BUS/KNX
SOLUTIONS

ACTIVE CONTROL OF LIGHTING, SHUTTERS, AND SOCKET OUTLETS

CATALOGUE
PAGES
INSIDE

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

L **legrand**®

NEW
GENERATION
LIGHTING
MANAGEMENT

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

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!

LEGRAND SOLUTIONS

KNX

COMPLETE BUILDING MANAGEMENT

KNX

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.

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.

MANUAL CONTROL UNITS

One offer, five designs
Combining performance with aesthetics, control units are available in five decorative ranges.

ARTEOR

AXOLUTE

CÉLIANE

MOSAIC

LIVINGLIGHT

"Really clever, infinitely stylish!

A wide range of mechanisms for everyday comfort

There are three types of mechanism available for user convenience.

SIMPLE

WITH LABEL HOLDER

TOUCH

Functional diversity

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

"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.

"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 ETS4 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)

" Set colour and brightness according to needs

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

MOSAIC

KNX WIRELESS INTERFACE

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 multi-scenario 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, centralised 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

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)
- system status: auto, controlled, forced, programmed

3 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

Wall - surface-mounting
Products are installed in a surface-mounted frame and can be fixed in a corner in certain cases.

SOLUTIONS FOR OUTDOOR CAR PARKS, BASEMENTS, SMALL PREMISES, BATHROOMS AND WORK AREAS

" 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.

CAT.NO 0 489 21
PIR detection with
270° movable head
Range 20 m
IP 55
Wall or ceiling
surface mounting

CAT.NO 0 489 19
360° PIR double detection
Lateral range 2 x 12 m
IP 20
Ceiling mounted

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.

EXCLUSIVE TO LEGRAND

CAT.NO 0 489 20
180° PIR/US detection
Front range 8 m
IP 42
Surface mounted on
the wall

CAT.NO 0 489 18
360° PIR/US detection
Range 8 m
IP 20
Ceiling mounted

Smart detection
Thanks to the combination of ETS4 and the 088230 configuration tool, it is possible to set/modify detector parameters simply and quickly for optimum detection!

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.

DECENTRALISED
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 THE DALI PROTOCOL, 4 OUTPUTS

FOR 1-10 V BALLASTS, 4 OUTPUTS

" Quicker and easier cabling

Multi-application modular controllers

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.

16 INPUTS
16 OUTPUTS
12 MODULES

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

These DIN controllers offer the 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).

CENTRALISED 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 controllers for dimming

■ Flexibility in use
  DALI master interface and power supply for a maximum of 64 connected ballasts, the modular DALI controller can handle them individually or in groups (maximum of 16 groups per gateway). It also allows DALI to be used (assignment of DALI ballasts to different groups and modification of the configuration) in two different ways: via the device using the integrated screen and programming touch keys, or via an integrated Web server.

■ Control of all sources, universal dimming, full DALI dimming, multiple circuits.

Controller Cat.No 0 026 59 varies the level of two outputs of any LV or ELV loads.

FOR THE DALI PROTOCOL

FOR ALL LV AND ELV LOADS

easy maintenance

Modular ON/OFF controllers

- 8 A FOR LIGHTING
- 16 A FOR LIGHTING, SOCKET OUTLETS AND ELECTRICAL EQUIPMENT

Modular controller for roller shutters

4 OUTPUTS

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.

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.

640 mA POWER SUPPLY

LINE COUPLER

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.

VOLT-FREE CONTACT BUS/KNX INTERFACE

Communication & Control

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

- A BUS/KNX - IP gateway allows operation from off site; it has 2 functions:
  - IP interface for making the links between the BUS/KNX infrastructure and the IP network remotely configure the installation with ETS
  - a Web communication interface for a simple supervision via a dedicated Web page.
- The scenario module can control up to eight scenarios and 8 program events.
- The IP/KNX router is a KNX network coupler enabling interconnection among different KNX networks via the IP infrastructure.
- The BUS/KNX - USB interface allows a PC to be connected to the BUS/KNX via the USB port to program or make diagnostic on the system.

IP COMMUNICATION MODULE

FLEXIBLE, RELIABLE AND CONSISTENT
CONFIGURATION

ETS5 SOLUTION

A standardised non-proprietary programming tool available in 15 languages, ETS5 software supports all KNX installations, whatever the medium used: twisted pair, radio frequency, Ethernet/IP, power line carrier.
It makes it easy to program control all the KNX devices.

A configuration system accessible in three steps:

1. Acquire the ETS5 software from the KNX association.
2. Download the Legrand database from www.legrandoc.com.
3. Import all the products into ETS5.

![Legrand logo]

LEGRAND SOLUTION

Configuration

As a complement to the ETS5 system, KNX detectors offer the possibility of local configuration.
This mobile configurator 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.

EXCLUSIVE TO LEGRAND

THE MOBILE CONFIGURATOR:
AN ASSET FOR COMMISSIONING AND MAINTENANCE

For optimum supervision with complete simplicity, Legrand offers "Legrand supervision software" (LSS) which allows you to view and control the whole of a building very easily: the management of Legrand solutions is pre-configured; screens are generated automatically.

SUPERVISION
SOFTWARE

VIEWING AND CONTROLLING LIGHTING: OVERVIEW AND DETAILED VIEW BY AREA

CONSUMPTION DISPLAY WITH COMPARISON

VIEWING AND CONTROLLING GUEST ROOM: OVERVIEW AND DETAILED VIEW BY ROOM

	LIGHTING, SHUTTERS, SOCKET OUTLETS	**MEASUREMENT**	**HOTEL GUEST ROOM MANAGEMENT**
VIEW AND CONTROL	■ Lighting status: overview and view by area ■ Presence of persons ■ Light level ■ Status of shutters and socket outlets ■ Control from the lighting, shutter and socket outlets supervision station, area by area ■ Programming according to a day/month/year calendar	For each zone and circuit, and by usage, display: ■ of consumption per day, month, year ■ of the comparator with previous periods ■ of the detail of electrical values (energy, power, voltage, current, etc.)	■ Occupancy status: overview and view by room ■ Ambiant temperature and status of thermoregulation operating mode ■ Energy consumption level ■ Control temperature setpoint, thermoregulation operating mode, shutter ■ Launch scenes as welcome, checkout, ...
BE WARNED	■ System fault display Example: loss of communication ■ Change of status of lighting, of a shutter, etc.	■ Over-consumption for the whole building	■ Guest requirements: MUR, Do Not Disturb ■ SOS alarm ■ "Green sensitive" guest

To meet any need of personalisation (screens, variables, equipment, etc.) the Legrand supervision software can be customised in order to create a tailor-made solution. Open to KNX, Modbus, DALI and also Bacnet protocols, it requires an integrator for its set-up.

