Catalogue

## Klik Lighting Connection

Klik is the lighting connection system for all your lighting designs, benefiting from its modular and adaptable design. From concept to commissioning, Klik adapts to meet your requirements.



:hager



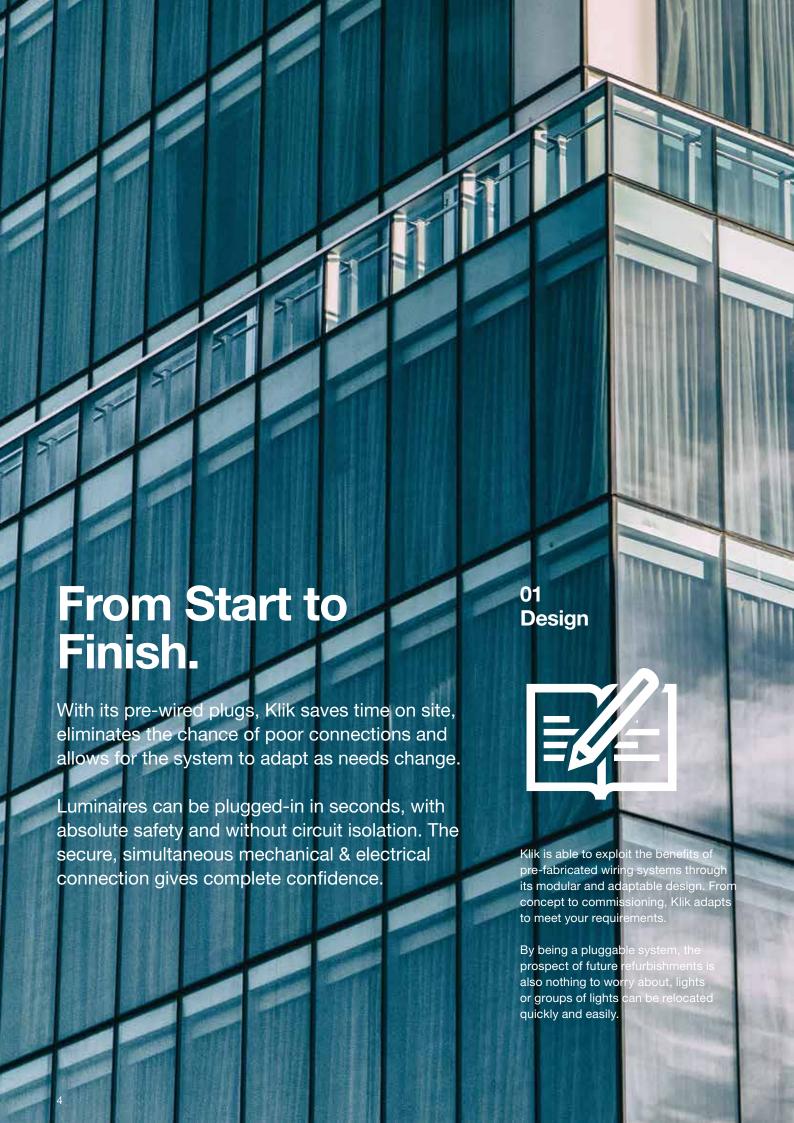
# Klik is the lighting connection system for all your lighting designs.

Established in the UK in the 1980s with its innovative 4 Pin plug & socket, installers have come to know and love Klik for its speed & ease of installation.

Klik has continued to develop to meet the changing needs of modern lighting connection & control systems through the Klik 4 & Klik 7 Ranges.

But the ethos has stayed the same...

Just Klik and forget.



### 02 Install



The Klik connector system brings plug-in convenience and versatility to lighting. Lights can be plugged-in, in seconds, with absolute safety, without circuit isolation.

The unique design prevents any unwanted disconnections due to load on cables or vibrations.

03 Use



Klik is a truly fit and forget lighting connection system. With a range of settings for daylight linked dimming, occupancy sensing photocell control for standard luminaires and DALI control, after Klik is installed, you'll forget it's even there.

### 04 Adapt

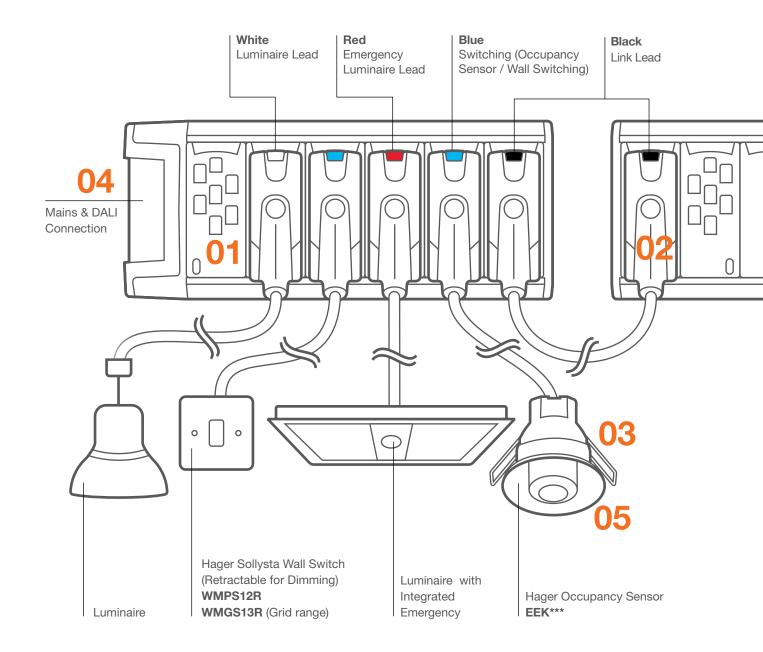


Part of the problem with traditional lighting systems comes when a building or office space needs to change. The inherent benefit of Klik is that adapting to a new layout is as easy as plugging in a plug.

