

Clegrand

Controllers

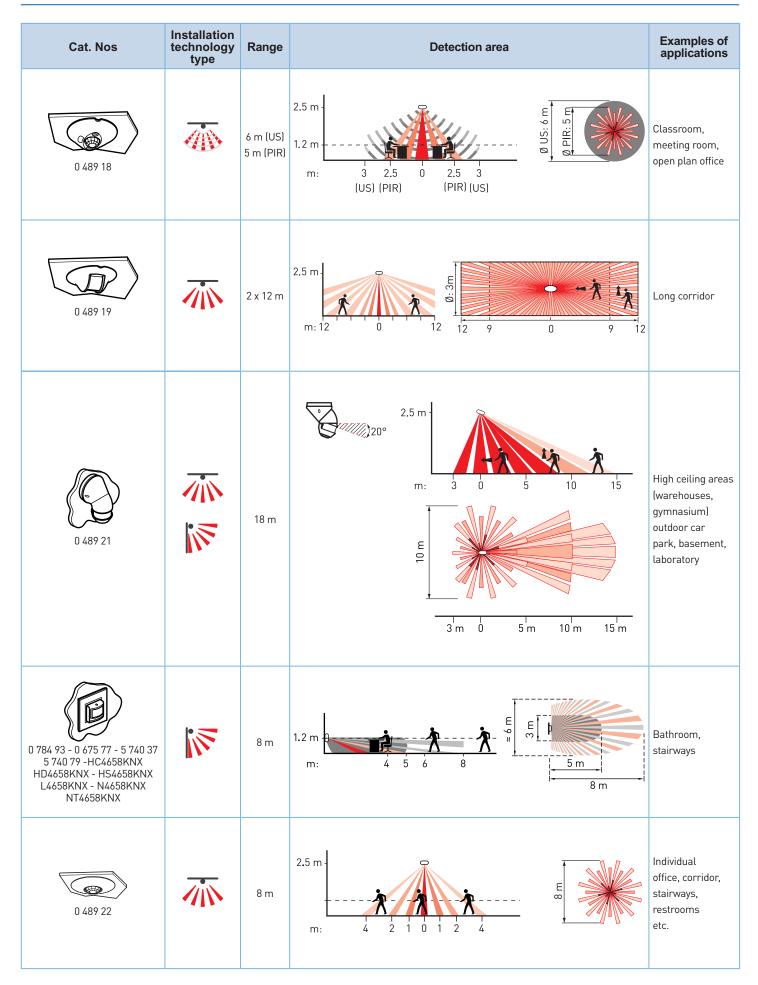
BUS/KNX load tables

Load table	Load table at 230 V a.c. 50-60Hz									
			₩ _+ <u>\</u>		₽ Ŝ			E		
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 contr	ollers									
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



Sensors BUS/KNX coverage patterns



L¹ legrand

Catalogue number index

Cat.Nos	Page N°	Pack	Cat.Nos	Page N°	Pack	Cat.Nos	Page N°	Pack	Cat.Nos	Page N°	Pack
	0 026 00		0 488 79	35	1	0 784 93	33	1	HD4657M3KNX	31	1
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			





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