FOR ACTIVE BUILDING MANAGEMENT

Customisable screens, with equipment shown on a plan

VIEW, CONTROL, BE WARNED

LIGHTING SHUTTERS
Display on a plan of the location of lighting and shutter units

MEASUREMENT
Water and gas consumption display for the whole building

HVAC
Temperature adjustment, ventilation, etc. Display of diagrams for monitoring

ACCESS CONTROL
Monitoring of building activity

INTERACT

Building manager decision maker PLC
Cat.No 0 035 44

Application examples with third-party systems (HVAC, access control, ...):
- automatic change to the right temperature depending on whether or not people are present
- supply to power sockets as soon as someone enters an office suite

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

![legrand](legrand logo)

APPLICATION
EXAMPLES

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 the conditions he prefers according to his mood or needs.

Legrand supervision software

KNX Arteor customised glass plate with 4 buttons. It manages the different scenarios: reading, sleeping, etc.

2

KNX/IP gateway

Cat.No	Qty
0 035 43	1

> page 44

KNX 640 mA power supply

Cat.No	Qty
0 026 94	1 per KNX line

> page 44

4

Arteor 1-way push-button, white

Cat.No	Qty
5 720 15	1 per room

5

Arteor RFID badge holder, white

Cat.No	Qty
5 722 53	1 per room

6

Arteor German standard socket, green

Cat.No	Qty
5 724 62	6 per room

TRADITIONAL CABLING

BUS/KNX

7

KNX Multi-application controller

Cat.No	Qty
0 484 22	1 per room

> page 43

Common solution for several areas

L7 legrand

Bathroom alam pushbutton: sends the alarm info to the multi-application controller which sends on this info to the supervisor and enables an alarm scenario in the room

4

Badge holder: sends presence information to the multi-application controller activating the welcome scenarios, enabling sockets, etc.

5

KNX multi-application controller: manages the majority of the room functions

7

3

KNX Arteor thermostat: manages the temperature in the room

2

6

1

KNX Arteor wiring device PIR sensor: detects presence at the entrance and turns ON the lights

6

Sockets: are managed by the multi-application controller when presence is communicated via the badge holder

6

1

KNX Arteor
PIR wiring
device sensor

2

KNX Arteor
4-button
glass plate, white

3

KNX Arteor
Thermostat,
white glass

Cat.No	Qty	Cat.No	Qty	Cat.No	Qty
5 740 37	1 per room	5 735 04	2 per room	0 490 29	1 per room

> page 42

> page 32

> page 35

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.

Manual control of shutters: up, down, stop

6

2

BUS/KNX

1

DALI BUS

BUS/KNX power supply

BUS/KNX DALI controller for dimming

BUS/KNX controller for shutters

Cat.No	Qty	Cat.No	Qty	Cat.No	Qty
0 035 12	1 for KNX line	0 026 98	1 for 64 ballasts max	0 026 91	1 for 4 shutters
> page 44		> page 43		> page 43	

Common solution for several areas

BUS/KNX

1 BUS/KNX **3**

Switching lighting on and off and dimming in 'islands' according to whether or not people are present, with constant light level monitoring

5

Heating/air conditioning: automatic change from eco to comfort when there are people present. Manual control possible

4

6

Manual on/off switching and dimming of a lighting zone

Manual switching on of each individual lamp connected to a green socket. Automatic switching off when the offices are unoccupied

2

2		**3**	**4**	**5**	**6**

ELECTRICAL PANEL ◄

OFFICE SUITE ►

ON/OFF lighting controller with 4 outputs for lamps connected to green sockets		360° KNX infrared+ultrasound lighting management sensor Range 8 m dia.	Room thermostat	Zigbee/KNX gateway	Radio control unit without batteries with single push-button
Cat.No	**Qty**	**Cat.No** / **Qty**	**Cat.No** / **Qty**	**Cat.No** / **Qty**	**Cat.No** / **Qty**
0 026 80	1 for 4 x 16 A sockets max	0 489 18 / 1 every 6 m	0 490 31 / 1 for the office suite	0 488 77 / 1 for 16 control units	0 784 61 / 1 per workstation
> page 43		> page 42	> page 35	> page 35	> page 35

Meeting room

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

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 - IP gateway

Cat.No	Qty
0 035 43	1

> page 44

BUS/KNX power supply

Cat.No	Qty
0 035 12	1 per KNX line

> page 44

BUS/KNX

1 BUS/KNX universal ON/OFF controller

Cat.No	Qty
0 026 61	1 for 4 circuits

> page 43

2 BUS/KNX universal dimming controller

Cat.No	Qty
0 026 59	1 for 2 circuits

> page 43

3 BUS/KNX controller for shutters

Cat.No	Qty
0 026 91	1 for 4 circuits

> page 43

Common solution for several areas

Ⴑ legrand

BUS/KNX

1 **2** **3** ▦▶

Power supply to light fittings, HVAC, shutters, screen, video projector: equipment in the electrical panel

4

On pressing the control unit at the entrance to the room, the lighting is automatically switched on/off or dimmed depending on whether or not there are people present and and on the level of daylight.

During the meeting, priority control of scenarios. Examples:
• **start of projection**
• **end of projection**
• **full lighting**
etc.
At the end of the meeting, automatic switch-off of lighting and HVAC

5

6

As soon as someone enters the room, manual switching on/off and dimming of ceiling and panel lights

CONTROLLED CIRCUITS	One ON/OFF lighting circuit for panel/screen LEDs or halogen	2 dimming circuits: one panel side, one room side Dimmable LEDs	2 shutter circuits: up/down/stop 1 screen circuit: up/down 1 HVAC circuit: comfort/eco

4 **5** **6**

ELECTRICAL PANEL ◀

OFFICE SUITE ▶

	BUS/KNX lighting management sensor 360° infrared + ultrasound Range 8 m	Touchscreen control	Control for 2 ON/OFF and dimming lighting circuits
Cat.No **Qty**	**Cat.No** **Qty**	**Cat.No** **Qty**	
0 489 18	1 every 6 m	0 488 84	1 per room
			0 675 71	1 per door

> page 42   > page 9   > page 32

COMMERCIAL SECTOR BUILDINGS

Reception areas

- 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.

Legrand supervision software

BUS/KNX - IP gateway

Cat.No	Qty
0 035 43	1

> **page 44**

BUS/KNX power supply

Cat.No	Qty
0 035 12	1 per KNX line

> **page 44**

BUS/KNX

Common solution for several areas

Long corridor 1: depending on daylight, lights come on automatically when people pass by. Automatic switch-off

Reception area: lighting automatically switches on/off and dims depending on whether or not there are people present and on the level of daylight.

Power supply for wall lights and halogen spots

Long corridor 2: depending on daylight level, the lighting automatically comes on when a person enters the corridor (detection possible up to 20 m). Automatic switch-off

CONTROLLED CIRCUITS	**Long corridor 1** Flush-mounted LED spots	**Reception area** Wall lights and halogen spots	**Long corridor 2** Wall lights

	1	2	3	4	
	BUS/KNX lighting management sensor 360° infrared + ultrasound Range 8 m	BUS/KNX controller in suspended ceiling for dimming DALI lamps	BUS/KNX lighting management sensor 2 x 180° for long corridors Range 2 x 12 m	BUS/KNX lighting management sensor 180° infrared + ultrasound Range 8 m	ON/OFF or dimming 1-10 V BUS/KNX controller in suspended ceiling Linked to lighting management sensors Cat.Nos 0 489 19/20

Cat.No	Qty	Cat.No	Qty	Cat.No	Qty	Cat.No	Qty	Cat.No	Qty
0 489 18	1 every 6 m	0 488 64	1 for 2 circuits	0 489 19	1 every 20 m	0 489 20	1 every 6 m	0 488 62	1 for 4 circuits

Class
room

- 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.