### What Klik can do for you

Over 75% of existing lighting installations are thought to be out of date and unable to meet current design standards.

With Klik 7, we provide a system which is energy efficient, meets current design standards and takes into account the usage and function of a space, responding to daylight levels as well as occupancy and footfall.



### **Benefits - At a Glance**

			Klik 3 / 4	Klik 7
<b>+</b>	Connection	Safe on-load connection / disconnection	<b>~</b>	<b>~</b>
	Conn	Superior electromechanical connection	<b>~</b>	<b>~</b>
		Occupancy sensing for on / off control	<b>~</b>	<b>~</b>
•	Control	Occupancy sensing for daylight linked on / off control	<b>~</b>	<b>~</b>
		Lux level 'trimming' during commissioning	×	<b>~</b>
		Automatic dimming (daylight linked)	×	<b>~</b>
		Manual dimming (via wall switch)	×	<b>~</b>
		DALI / DSI	×	<b>~</b>

By following the information CIBSE provide, building operators, designers and employers are better able to demonstrate compliance with UK building regulations and a number of lighting related BS EN standards, by incorporating the following Klik features.



BSE

Use Occupancy Sensors	<b>~</b>	<b>~</b>
Use Daylight Sensors	<b>~</b>	<b>~</b>
Have a Maintenance Plan		

01



### Safe on-load connection

Luminaires can be connected in seconds in absolute safety, without circuit isolation, as all live contacts are inaccessible and the earth connection is made before any other, facilitating a simplified maintenance plan.

02



### **Electro Mechanical Connection**

All Klik plugs feature a unique plug-in method which achieves a simultaneous mechanical and electrical connection.

03



### **Occupancy Sensing**

Our range of occupancy sensors can provide presence and absence control of lighting, providing energy savings by switching lights on or off depending on the usage of the room.

04



### **DALI Control**

DALI (digital addressable lighting interface) is a broadcast communication system that brings digital technology to lighting. Our 7 pin Klik products offer full compatibility with DALI control solutions.

05



### **Trimming of lux level**

DALI based occupancy sensors enable trimming of lux level at commissioning stage to ensure optimum final lighting levels, when used with compatible, dimmable luminaire.

06



### **Daylight Link**

Klik allows for automatic lighting control which can provide energy savings by not operating when sufficient light levels exist.



### A Fast, Adaptable & Secure Solution.

Providing an optimal lux level for the occupiers of a building is just one of the often overlooked functions of a quality lighting connection system.

Klik 7 provides an adaptable solution to any challenge faced in designing a modern, scalable lighting system, by ensuring the lux levels of dimmable luminaires can be adjusted during commissioning and, most importantly, after feedback from the occupiers.

### The Value of Control

A basic level of control can be achieved easily with the use of occupancy sensors, by 'trimming' the lux level of dimmable luminaires to the required level at commissioning stage, helping to avoid costly problems later.

As lighting technologies and their applications continue to evolve, so too must the lighting connection systems used. The Klik range, with its combination of occupancy sensors, motion detectors, ceiling roses and marshalling boxes, can facilitate the inclusion of more complex control options as required.

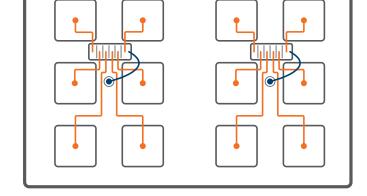
Klik 7 provides all the benefits of Klik 4, creating a truly scalable level of control when matched with our sensors or other higher level supervisory systems, with the advantages associated with a built in control pair.

### **Application Examples**

### Application 1 - Office with no natural light

Sensor settings	Presence	
Lux sensor used	No	
Wall switching	None - auto only	

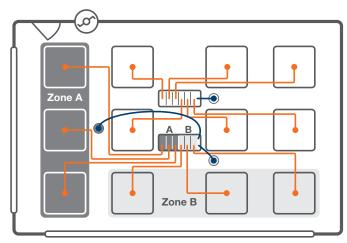
- Two KLMB/KLDS marshalling boxes
- No natural light
- Standard or digital luminaires
- Auto on when entering room
- 20 Minute time out when vacant



### Application 2 - Office with windows on two sides

Sensor settings	Presence	
Lux sensor used	Yes	
Wall switching	Optional	

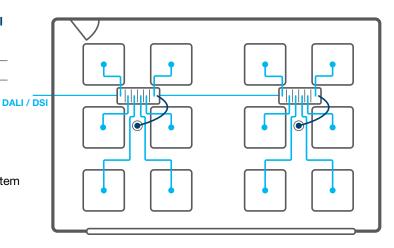
- One dual supply KLMB marshalling boxes & one standard KLMB box
- Auto on when entering room
- Natural light on two sides
- Digital luminaires adjacent to windows standard or digital luminaires elsewhere
- 2 x digital sensors & 1 x standard sensor.
- 20 minute time out when vacant



### Application 3 - Klik connection with 3rd party control

Sensor settings	Presence	
Lux sensor used	Optional	
Wall switching	Optional	

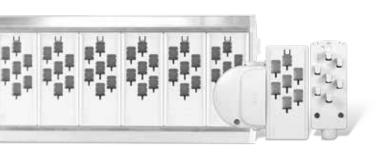
- Two KLMB marshalling boxes
- Natural light on one side
- Digital luminaires
- Auto on when entering room
- 3rd Party head-end lighting control/supervisory system



### Klik 7

Delivering all the time saving, flexibility and secure lighting connection benefits of Klik 4, Klik 7 offers the additional benefit of an embedded control pair for the dimming of luminaires, providing a scalable approach to lighting control.