Legrand supervision software

BUS/KNX - IP gateway

Cat.No	Qty
0 035 43	1

> page 44

BUS/KNX power supply

Cat.No	Qty
0 035 12	1 for KNX line

> page 44

BUS/KNX

Common solution for several areas

Luminaire circuits in the centre and on the window side

Luminaire circuit on the corridor side

BUS/KNX

Constant monitoring of whether people are present and of the light level in the room, adjustment of brightness on the window side and corridor side

1

2

4

Switching panel lighting on/off

3

As soon as someone enters, manual switching on/off

1	2	3	4
BUS/KNX lighting management sensor 360° infrared + ultrasound Range 8 m	BUS/KNX DALI controller in suspended ceiling for dimming	Control for 2 on/off and dimming lighting circuits	Control for panel lighting

Cat.No	Qty	Cat.No	Qty	Cat.No	Qty	Cat.No	Qty
0 489 18	1 every 6 m	0 488 64	1 for 4 circuits	0 784 96	1 per door	0 784 89	1 per panel

> page 42   > page 43   > page 32   > page 32

KNX certified

| 0 784 89 | 0 784 94 | 0 784 91 | 0 675 71 (Mahogany) | 0 675 72 | 5 735 05 |

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

Pack	Cat.Nos	**Mosaic 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.
		For use in combination with Mosaic plates and Batibox support frames
		1 button - 1 actuation point
1	0 784 89	○ White
		1 button - 2 actuation points
1	0 784 95	○ White
		2 buttons - 2 actuation points
1	0 784 94	○ White
		2 buttons - 4 actuation points
1	0 784 96	○ White
		4 buttons - 4 actuation points
		Supplied with label holder for button identification
1	0 784 91	○ White

Pack	Cat.Nos	**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
1	0 675 71	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
1	0 675 70	○ White
1	0 675 79	● Titanium

Pack	Cat.Nos	**Céliane wired control units (continued)**
		4 buttons touch control units
		Supplied complete with white or black touch plate
1	0 675 72	○ Kaolin glass
1	0 675 74	● Graphite glass

Pack	Cat.Nos	**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
		4 channels control unit without label display
1	0 675 71	4 actuation points
		To be equipped with key covers for control mechanism
		Square version
		4 actuation points - With label holder
1	5 742 03	○ White
1	5 744 04	● Magnesium
		Round version
		4 actuation points - With label holder
1	5 735 02	○ White
1	5 735 03	● Magnesium
		4-buttons touch control units
		Supplied complete with white or black touch plates
		To be fitted with Batibox support frames
1	5 735 04	○ White - for BS flush-mounting boxes
1	5 735 05	● Black - for BS flush-mounting boxes
		6-buttons touch control units
		Supplied complete with white or black touch plates
1	5 735 12	○ White
1	5 735 13	● Black

Céliane™

BUS/KNX manual control key covers

| 0 681 50 | 0 684 52 | 0 684 55 | 0 685 69 | 0 684 76 | 0 684 58 | 0 683 00 |

Single key covers

Pack	Cat.Nos		Single key covers
	White	Titanium	For mechanisms Cat.Nos 0 675 71
			Lighting and sound distribution
5	**0 681 50**	**0 684 50**	Left-hand mounting
5	0 681 52	0 684 52	Right-hand mounting
			Lighting
5	0 681 48	0 684 48	Left-hand mounting
5	0 681 49	0 684 49	Right-hand mounting
			Dimming
5	0 681 77	0 684 77	Left-hand mounting
5	0 681 78	0 684 78	Right-hand mounting
			GEN/ON/OFF
5	0 681 55	0 684 55	Left-hand mounting
5	0 681 56	0 684 56	Right-hand mounting
			ON/OFF
5	0 682 80	0 685 80	Left-hand mounting
10	0 682 81	0 685 81	Right-hand mounting
			For roller shutters
5	**0 682 69**	**0 685 69**	Left or right-hand mounting
			Unmarked
10	**0 682 03**	**0 685 03**	Left or right-hand mounting
			STOP
1	0 682 04	0 685 04	Left-hand mounting only

Double key covers

Pack	Cat.Nos		Double key covers
	White	Titanium	For mechanisms Cat.Nos 0 675 71
5	0 681 42	0 684 42	Lighting
5	0 681 44	0 684 44	Lighting
5	0 681 76	0 684 76	Dimming
5	0 681 80	0 684 80	GEN
5	0 681 58	0 684 58	GEN/ON/OFF
5	0 681 88	0 684 88	ON/OFF
5	**0 682 59**	**0 685 59**	For roller shutters
10	**0 682 02**	**0 685 02**	Unmarked

Ring covers

Pack	White	Titanium	Ring covers
10	**0 680 00**	**0 683 00**	To be installed in addition to single or double key covers

Arteor™

BUS/KNX manual control key covers

| 5 745 05 | 5 745 08 | 5 745 38 | 5 745 17 | 5 745 43 | 5 745 22 | 5 745 19 | 5 745 42 | 5 745 16 | 5 745 36 |

| 5 744 86 | 5 744 81 | 5 744 76 | 5 744 79 | 5 744 69 | 5 744 80 | 5 743 94 | 5 743 96 |

Key cover description	Pack	Number of modules	ROUND VERSION			SQUARE VERSION		
				White ○	Magnesium ●		White ○	Magnesium ●
Adjustment symbol, left-hand side mounting	5	1		5 745 05	5 745 06		5 744 87	5 744 86
Adjustment symbol, right-hand side mounting	5	1		5 745 07	5 745 08			
Adjustment symbol	5	2		5 745 37	5 745 38		5 744 89	5 744 88
Light symbol (either side)	5	1		5 745 17	5 745 18		5 744 75	5 744 74
Light symbol	5	2		5 745 43	5 745 44		5 744 77	5 744 76
Dimmer symbol, left-hand side mounting	5	1		5 745 20	5 745 22		5 744 69	5 744 68
Dimmer symbol, right-hand side mounting	5	1		5 745 19	5 745 21			
Dimmer symbol	5	2		5 745 41	5 745 42		5 744 71	5 744 70
Up/Down symbol (either side)	5	1		5 745 15	5 745 16		5 744 93	5 744 92
Up/Down symbol	5	2		5 745 35	5 745 36		5 744 95	5 744 94
GEN marking	5	2		5 745 39	5 745 40		5 744 73	5 744 72
GEN/ON/OFF marking, left-hand side mounting	5	1		5 745 24	5 745 26		5 744 83	5 744 82
GEN/ON/OFF marking, right-hand side mounting	5	1		5 745 23	5 745 25			
GEN/ON/OFF marking	5	2		5 745 31	5 745 32		5 744 85	5 744 84
ON/OFF marking, left-hand side mounting	5	1		5 745 28	5 745 30		5 744 79	5 744 78
ON/OFF marking, right-hand side mounting	5	1		5 745 27	5 745 29			
ON/OFF marking	5	2		5 745 33	5 745 34		5 744 81	5 744 80
Sound source selection right-hand mounting	5	1		5 745 11	5 745 12		5 744 91	5 744 90
Shutter STOP marking (either side)	5	1		5 745 45	5 745 46		5 745 47	5 745 48
Unmarked (either side)	5	1		5 745 09	5 745 10		5 744 65	5 744 64
Unmarked	5	2		5 745 13	5 745 14		5 744 67	5 744 66
Key cover with DO NOT DISTURB symbol - 2 modules	5	2		5 743 46	5 743 47		5 743 48	5 743 49
Pair of key covers with DO NOT DISTURB symbol and MAKE UP ROOM symbol	2	1		5 743 94	5 743 95		5 743 96	5 743 97