Developed to specifically address the latest lighting technologies, Klik 7 has evolved as an essential element of controllable lighting solutions.



Essential 'trimming' of lux levels to optimise the light in a room can easily be implemented through the use of DALI enabled Occupancy Sensors, which can then be adjusted at the commissioning phase and if required, after occupier feedback.

Klik 7 facilitates a truly scalable approach to lighting control, without compromising speed, security or flexibility of installation.

From intelligent occupancy sensors to manage lux levels and common control requirements, to sophisticated 3rd party 'head end' control and supervisory solutions, Klik 7 facilitates all your lighting application requirements.

### Klik 4

Klik 4 is a modular plug-in marshalling solution for lighting systems that provides simultaneous mechanical and electrical connection in one clickin action. Designed for on-load connection & disconnection, Klik 4 allows individual light fittings to be removed or added without affecting other fittings on the circuit.

3 pin moulded plugs and leads distribute switch live, neutral and earth with 4 pin providing an additional connection, normally a permanent live for emergency lighting.

Pre-wired or self-wired plugs provide a highly adaptable solution for when systems need to be altered. Klik significantly cuts down on installation time by limiting the testing requirements at the commissioning stage.





Project Name: Facebook Data Centre Location: Clonee, Co. Meath, Ireland. Products Used: Klik 7 with DALI sensors

Klik 7 and DALI sensors were chosen to provide lighting connection and control, to be installed in a Facebook Data Centre in Clonee, Co. Meath, Ireland.

The 250 acre Clonee Data Centre is home to servers that hold data from Instagram, WhatsApp, Messenger, and Oculus. Introduced in 2015, construction began on the €200m facility in April 2016 and rapidly grew to be the largest construction project in Ireland at the time.

After 7.2 million hours completed on the construction site by nearly 1,550 workers at peak, the first two buildings called Clonee 1 and 2, are now up and running. Clonne 3 is on the path to completion and Facebook is hoping to have it finished next year, while a planning application for Clonee 4 and 5 has been lodged. With the employment of 1,000 – 1,500 people for continuous periods of time, projects of this nature are remarkably good for the local and regional economy.

In an effort to stay energy efficient, Facebook designed an agreement with Brookfield renewable Partners, confirming that the site is 100% powered by wind energy and actively investing in constructing renewable generation capacity. At present, Facebook has stated it has added 2,500MW of renewable infrastructure that includes solar, wind and hydro globally in the last year alone and continues to increase as time goes on.

Mercury Engineering needed a lighting solution for wiring all the DALI fittings throughout the numerous data halls, and office spaces that occupy the building. Hager presented the Klik solution valued at €200k with the agreement to customise the length and part numbers to match the specifications of the project. After the decision was finalised, Mercury Engineering, distributor NEW and Hager worked closely together to come to an arrangement on time-scale, quantities and supply.

Hager's Klik range is a solution for any lighting design scenario. The Klik offer allows for automatic lighting control that provides energy savings by not operating when there are sufficient light levels present. With a range of settings for daylight linked dimming, occupancy sensing and DALI control, Klik was an ideal lighting solution for the Facebook Data Centre project.

## Lighting Connection

Lighting creates an impression. Klik, our lighting connection system provides the roots to a buildings lighting system, allowing it to adapt and grow with ease. Controls, including occupancy sensors, ensure that light is only available when needed and tailored to a users needs.



# Klik Klik 7 14 Klik 4 22 Controls Motion Detectors 19 Technical Pages 33





KLMB4W

### Marshalling Boxes - Wire In, Plug Out

### **Characteristics:**

- The KLMB marshalling box allows the connection and control of multiple luminaires. The marshalling box utilises a robust extruded aluminium body.
- 7 Pole.

- 4, 6, 8, 10 & 12 outlets.- 16A Rated BS 5733:2010 .- Short circuit tested: 1500A conditional rating.

Description	Cat ref.
Marshalling Box, Single Supply, Wire In, Plug Out	
4 Way	KLMB4W
6 Way	KLMB6W
8 Way	KLMB8W
10 Way	KLMB10W
12 Way	KLMB12W
Marshalling Box, Dual Channel, Wire In, Plug Out	
8 Way, 4/4	KLMB244W
10 Way, 5/5	KLMB255W
12 Way, 6/6	KLMB266W



KLMB5P

### Marshalling Boxes - Plug In, Plug Out

### **Characteristics:**

- The KLMB marshalling box allows the connection and control of multiple luminaires. The marshalling box utilises a robust extruded aluminium body.
- 7 Pole.
- 5, 7, 9 & 11 outlets.
- 16A Rated BS 5733:2010 .
- Short circuit tested: 1500A conditional rating.