Thermostats

BUS/KNX

KNX certified

0 490 31

0 490 29

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

Pack	Cat.Nos	**KNX thermostats**
		For fan coil units: 2 pipes, 2 pipes + electric heater and 4 pipes for heating and/or air conditioning For controlling on/off valves, 2-3 positions and 3 speeds (fan): comfort, economy, and protection with manual or automatic selection. Adjustment accuracy + 0.5°C 2 multi-function inputs for window contacts, summer/winter changeover, etc Backlit display Operating voltage 230 V± Supplied complete with dedicated flush-mounting box
1	0 490 31	○ White
1	0 490 29	○ White glass
1	0 490 30	● Black glass

Radio extension

BUS/KNX

0 784 61

0 488 77

Pack	Cat.Nos	**Zigbee/KNX wireless extension**
1	0 784 61	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 **Mosaic** 1 button - 2 actuation points ○ White
1	0 488 77	**Zigbee/KNX interface** 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
1	0 883 09	**Sensors** Used to control lighting (ON/OFF, dimming) or trigger automations For use with Zigbee/KNX interface Cat.No 0 488 77 180° passive infrared detection, front range 10 m Recommended fixing height: 2.5 m IP 42 Optimum distance between two sensors: 6 m Sleepy Consumption: 0.032 mA so 0.096 mW Awakened Consumption: 0.932 mA so 2.796 mW Battery powered by 2 x AA LR6

LN4651KNX	NT4680KNX	H4651KNX	HD4680KNX	HD4657M3KNX	HS4657M3KNX

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 display
1	LN4651KNX	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	⬤ Tech
1	L4680KNX	⬤ Anthracite

Pack	Cat.Nos	**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	⬤ Anthracite
1	HD4680KNX	○ White
		6-buttons touch control unit Supplied with fitted touch plate Requires Axolute support frame
1	HC4657M3KNX	○ White
1	HS4657M3KNX	⬤ Black
1	HD4657M3KNX	○ Transparent glass

Livinglight

BUS/KNX manual control key covers

1-FUNCTION KEY COVERS		1 module CAT.NO	2 modules CAT.NO
NEUTRAL LIGHTABLE KEY COVERS			
NT4915N **Neutral key cover with lightable bottom section**	⬤ (grey)	NT4915N	NT4915M2N
L4915N	⬤ (black)	L4915N	L4915M2N
N4915LN **High brightness key cover**	◯ (white)	N4915LN	N4915M2LN
KEY COVERS WITH DIFFUSER AND LIGHTABLE SYMBOL			
NT4915AN **Key cover with light symbol**	◯ (white)	N4915AN	N4915M2AN
	⬤ (grey)	NT4915AN	NT4915M2AN
	⬤ (black)	L4915AN	L4915M2AN
NT4915BN **Key cover with staircase light symbol**	◯ (white)	N4915BN	N4915M2BN
	⬤ (grey)	NT4915BN	NT4915M2BN
	⬤ (black)	L4915BN	L4915M2BN
NT4915DN **Key cover with bell symbol**	◯ (white)	N4915DN	N4915M2DN
	⬤ (grey)	NT4915DN	NT4915M2DN
	⬤ (black)	L4915DN	L4915M2DN
NT4915FN **Key cover with key symbol**	◯ (white)	N4915FN	N4915M2FN
	⬤ (grey)	NT4915FN	NT4915M2FN
	⬤ (black)	L4915FN	L4915M2FN
NT4915M2ADN **Key cover with dimmer symbol**	◯ (white)	—	N4915M2ADN
	⬤ (grey)	—	NT4915M2ADN
	⬤ (black)	—	L4915M2ADN
NT4915DD **Key cover with "Do not disturb" symbol**	◯ (white)	N4915DD	N4915M2DD
	⬤ (grey)	NT4915DD	NT4915M2DD
	⬤ (black)	L4915DD	L4915M2DD
NT4915MR **Key cover with "Make up room" symbol**	◯ (white)	N4915MR	—
	⬤ (grey)	NT4915MR	—
	⬤ (black)	L4915MR	—

Livinglight

BUS/KNX manual control key covers

2-FUNCTION KEY COVERS		1 module CAT.NO	2 modules CAT.NO
NEUTRAL LIGHTABLE KEY COVERS			
N4911N	○	N4911N	N4911M2N
NT4911N — Neutral key cover with lightable top and bottom sections	● (grey)	NT4911N	NT4911M2N
L4911N	●	L4911N	L4911M2N
KEY COVERS WITH 2 DIFFUSERS AND LIGHTABLE SYMBOLS			
NT4911AFN — Key cover with ON-OFF and GEN screen printing	○	N4911AFN	N4911M2AFN
	● (grey)	NT4911AFN	NT4911M2AFN
	●	L4911AFN	L4911M2AFN
NT4911AGN — Key cover with ON/OFF markings	○	N4911AGN	N4911M2AGN
	● (grey)	NT4911AGN	NT4911M2AGN
	●	L4911AGN	L4911M2AGN
NT4911AHN — Key cover with up/down symbols	○	N4911AHN	N4911M2AHN
	● (grey)	NT4911AHN	NT4911M2AHN
	●	L4911AHN	L4911M2AHN
NT4911ADN — Key cover with + (top) and - (bottom) markings	○	N4911ADN	—
	● (grey)	NT4911ADN	—
	●	L4911ADN	—
NT4911AIN — Key cover with adjustment OFF adjustment ON symbols	○	N4911AIN	N4911M2AIN
	● (grey)	NT4911AIN	NT4911M2AIN
	●	L4911AIN	L4911M2AIN
NT4911BFN — Key cover with "change source" and "change track" symbols	○	N4911BFN	—
	● (grey)	NT4911BFN	—
	●	L4911BFN	—