Description	Cat ref.	
Marshalling Box, Single Supply, Plug In, Plug out		
5 Way	KLMB5P	
7 Way	KLMB7P	
9 Way	KLMB9P	
11 Way	KLMB11P	



K7B1M075WPCR

### Klik 7 Pre-wired Plugs with Sockets

### **Characteristics:**

- Connections to the luminaire are made via a pre-wired plug and lead. All leads are low smoke zero halogen and are factory connected and tested.
- Standard, digital and emergency luminaires.
- Short circuit tested: 1500A conditional rating.
- Cable standard BS 7211.

Description	Cat ref.
Pre-wired Plugs and Sockets for Standard Luminaires	
6A Luminaire Lead 1.5m 0.75mm <sup>2</sup> 3 Core Plug to Wire + KLPCR7	K7B1M075WPCR
6A Luminaire Lead 3m 0.75mm <sup>2</sup> 3 Core Plug to Wire + KLPCR7	K7B3M075WPCR
Pre-wired Plugs and Sockets for Standard Luminaires with Emergency	
6A Luminaire Lead 1.5m 0.75mm <sup>2</sup> 4 Core Plug to Wire + KLPCR7	K7J1M075WPCR
6A Luminaire Lead 3m 0.75mm <sup>2</sup> 4 Core Plug to Wire + KLPCR7	K7J3M075WPCR
Pre-wired Plugs and Sockets for Dimmable Luminaires	
6A Luminaire Lead 1.5m 0.75mm² 5 Core Plug to Wire + KLPCR7	K7P1M075WPCR
6A Luminaire Lead 3m 0.75mm <sup>2</sup> 5 Core Plug to Wire + KLPCR7	K7P3M075WPCR
Pre-wired Plugs and Sockets for Dimmable Luminaires with Emergency	
6A Luminaire Lead 1.5m 0.75mm 6 Core Plug to Wire + KLPCR7	K7T1M075WPCR
6A Luminaire Lead 3m 0.75mm 6 Core Plug to Wire + KLPCR7	K7T3M075WPCR



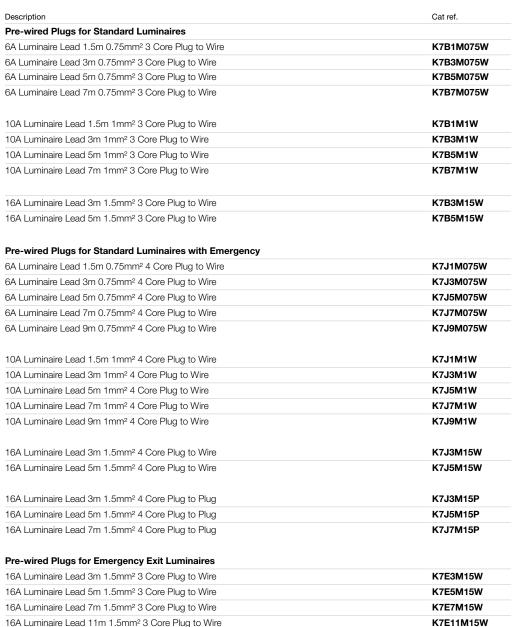
### Klik 7 Pre-wired Plugs

### **Characteristics:**

- Connections to the luminaire are made via a pre-wired plug and lead. All leads are low smoke zero halogen and are factory connected and tested.
- Standard, digital and emergency luminaires.
- Short circuit tested: 1500A conditional rating.
- Cable standard BS 7211.
- New for 2019 references with 1m cable length will be provided as 1.5m.

We have recently improved our range of Klik 7 pre-wired leads. As part of this process, we have changed how our part references work. For example **KLB/3/0-75W** will now become **K7B3M075W**. For a full supercession chart, see page 30.

<b>K7</b> Range	<b>B</b> Function	3M Length	075 Core Size	W Wired or Plug End
A Link Lead, Power		<b>B</b> Standard Lu	minaire	<b>E</b> Emergency Exit Luminaire
<b>G</b> Link Lead, Power, Emergency		J Standard Lui	minaire, Emergency	F Switch Drop Lead
K Link Lead, Power, Emergency, Switched Line		P Dimmable Lu	uminaire	W Control, +/- & Cpc
<b>Z</b> Link Lead, Power, Emergency,	rol <b>T</b> Dimmable Lu	T Dimmable Luminaire, Emergency		





K7B1M075W



K7J1M075W





### K7T3M075W

### Klik 7 Pre-wired Plugs for Dimmable Luminaires

Description	Cat ref.
Pre-wired Plugs for Dimmable Luminaires	
6A Luminaire Lead 1.5m 0.75mm² 5 Core Plug to Wire	K7P1M075W
6A Luminaire Lead 3m 0.75mm² 5 Core Plug to Wire	K7P3M075W
6A Luminaire Lead 5m 0.75mm² 5 Core Plug to Wire	K7P5M075W
6A Luminaire Lead 7m 0.75mm² 5 Core Plug to Wire	K7P7M075W
10A Luminaire lead 1.5m 1mm² 5 core Plug to Wire	K7P1M1W
10A Luminaire Lead 3m 1mm <sup>2</sup> 5 Core Plug to Wire	K7P3M1W
10A Luminaire Lead 5m 1mm² 5 Core Plug to Wire	K7P5M1W
10A Luminaire Lead 7m 1mm <sup>2</sup> 5 Core Plug to Wire	K7P7M1W
16A Luminaire lead 1.5m 1.5mm² 5 core Plug to Wire	K7P1M15W
16A Luminaire Lead 3m 1.5mm <sup>2</sup> 5 Core Plug to Wire	K7P3M15W
16A Luminaire Lead 5m 1.5mm <sup>2</sup> 5 Core Plug to Wire	K7P5M15W
16A Luminaire Lead 7m 1.5mm <sup>2</sup> 5 Core Plug to Wire	K7P7M15W
Pre-wired Plugs for Dimmable Luminaires with Emergency	
6A Luminaire Lead 1.5m 0.75mm² 6 Core Plug to Wire	K7T1M075W
6A Luminaire Lead 3m 0.75mm <sup>2</sup> 6 Core Plug to Wire	K7T3M075W
6A Luminaire Lead 5m 0.75mm <sup>2</sup> 6 Core Plug to Wire	K7T5M075W
6A Luminaire Lead 7m 0.75mm <sup>2</sup> 6 Core Plug to Wire	K7T7M075W
10A Luminaire Lead 1.5m 1mm <sup>2</sup> 6 Core Plug to Wire	K7T1M1W
10A Luminaire Lead 3m 1mm <sup>2</sup> 6 Core Plug to Wire	K7T3M1W
10A Luminaire Lead 5m 1mm² 6 Core Plug to Wire	K7T5M1W
10A Luminaire Lead 7m 1mm <sup>2</sup> 6 Core Plug to Wire	K7T7M1W
16A Luminaire Lead 3m 1.5mm <sup>2</sup> 6 Core Plug to Wire	K7T3M15W
16A Luminaire Lead 5m 1.5mm² 6 Core Plug to Wire	K7T5M15W
16A Luminaire Lead 3m 1.5mm² 6 Core Plug to Plug	K7T3M15P
16A Luminaire Lead 5m 1.5mm² 6 Core Plug to Plug	K7T5M15P
16A Luminaire Lead 7m 1.5mm² 6 Core Plug to Plug	K7T7M15P



### Klik 7 Pre-wired Marshalling Box Link Leads

### **Characteristics:**

- The link leads are used to connect KLMB to KLMB. All leads are low smoke zero halogen and are factory connected and tested. Note: to ensure correct link lead selection see the connection key on page .
- 1.5mm<sup>2</sup> CSA.
- 3m, 5m & 10m lengths.
- Standard, Digital and Emergency Luminaires.
- 16A Rated
- BS 5733:2010, BS EN 61535.
- Short circuit tested: 1500A conditional rating.
- Cable standard BS 6500 & BS 7211.



K7A3M15P

Description	Cat ref.
Pre-wired Link Leads - L, N, CPC	
16A Luminaire Lead 10m 1.5mm <sup>2</sup> 3 Core Plug to Plug	K7A10M15P
16A Luminaire Lead 5m 1.5mm² 3 Core Plug to Plug	K7A5M15P
Pre-wired Link Leads - L, N, CPC, Emergency	
16A Link Lead 10m 1.5mm <sup>2</sup> 4 Core Plug to Plug	K7G10M15P
16A Link Lead 5m 1.5mm² 4 Core Plug to Plug	K7G5M15P
Pre-wired Link Leads - L, N, SL, CPC, Emergency	
16A Link Lead 5m 1.5mm² 5 Core Plug to Plug	K7K5M15P
Pre-wired Link Leads - CPC, DA+, DA-	
6A DALI Link Lead 3m 0.75mm <sup>2</sup> 3 Core Plug to Wire	K7W3M075W
6A DALI Link Lead 5m 0.75mm <sup>2</sup> 3 Core Plug to Wire	K7W5M075W
Pre-wired Link Leads - L, N, SL, CPC, DA+, DA-, Emergency	
16A Link Lead 3m 1.5mm² 7 Core Plug to Plug	K7Z3M15P
16A Link Lead 5m 1.5mm² 7 Core Plug to Plug	K7Z5M15P

### **Ceiling Roses**

### Characteristics:

- 7 Pole conduit box / surface connector to allow the easy connection of digital lighting within traditional fixed wire installations. The connector is fitted directly to trunking or conduit allowing the luminaire to be connected / disconnected via the pluggable luminaire lead.
- 7 Pole.
- 16A Rated.
- Standards: BS 5733:2010.
- Short circuit tested: 1500A conditional rating.



KLPCR7

Description	Cat ref.
16A 7 Pin Ceiling Rose	KLPCR/7
16A 7 Pin Wireable Plug & Ceiling Rose	K7PLUGPCR



K7PLUGPCR

### Wireable / Rewireable Plug

### Characteristics:

- 7 Terminal plug, enabling you to make leads on site to the configuration required.
- Complies with BS EN 61535-2009+A1-2013
- Enables you to add the plug after cable routing, for example when cables pass through walls.

 Description
 Cat ref.

 16A Wireable Klik 7 Plug
 K7PLUG



K7PLUG





EEK515P



EEK001

### Occupancy Sensors with Remote Programming & Control Options

### **Characteristics:**

- **EEK520B** Detector for control of digital (DSI/DALI) luminaires
- Direct control of a light load.
- Lux level and ON delay adjustable via potentiometers or **EEK001** remote control.
- DALI/OSI bus output accommodates up to 24 ballasts.
  230V wall switch override.
  Presence or absence detection available.

- Presence of absence defection available.