L7 **legrand**

KEY COVERS THAT CAN BE CUSTOMISED WITH DIFFUSERS, AVAILABLE AS A KIT		1 module CAT.NO	2 modules CAT.NO
NEUTRAL LIGHTABLE KEY COVERS			
1 function — can be customised	**1-function key cover that can be customised with 1 diffuser*** ○	N4915TN	N4915M2TN
	◉	NT4915TN	NT4915M2TN
	●	L4915TN	L4915M2TN
2 functions — can be customised	**2-function key cover that can be customised with 2 diffusers*** ○	N4911TN	N4911M2TN
	◉	NT4911TN	NT4911M2TN
	●	L4911TN	L4911M2TN
DIFFUSERS KIT			
ON OFF GEN ⌒ ◀▶ ▶◀ + −	**Kit composition shown alongside (5 diffusers for each type)** ○	N4915KIT	
	◉	NT4915KIT	
	●	L4915KIT	
♪ ⌒ C))) ⊟ ◎ ◎ ◎	**Kit composition shown alongside (5 diffusers for each type)** ○	N4915KIT	
	◉	N4915KIT	
	●	N4915KIT	
🛏◎	**Kit with diffuser shown alongside (50 diffusers)** ○	N4915SETBL	
	◉	NT4915SETBL	
	●	L4915SETBL	

legrand

Axolute

BUS/KNX manual control key covers

KEY COVERS WITHOUT SILK-SCREEN PRINTING - 1 AND 2 FUNCTIONS		1 module CAT.NO	2 modules CAT.NO
KEY-COVERS WITHOUT SILK-SCREEN PRINTING - 1 FUNCTION			
HD4915 HD4915M2	○	HD4915	HD4915M2
HC4915 HC4915/2	◉	HC4915	HC4915/2
HS4915 HS4915/2	●	HS4915	HS4915/2
KEY-COVERS WITHOUT SILK-SCREEN PRINTING - 2 FUNCTIONS			
HD4911 HD4911M2	○	HD4911	HD4911M2
HC4911 HC4911/2	◉	HC4911	HC4911/2
HS4911 HS4911/2	●	HS4911	HS4911/2

Axolute

BUS/KNX manual control key covers

KEY COVERS WITH SILK-SCREEN PRINTING - 1 AND 2 FUNCTIONS

KEY COVERS WITH SILK-SCREEN PRINTING WITH SYMBOLS - 1 FUNCTION

Function	Colour	1 module CAT.NO	2 modules CAT.NO
OFF	White	HD4915AA	HD4915M2AA
OFF	Gray	HC4915AA	HC4915/2AA
OFF	Black	HS4915AA	HS4915/2AA
ON	White	HD4915AB	HD4915M2AB
ON	Gray	HC4915AB	HC4915/2AB
ON	Black	HS4915AB	HS4915/2AB
GEN	White	HD4915AC	HD4915M2AC
GEN	Gray	HC4915AC	HC4915/2AC
GEN	Black	HS4915AC	HS4915/2AC
Dimmer	White	HD4915AD	HD4915M2AD
Dimmer	Gray	HC4915AD	HC4915/2AD
Dimmer	Black	HS4915AD	HS4915/2AD
Light	White	HD4915BA	HD4915M2BA
Light	Gray	HC4915BA	HC4915/2BA
Light	Black	HS4915BA	HS4915/2BA
Stop	White	HD4915AE	—
Stop	Gray	HC4915AE	—
Stop	Black	HS4915AE	—
Bed light	White	HD4915BL	HD4915M2BL
Bed light	Gray	HC4915BL	HC4915M2BL
Bed light	Black	HS4915BL	HS4915M2BL
Bell	White	HD4915BB	HD4915M2BB
Bell	Gray	HC4915BB	HC4915/2BB
Bell	Black	HS4915BB	HS4915/2BB
Fan	White	HD4915BC	HD4915M2BC
Fan	Gray	HC4915BC	HC4915/2BC
Fan	Black	HS4915BC	HS4915/2BC
Key	White	HD4915BD	—
Key	Gray	HC4915BC	—
Key	Black	HS4915BC	—
Music	White	HD4915BE	HD4915M2BE
Music	Gray	HC4915BE	HC4915/2BE
Music	Black	HS4915BE	HS4915/2BE
Nurse	White	HD4915BF	HD4915M2BF
Nurse	Gray	HC4915BF	HC4915/2BF
Nurse	Black	HS4915BF	HS4915/2BF
Do not disturb	White	HD4915DD	HD4915M2DD
Do not disturb	Gray	HC4915DD	HC4915M2DD
Do not disturb	Black	HS4915DD	HS4915M2DD

Images: HD4915AA, HD4915M2AA, HC4915/2AA, HS4915/2AA, HC4915AC / HC4915/2AC, HS4915BA / HS4915/2BA

KEY COVERS WITH SILK-SCREEN PRINTING WITH SYMBOLS - 1 FUNCTION (CONTINUED)

Function	Colour	1 module CAT.NO	2 modules CAT.NO
Make up room	White	HD4915MR	—
Make up room	Gray	HC4915MR	—
Make up room	Black	HS4915MR	—

KEY COVERS WITH SILK-SCREEN PRINTING WITH SYMBOLS - 2 FUNCTIONS

Function	Colour	1 module CAT.NO	2 modules CAT.NO
ON - OFF - GEN	White	HD4911AF	HD4911M2AF
ON - OFF - GEN	Gray	HC4911AF	HC4911/2AF
ON - OFF - GEN	Black	HS4911AF	HS4911/2AF
ON - OFF	White	HD4911AG	HD4911M2AG
ON - OFF	Gray	HC4911AG	HC4911/2AG
ON - OFF	Black	HS4911AG	HS4911/2AG
UP - DOWN	White	HD4911AH	HD4911M2AH
UP - DOWN	Gray	HC4911AH	HC4911/2AH
UP - DOWN	Black	HS4911AH	HS4911/2AH
ON - OFF ADJUSTMENT	White	HD4911AI	HD4911M2AI
ON - OFF ADJUSTMENT	Gray	HC4911AI	HC4911/2AI
ON - OFF ADJUSTMENT	Black	HS4911AI	HS4911/2AI
Light	White	HD4911BA	HD4911M2BA
Light	Gray	HC4911BA	HC4911/2BA
Light	Black	HS4911BA	HS4911/2BA
Fan	White	HD4911BC	HD4911M2BC
Fan	Gray	HC4911BC	HC4911/2BC
Fan	Black	HS4911BC	HS4911/2BC
Treble clef	White	HD4911BE	—
Treble clef	Gray	HC4911BE	—
Treble clef	Black	HS4911BE	—
+ up and - down	White	HD4911AD	—
+ up and - down	Gray	HC4911AD	—
+ up and - down	Black	HS4911AD	—

Images: HD4911AF, HD4911M2AF, HC4911AF, HC4911AG, HC4911AI, HC4911BC

KNX certified

0 489 19	0 489 21	0 784 93	0 489 18	0 489 20

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
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
		Special motion sensor for outdoor car parks and cellars
1	0 489 21	**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 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
1	0 784 93	**Mosaic** White 180° passive infrared detection, range 8 m IP 41 For use with Mosaic plate and Batibox support frame 2 modules
1	0 675 77	**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 (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
1	5 740 37	○ White
1	5 740 79	● Magnesium