   EEK523P As EEK520B but pre-wired with 3m Lead
   EEK525P As EEK520B but pre-wired with 5m Lead
   EEK513P detector control of standard luminaires (On/Off)
   Presence or Absence detection available.
- Programmable from **EEK001** - 7m Range
- **EEK515P** As **EEK513P** but pre-wired with 5m Lead
- EEK001 IR programming tool
- Installer remote control to commission settings.
- **EEK002** IR remote control
- Customer remote control for override operation.
- Complies with BS EN 60669-1 & BS EN 60669-2-1.

Description	Cat ref.
Wireable Digital PIR Occupancy Sensor - Dimmable & Daylight Linked	EEK520B
Pluggable Digital PIR Occupancy Sensor 3m lead - Dimmable & Daylight Linked	EEK523P
Pluggable Digital PIR Occupancy Sensor 5m lead - Dimmable & Daylight Linked	EEK525P
Flush Mounted Standard Occupancy Sensor (without cable)	EEK510B
Pluggable PIR Occupancy Sensor 3m lead - On / Off & Daylight Linked	EEK513P
Pluggable PIR Occupancy Sensor 5m lead - On / Off & Daylight Linked	EEK515P
Pre-Wired PIR Occupancy Sensor 3m lead - On / Off & Daylight Linked	EEK513W
Programming Tool	EEK001
Remote Control for the End User	EEK002
Backbox Accessory for Surface BESA Detectors	EEK005



### **Semi-Recessed Occupancy Sensor**

### **Characteristics:**

- The presence area is especially suitable in offices, where there may be notional corridors.
- EE810 1 channel detector
- Provides direct control of a light load or can be used as a slave with **EE811** for enlargement of detection area.
- Lux level and ON delay (duration or pulse) defined via potentiometers.
- Test mode in order to set lux level and the detection pattern.
- EE811 2 channel detector
- Lux level and ON delay adjustable via potentiometers.
- Input for slave (**EE810**) and/or remote push button.
- 230V wall switch override.
- Complies with BS EN 60669-1 & BS EN 60669-2-1.



Description	Cat ref.
Presence Detector 1 Channel	EE810
Presence Detector 2 Channel	EE811
Surface Mounting Box for <b>EE810</b> and <b>EE811</b>	EE813

### **Hyper Frequency Detector**

### Characteristics:

 The detection range diameter is adjustable from one to eight metres. The hyper frequency sensor allows for detection of movement through partitions (drywall, wood, glass) independent of temperature detection.

### **Features**

- 230V AC
- IP54 rated.
- Detection area 360°.
- Complies with BS EN 60669-1, BS EN 60669-2-1.



EE883

Description	Cat ref.
360° Hyper Frequency Sensor	EE883
Protection Basket for Hyper Frequency Sensor	EEK006

### **Corridor Motion Detector**

### Characteristics:

- Infra-red corridor motion detector for surface mounting.

### Features

- 230V AC.
- IP54 rated.
- Detection zone of 4m x 20m.
- Overrun timer from 5 seconds to 15 minutes.
- Complies with BS EN 60669-1 & BS EN 60669-2-1.



EE880

Description	Cat ref.
PIR Corridor Motion Detector	EE880



Klik LCM's (Lighting Control Module) enable the control of an area with up to 4 different control groups. Each group of outputs can control standard switched and/ or digital dimmable (DALI/DSI) luminaires. The control module can be connected to up to 4 SELV occupancy sensors and up to 4 wall switch overrides (double retractive, centre off). Any switch or occupancy sensor can be assigned to any output.

The programming is carried out with iPad and communicates with the LCM via Bluetooth. We've also recently introduced an LCM which allows for local physical disconnection of bluetooth technology, for use in security sensitive applications.





### **SELV Switching / Dimming**

Each channel is capable of being switched via one of 4 or more switch inputs.



### Sensor with integral lux sensor (SELV)

This allows daylight dimming and switching utilising any natural light available



### Scene setting

4 lighting scenes are possible (plus global Up/ Down-On/Off) controlled via centre-off 2 pole retractive grid switch modules and 2 separate scene profiles are available.



### **Partition switch**

This allows total and separate control of a room with a partition and switch fitted.



### Corridor hold

Linking LCMs with RJ45 lead to hold designated corridor area



### **Bluetooth local disconnection**

LCM references with BT suffix: Bluetooth function can be locally disconnected for enhanced security applications.



### Integral emergency test timers

Emergency test carried out via an emergency test switch (can be set for up to 5 hours). Whilst on test the other luminaires will dim to a pre-set value.



### Presence & absence sensing

Each output channel can be set to Presence or Absence individually.



### Light level offset between channels

This function allows phasing channels to set as a percentage of the lead channel (e.g. 10%, 60%, 80%, 100%).



### Three level timeout

At timeout, lighting can turn Off or Dim down in three stages.