Pack	Cat.Nos	
		Special motion sensor for small premises and bathrooms (continued)
		Axolute 180° passive infrared detection, range 8 m IP 41 For use with: - an Axolute plate - an Axolute support frame
1	HD4658KNX	White
1	HS4658KNX	Anthracite
1	HC4658KNX	Tech
		Livinglight 180° passive infrared detection, range 8 m IP 41 For use with: - a Livinglight plate - a Livinglight support frame
1	N4658KNX	White
1	L4658KNX	Anthracite
1	NT4658KNX	Tech
		Special presence sensors for work areas
		Suitable for meeting rooms, classrooms, open areas, etc.
1	0 489 18	**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
1	0 489 22	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 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	0 489 20	**Wall mounted - surface mounting** 180° passive infrared and ultrasound detection, front range 8 m IP 42 Consumption 0.5 W Recommended fixing height: 2.5 m Optimum distance between two sensors: 10 m Can be fixed in a corner with a special accessory Cat.No 0 489 71

Exists in Céliane version

Dual technology

Controllers

false ceiling and modular BUS/KNX

KNX
KNX certified

0 488 64

0 484 22

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

False ceiling controllers for dimming

Pack	Cat.Nos	
		Each output can be controlled by a sensor and/or BUS/KNX control unit
		For DALI protocol
1	0 488 64	4 outputs 32 ballasts maximum per output
		For 1-10 V ballast
1	0 488 62	4 outputs 1000 VA maximum per output Also controls four ON/OFF circuits

Modular controllers for dimming

Pack	Cat.Nos	
		Each output can be controlled by a sensor and/or BUS/KNX control unit
		For DALI protocol
1	MARCH 2016 0 026 98	1 output Individually controls 64 ballasts in a maximum of 16 groups 6 17.5 mm DIN modules
1	0 026 63	8 outputs 16 ballasts maximum per output 4 17.5 mm DIN modules
		All LV and ELV loads
1	0 026 59	2 outputs 2 x 400 W/VA maximum per output or 1 x 800 W/VA For use with one or two extensions Cat.No 0 026 60 max. for four or six outputs. 4 17.5 mm DIN modules

Controller extension 0 026 59

Pack	Cat.Nos	
1	0 026 60	Adds two additional outputs to controller Cat.No 0 026 59 Maximum of two extensions per controller 4 17.5 mm DIN modules
		For BT and TBT loads only
1	MARCH 2016 0 026 86	2 outputs 2 x 500 VA maximum per output 8 17.5 DIN modules
1	MARCH 2016 0 026 87	4 outputs 4 x 500 VA maximum per output 12 17.5 mm DIN modules
1	MARCH 2016 0 026 88	4 1-10 V outputs and 4 x 16 A switching outputs 8 17.5 mm DIN modules

Modular ON/OFF controllers

Pack	Cat.Nos	
		Each output can be controlled by a sensor and/or BUS/KNX control unit
		8 A for lighting
1	0 026 61	4 x 8 A outputs 4 17.5 mm DIN modules
1	0 026 62	8 x 8 A outputs 4 17.5 mm DIN modules
		16 A for lighting, sockets and electrical equipment
1	0 026 80	4 x 16 A outputs 4 17.5 mm DIN modules
1	0 026 81	8 x 16 A outputs 8 17.5 mm modules
1	0 026 82	12 x 16 A outputs 12 17.5 mm modules

Modular controller for roller shutters

Pack	Cat.Nos	
		Each output can be controlled by a sensor and/or BUS/KNX control
1	MARCH 2016 0 026 91	4 x 2.1 A outputs 4 17.5 mm modules

Room Controller Unit

Pack	Cat.Nos	
		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 17.5 mm DIN modules
1	0 484 22	16 inputs - 16 outputs 12 17.5 mm DIN modules

KNX
KNX certified

0 026 55	0 026 93	0 035 16	0 035 12	0 035 43

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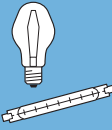Configuration using ETS programming software

Pack	Cat.Nos	**BUS/KNX interface - voltage contact**
		Connects voltage free contacts devices (switches, push-buttons, alarms, etc.) to the BUS/KNX
		Modular
1	0 026 55	8 inputs 6 17.5 mm modules
1	0 026 93	Connects powered contacts devices 2 17.5 DIN modules
		Flush mounting
		For installation in a flush-mounting box
1	0 026 92	4 inputs - 4 outputs

Pack	Cat.Nos	**Scenario module**
1	0 026 50	Able to perform up to 8 scenarios and 8 events programs 1 17.5 mm module

Pack	Cat.Nos	**Line coupler**
1	0 035 16	Provides galvanic isolation between lines Necessary in an installation where there are more than 64 KNX participants 2 17.5 mm DIN modules

Pack	Cat.Nos	**BUS/KNX - USB interface**
1	0 035 47	Connects a PC to the BUS/KNX via the USB port 1 17.5 mm DIN module

Pack	Cat.Nos	**Modular power supplies**
		Powers one BUS/KNX line Integrated filter to prevent the short-circuit of BUS messages Connection by automatic terminals 4 17.5 mm DIN modules Voltage 120-230 V∿ - 29 V⎓ With additional 29 V unfiltered output
1	0 035 12 **MARCH 2016**	320 mA
1	0 026 94	640 mA 6 17.5 mm DIN modules Voltage 120V∿ 230 VAC - 29 V⎓

Pack	Cat.Nos	**IP communication module**
1	0 035 43	BUS/KNX - IP gateway 2 functions: - IP interface: makes the link between the BUS/KNX infrastructure and the IP network for remote configuration using ETS software - Web communication interface for remotely managing via a dedicated Web page Allows operation from off site 4 17.5 mm DIN modules

Pack	Cat.Nos	**IP/KNX router**
1	0 026 38	Can acts as main line or backbone coupler Links differerent KNX networks to each other via the IP infrastructure 2 17.5 mm DIN modules

Pack	Cat.Nos	**BUS/KNX connector**
1	0 488 79	Black and red Supplied in boxes of 50