### Dimming - DSI, DALI (Broadcast)

Broadcast on the required channel to all connected luminaire



### Lighting Control Module with KlikLink

### **Characteristics:**

- The KLCM allows connection and control of multiple luminaires with four separate channels.
- Switching, dimming (DSI & DALI), corridor hold, partition switching, daylight switching & dimming, scene settings, integral emergency test times, reset profiles, light level offset (channel to channel).
- Setting up of **KLCM** is acomplished via KlikLink app, available on iOS for iPad.
- For technical data, see page 36

Description	Cat ref.
13 Way 4 Channel LCM Wire in, Plug out	KLCM413W
13 Way 4 Channel LCM Wire in, Plug out, 230V EM Test Override	KLCM413WIET
13 Way 4 Channel LCM Wire in, Plug out, with bluetooth disconnect switch	KLCM413WBT ★
13 Way 4 Channel LCM Wire in, Plug out, 230V EM Test Override, with bluetooth disconnect switch	KLCM413WETBT ★
KlikLink iPad App (Free of charge)	Search KlikLink in iPad App Store



KLCM413W



KlikLink App (Shown on iPad, not included)

### **Lighting Control Module Occupancy Sensors**

### **Characteristics:**

- Klik SELV LCM occupancy sensors come complete with a 10m RJ11 lead and have integrated daylight sensing.
- Sensing options are selected via the KlikLink app (e.g. presence/absence).
- KLCM-3OS is designed for use as a corridor sensor.
- KLCM-50S is designed for use as a whole room sensor.

Description	Range	Cat ref.
Klik LCM Occupancy Sensor with 1 Sensor Head	5m	KLCM-OS
Klik LCM Occupancy Sensor with 1 Sensor Head	10m	KLCM-10S
Klik LCM Corridor Sensor with 3 Sensor Heads	15 x 5m	KLCM-3OS
Klik LCM Wide Area Sensor with 5 Sensor Heads	15 x 15m	KLCM-5OS



KLCM-OS



KLCM-50S

### **Lighting Control Module Switch Drop Leads (Grey)**

### Characteristics:

- RJ45 to switch (wire-in) lead available in a variety of lengths.
- SELV.
- Cables supplied standard with RJ45 plug on both ends.

Note: for retractive wall switch, please see below

Description	Cat ref. Red	Cat ref. Grey
RJ45 SELV Switch Drop Lead		
5m	KLO5RJ45R	KLO5RJ45G
10m	KLO10RJ45R	KLO10RJ45G
15m	KLO15RJ45R	KLO15RJ45G
20m	KLO20RJ45R	KLO20RJ45G
30m	KLO30RJ45R	KLO30RJ45G
40m	KLO40RJ45R	KLO40RJ45G
50m	KLO50RJ45R	KLO50RJ45G
RJ45 Splitter	KLORJ45CON	



KLO15RJ45G



KLO15RJ45R

### **User Controls**

### Characteristics:

- Our Sollysta grid retractive wall switches make the perfect user control companion to the LCM.
- Other grid finishes are available, please see our Wiring Accessories Catalogue for the full range.

Description	Cat ref.
Sollsyta Grid Retractive Wall Switch	
1 Gang Grid Plate	WMGP1
1 Gang Grid Frame	WMGF1
2 Way & Centre Off Retractive Wall Switch	WMGS13R



WMGS13R





KLDS4



KLDS6BLACK

### Marshalling Boxes

### **Characteristics:**

- Klik marshalling boxes are used in conjunction with Klik 3 and 4 pin plugs to connect luminaires within an area. The Klik marshalling box can be separated into two independently switched circuits. These circuits can be controlled via wall switch or occupancy sensor.
- Complies with BS 5733:2010.
- Main terminal rating: 16 Amps.
- Socket outlet rating: 6 Amps.
- Separate terminals for flexible conductors, rating: 10 Amps.
   Short circuit tested 1500A conditional rating.
- Socket outlets accept either Klik lighting (3 pin) plugs, Klik auxiliary (4 pin) plugs.

Description	Cat ref.
4 Way Klik Lighting Distribution Unit	KLDS4
6 Way Klik Lighting Distribution Unit	KLDS6
8 Way Klik Lighting Distribution Unit	KLDS8
10 Way Klik Lighting Distribution Unit	KLDS10
12 Way Klik Lighting Distribution Unit	KLDS12

6 Way Klik Lighting Distribution Unit - Black

**KLDS6BLACK** ★



PCR2000/1.0

### 3 Pin Pre-wired 6A Plug-in Ceiling Rose

- 6A pre-wired plug-in ceiling roses are used to connect luminaires to a fixed wiring installation.
- Complies with BS 6972 and BS 5733:2010.
- PVC flexible cord complies with BS EN 50525-2-11.
- Low smoke zero halogen flexible cord, complies with BS EN 50525-3-11.
- All leads have prepared ends.

6A Plug-in Ceiling Rose with 0.75mm <sup>2</sup>	<sup>2</sup> Flexible Cord		
1 Metre	10	PCR2000/1 .0	PCR2000/LSF/1.0
2 Metre	10	PCR2000/2.0	PCR2000/LSF/2.0
3 Metre	5	PCR2000/3.0	PCR2000/LSF/3.0
4 Metre	5	PCR2000/4.0	PCR2000/LSF/4.0
6A Plug-in Ceiling Rose with 1mm <sup>2</sup> Flo	exible Cord		
<b>6A Plug-in Ceiling Rose with 1mm² Fl</b> o 2 Metre	exible Cord	PCR2000/1.0PVC/2	PCR2000/1.0LSF/2
		PCR2000/1.0PVC/2 PCR2000/1.0PVC/3	
2 Metre	10		
2 Metre 3 Metre	10 5	PCR2000/1.0PVC/3	PCR2000/1.0LSF/2 PCR2000/1.0LSF/3 PCR2000/1.0LSF/4 PCR2000/1.0LSF/5



CR64AX/1.0

### 4 Pin (Including Auxiliary) Pre-wired 6A Plug-in Ceiling Rose

### Characteristics:

4 Metre

5 Metre

- Auxiliary 6A pre-wired plug-in ceiling roses are used to connect luminaires to a fixed wiring installation.
- Complies with BS 6972 and BS 5733:2010.
- PVC flexible cord complies with BS EN 50525-2-11.
- Low smoke zero halogen flexible cord, complies with BS EN 50525-3-11.
- All leads have prepared ends.