Pack	Cat.Nos	**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

Controllers
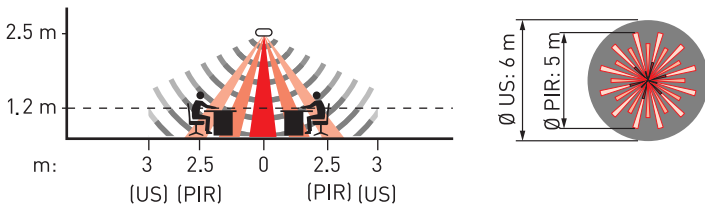## BUS/KNX load tables

Load table at 230 V a.c. 50-60Hz

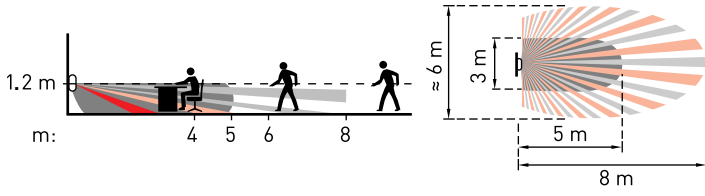| Cat.Nos	Outputs	Halogen lamp	ELV halogen lamp with ferromagnetic or electronic transformer	Fluorescent tube	LED and compact fluorescent lamp	Fluorescent lamp with 1-10 V ballast	DALI	Motors
False ceiling controllers								
0 488 64	4	-	-	-	-	-	4 x 32 ballasts	-
0 488 62	4	4 x 800 W	4 x 800 VA	4 x 1000 VA	4 x 1000 VA	4 x 1000 VA	-	-
Modular controllers								
0 026 98	-	-	-	-	-	-	1 x 64 ballasts	-
0 026 63	8	-	-	-	-	-	8 x 8 ballasts	-
0 026 59	2	2 x 400 W	2 x 80 W	-	2 x 60 VA(*)			
0 026 91	-	-	-	-	-	-	-	4 x 6 A
0 026 61	4	4 x 2000 W	4 x 500 VA	4 x 500 VA	4 x 500 VA	-	-	-
0 026 62	8	8 x 2000 W	8 x 500 VA	8 x 500 VA	8 x 500 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
0 026 80	4	4 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 81	8	8 x 3680 W	8 x 1000 VA	8 x [10 x (2 x 36 W)]	8 x 500 VA	-	-	8 x 500 VA
0 026 82	12	12 x 3680 W	12 x 1000 VA	12 x [10 x (2 x 36 W)]	12 x 500 VA	-	-	12 x 500 VA
0 026 86	2	2 x 500 W	2 x 500 W	-	-	-	-	-
0 026 87	4	4 x 500 W	4 x 500 W	-	-	-	-	-
0 026 88	4	4 x 1000 VA	-	4 x 1000 VA	-	4 x 1000 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)		Classroom, meeting room, open plan office
0 489 19		2 x 12 m		Long corridor
0 489 20		7 m (US) 12 m (PIR)		Individual office, classroom, meeting room, restrooms etc.
0 489 21		18 m		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		Bathroom, stairways
0 489 22		8 m		Individual office, corridor, stairways, restrooms etc.

>>>| **Building management**
active building management

BUS/KNX:
overall control
of the building

Apart from local control, BUS/KNX wiring allows other building applications to be supervised and integrated: emergency lighting, HVAC, fire alarm, etc. It is ideal for meeting energy and operating performance needs and easy maintenance.

0 490 04

For overall building management
Operates with:
- the metering offer: uses RS 485/IP converter Cat.No 0 046 88, or communication modules Cat.Nos 0 146 76/78 linked to measurement control unit Cat.No 0 146 69
- the BUS/KNX lighting offer, with KNX/IP converter Cat.No 0 035 43
- the BUS/SCS lighting offer with zone controller Cat.No 0 026 45
- the emergency lighting offer with addressable unit control interface Cat.No 0 626 00
- the fire alarm offer: using RS 485/IP converter Cat.No 0 046 88

2 SOLUTIONS FOR ACTIVE BUILDING MANAGEMENT

> View, control, be warned
Supervision software for Legrand applications: lighting, emergency lighting, metering, fire alarms, etc.

> Interact
The PLC allows Legrand and other applications to interact with one another. Example: changes automatically to the set temperature if there are people present.

Pack	Cat.Nos	**Legrand Supervision software**
		Supervision software which displays data, analyses and manages alarms for small commercial sector projects: - displays values measured and the status of connected systems - alarm management console - timer programming Is installed permanently on a dedicated PC Integrated assisted mode facilitating execution of the project plus display screens: pre-programming of Legrand solutions (electrical consumption measurement, lighting management, emergency lighting, fire alarms) Expert mode for handling third-party equipment (HVAC) and for customizing display screens
1	0 490 00	Ready to view, up to 125 points
1	0 490 01	Ready to view, up to 250 points
1	0 490 02	Ready to view, up to 500 points
1	0 490 03	Ready to view, up to 1000 points
1	0 490 04	Ready to view, up to 2000 points
		Building manager
1	0 035 44	PLC designed for the automated control of commercial sector buildings requiring interoperability between the different systems connected or requiring Legrand solutions to be integrated in a BMS: - Legrand solutions: lighting management, emergency lighting, power metering, fire alarm - other solutions: HVAC, etc. • Provides - data collection from the various systems: IP KNX, IP MODBUS, IP BACNET, IP SCS - programming of scripts (with algorithm), alarms and data history - exchange of collected data between systems (example: display on digital screen of power circuit consumption measurements) - HVAC systems included (air conditioning, heating) - sending of email alerts • Is installed in the VDI rack with dedicated patching to the various applications in the system • Can be linked to Supervision software Cat.Nos 0 490 00/01/02/03/04 for an overview of the installation

For configuration in expert mode,
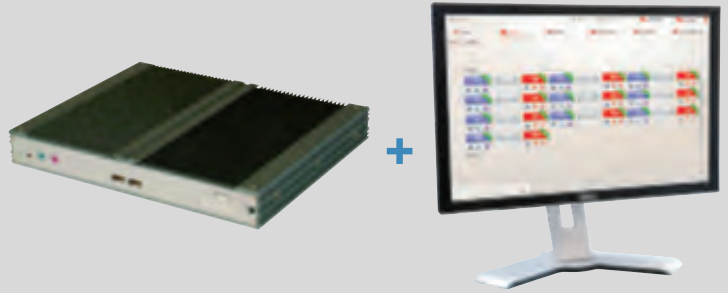**Contact your sales department**

Building management

active building management

■ Active building management with Legrand or other systems

1st example: Active building management using Supervision software Cat.Nos 0 490 00/01/02/03/04 providing displays, analyses and alerts

2nd example: Active building management using building manager decision maker Cat.No 0 035 44 for interaction between connected systems and integration of those systems into a BMS:
- Legrand solutions: lighting management, emergency lighting, power metering, fire alarm
- other solutions: HVAC, etc.

■ Example: Lighting management + emergency lighting + power meter + fire alarm

LIGHTING, SHUTTERS, POWER SOCKETS

METERING

EMERGENCY LIGHTING

FIRE ALARM

ACCESS CONTROL, CCTV

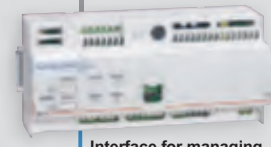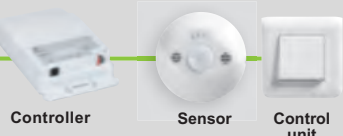HEATING, VENTILATION, AIR CONDITIONING (HVAC)

IP KNX

IP MODBUS

IP BACNET

IP/KNX gateway Cat.No 0 035 43

RS 485/IP converter Cat.No 0 046 88

Interface for managing addressable units Cat.No 0 626 00

BUS/KNX

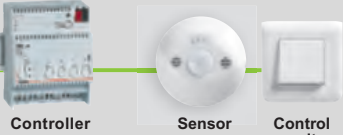RS 485 BUS

Controller **Sensor** **Control unit**

DPX³ circuit breaker

SATI addressable emergency lighting unit

Controller **Sensor** **Control unit**

Measuring unit

Self-contained emergency room lighting unit

Room Controller Unit

Energy meter

Self-contained emergency lighting unit with reinforced escape lighting

Kickspot flush-mounting self-contained emergency lighting unit

Touchscreen

Catalogue number index

Catalogue number index

Axolute and Livinglight

Cat.Nos	Page no.	Pack	Cat.Nos	Page no.	Pack	Cat.Nos	Page no.	Pack	Cat.Nos	Page no.	Pack	Cat.Nos	Page no.	Pack
H4651KNX	36	1	HD4680KNX	36	1	HS4911/2AG	41	1	L4911M2AHN	38	1	N4915KIT	39	1
			HD4911	40	1	HS4911/2AH	-	1	L4911M2AIN	-	1	N4915LN	37	1
HC4657M3KNX	36	1	HD4911AD	41	1	HS4911/2AI	-	1	L4911M2N	-	1	N4915M2ADN	-	1
HC4658KNX	42	1	HD4911AF	-	1	HS4911/2BA	-	1	L4911M2TN	39	1	N4915M2AN	-	1
HC4680KNX	36	1	HD4911AG	-	1	HS4911/2BC	-	1	L4911N	38	1	N4915M2BN	-	1
HC4911	40	1	HD4911AH	-	1	HS4911AD	-	1	L4911TN	39	1	N4915M2DD	-	1
HC4911/2	-	1	HD4911AI	-	1	HS4911AF	-	1	L4915AN	37	1	N4915M2DN	-	1
HC4911/2AF	41	1	HD4911BA	-	1	HS4911AG	-	1	L4915BN	-	1	N4915M2FN	-	1
HC4911/2AG	-	1	HD4911BC	-	1	HS4911AH	-	1	L4915DD	-	1	N4915M2LN	-	1
HC4911/2AH	-	1	HD4911BE	-	1	HS4911AI	-	1	L4915DN	-	1	N4915M2TN	39	1
HC4911/2AI	-	1	HD4911M2	40	1	HS4911BA	-	1	L4915FN	-	1	N4915MR	37	1
HC4911/2BA	-	1	HD4911M2AF	41	1	HS4911BC	-	1	L4915KIT	39	1	N4915SETBL	39	1
HC4911/2BC	-	1	HD4911M2AG	-	1	HS4911BE	-	1	L4915M2ADN	37	1	N4915TN	-	1
HC4911AD	-	1	HD4911M2AH	-	1	HS4915	40	1	L4915M2AN	-	1			
HC4911AF	-	1	HD4911M2AI	-	1	HS4915/2	-	1	L4915M2BN	-	1	NT4658KNX	42	1
HC4911AG	-	1	HD4911M2BA	-	1	HS4915/2AA	41	1	L4915M2DD	-	1	NT4680KNX	36	1
HC4911AH	-	1	HD4911M2BC	-	1	HS4915/2AB	-	1	L4915M2DN	-	1	NT4911ADN	38	1
HC4911AI	-	1	HD4915	40	1	HS4915/2AC	-	1	L4915M2FN	-	1	NT4911AFN	-	1
HC4911BA	-	1	HD4915AA	41	1	HS4915/2AD	-	1	L4915M2N	-	1	NT4911AGN	-	1
HC4911BC	-	1	HD4915AB	-	1	HS4915/2BA	-	1	L4915M2TN	39	1	NT4911AHN	-	1
HC4911BE	-	1	HD4915AC	-	1	HS4915/2BB	-	1	L4915MR	37	1	NT4911AIN	-	1
HC4915	40	1	HD4915AD	-	1	HS4915/2BC	-	1	L4915N	-	1	NT4911BFN	-	1
HC4915/2	-	1	HD4915AE	-	1	HS4915/2BE	-	1	L4915SETBL	39	1	NT4911M2AFN	-	1
HC4915/2AA	41	1	HD4915BA	-	1	HS4915/2BF	-	1	L4915TN	-	1	NT4911M2AGN	-	1
HC4915/2AB	-	1	HD4915BB	-	1	HS4915AA	-	1				NT4911M2AHN	-	1
HC4915/2AC	-	1	HD4915BC	-	1	HS4915AB	-	1	LN4651KNX	36	1	NT4911M2AIN	-	1
HC4915/2AD	-	1	HD4915BD	-	1	HS4915AC	-	1				NT4911M2N	-	1
HC4915/2BA	-	1	HD4915BE	-	1	HS4915AD	-	1	N4658KNX	42	1	NT4911M2TN	39	1
HC4915/2BB	-	1	HD4915BF	-	1	HS4915AE	-	1	N4680KNX	36	1	NT4911N	38	1
HC4915/2BC	-	1	HD4915BL	-	1	HS4915BA	-	1	N4911ADN	38	1	NT4911TN	39	1
HC4915/2BE	-	1	HD4915DD	-	1	HS4915BB	-	1	N4911AFN	-	1	NT4915AN	37	1
HC4915/2BF	-	1	HD4915M2	40	1	HS4915BC	-	1	N4911AGN	-	1	NT4915BN	-	1
HC4915AA	-	1	HD4915M2AA	41	1	HS4915BC	-	1	N4911AHN	-	1	NT4915DD	-	1
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HC4915AC	-	1	HD4915M2AC	-	1	HS4915BF	-	1	N4911BFN	-	1	NT4915FN	-	1
HC4915AD	-	1	HD4915M2AD	-	1	HS4915BL	-	1	N4911M2AFN	-	1	NT4915KIT	39	1
HC4915AE	-	1	HD4915M2BA	-	1	HS4915DD	-	1	N4911M2AGN	-	1	NT4915M2ADN	37	1
HC4915BA	-	1	HD4915M2BB	-	1	HS4915M2BL	-	1	N4911M2AHN	-	1	NT4915M2AN	-	1
HC4915BB	-	1	HD4915M2BC	-	1	HS4915M2DD	-	1	N4911M2AIN	-	1	NT4915M2BN	-	1
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HC4915BC	-	1	HD4915M2BF	-	1				N4911M2TN	39	1	NT4915M2DN	-	1
HC4915BE	-	1	HD4915M2BL	-	1	L4658KNX	42	1	N4911N	38	1	NT4915M2FN	-	1
HC4915BF	-	1	HD4915M2DD	-	1	L4680KNX	36	1	N4911TN	39	1	NT4915M2N	-	1
HC4915BL	-	1	HD4915MR	-	1	L4911ADN	38	1	N4915AN	37	1	NT4915M2TN	39	1
HC4915DD	-	1				L4911AFN	-	1	N4915BN	-	1	NT4915MR	37	1
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HC4915MR	-	1	HS4680KNX	36	1	L4911AIN	-	1	N4915FN	-	1	NT4915TN	-	1
			HS4911	40	1	L4911BFN	-	1	N4915KIT	39	1			
HD4657M3KNX	36	1	HS4911/2	-	1	L4911M2AFN	-	1	N4915KIT	-	1			
HD4658KNX	42	1	HS4911/2AF	-	1	L4911M2AGN	-	1	N4915KIT	-	1			

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