Description	Box Quantity	PVC Cat ref.	LSZH Cat ref.
6A Pre-wired Ceiling Rose with 0.75mm <sup>2</sup> Flexible Cord			
1 Metre	10	CR64AX/1.0	CR64AX/LSF/1.0
2 Metre	10	CR64AX/2.0	CR64AX/LSF/2.0
3 Metre	5	CR64AX/3.0	CR64AX/LSF/3.0
4 Metre	5	CR64AX/4.0	CR64AX/LSF/4.0
6A Pre-wired Ceiling Rose with 1mm² Flexible Cord			
2 Metre	10	CR64AX/1.0PVC/2	CR64AX/1.0LSF/2
3 Metre	5	CR64AX/1.0PVC/3	CR64AX/1.0LSF/3

5

5

CR64AX/1.0LSF/4

CR64AX/1.0LSF/5

CR64AX/1.0PVC/4

CR64AX/1.0PVC/5



### 3 Pin Pre-wired 6A Plugs

### Characteristics:

- 6A pre-wired plugs are used to connect luminaires to a Klik ceiling rose or marshalling box. All leads have prepared ends.
- Complies with BS 6972 and BS 5733:2010.
- PVC flexible cord complies with BS EN 50525-2-11.
- Low smoke zero halogen flexible cord, complies with BS EN 50525-3-11.

Description	Quantity	PVC Cat ref.	LSZH Cat ref.
6A Pre-wired Plugs with 0.75mm <sup>2</sup> Flexible Cord			
1 Metre	10	P22/1.0	P22/LSF/1.0
2 Metre	10	P22/2.0	P22/LSF/2.0
3 Metre	5	P22/3.0	P22/LSF/3.0
4 Metre	5	P22/4.0	P22/LSF/4.0
6A Pre-wired Plugs with 1mm <sup>2</sup> Flexible Cord			
2 Metre	10	P22/1.0PVC/2	P22/1.0LSF/2
3 Metre	5	P22/1.0PVC/3	P22/1.0LSF/3
4 Metre	5	P22/1.0PVC/4	P22/1.0LSF/4
5 Metre	5	P22/1.0PVC/5	P22/1.0LSF/5



P22/1.0

### 4 Pin (Including Auxiliary) Pre-wired 6A Plugs - White

### **Characteristics:**

- Klik auxiliary 6A pre-wired plugs are used to connect luminaires to a Klik ceiling rose or marshalling box.
- Complies with BS 6972 and BS 5733:2010.
- PVC flexible cord complies with BS EN 50525-2-11.
- Low smoke zero halogen flexible cord, complies with BS EN 50525-3-11.
- All leads have prepared ends.

Description	Quantity	PVC Cat ref.	LSZH Cat ref.
6A Pre-wired Plugs with 0.75mm² Flexible Cord			
1 Metre	10	P64AX/1.0	P64AX/LSF/1.0
2 Metre	10	P64AX/2.0	P64AX/LSF/2.0
3 Metre	5	P64AX/3.0	P64AX/LSF/3.0
4 Metre	5	P64AX/4.0	P64AX/LSF/4.0
CA Dra suivad Diseas with America Florible Cond			
6A Pre-wired Plugs with 1mm² Flexible Cord			
	10	P64AX/1.0PVC/2	P64AX/1.0LSF/2
6A Pre-wired Plugs with 1mm² Flexible Cord 2 Metre 3 Metre	10 5	P64AX/1.0PVC/2 P64AX/1.0PVC/3	
2 Metre			P64AX/1.0LSF/3



P64AX/1.0

### 4 Pin (Including Auxiliary) Pre-wired 6A Plugs - Red

### Characteristics:

- Klik auxiliary 6A pre-wired plugs are used to connect luminaires to a Klik ceiling rose or marshalling box.
- Complies with BS 6972 and BS 5733:2010.
- PVC flexible cord complies with BS EN 50525-2-11.
- Low smoke zero halogen flexible cord, complies with BS EN 50525-3-11.
- All leads have prepared ends.

5 Metre 1.00mm<sup>2</sup> Flexible Cord

Description	Quantity	PVC Cat ref.	LSZH Cat ref.
6A Pre-wired Plugs with 0.75mm² Flexible Cord			
1 Metre	10	P64AXR/1.0	P64AXR/LSF/1.0
2 Metre	10	P64AXR/2.0	P64AXR/LSF/2.0
3 Metre	5	P64AXR/3.0	P64AXR/LSF/3.0
4 Metre	5	P64AXR/4.0	P64AXR/LSF/4.0
6A Pre-wired Plugs with 1mm² Flexible Cord			
2 Metre 1.00mm² Flexible Cord	10	P64AXR/1.0PVC/2	P64AXR/1.0LSF/2
3 Metre 1.00mm² Flexible Cord	5	P64AXR/1.0PVC/3	P64AXR/1.0LSF/3
4 Metre 1.00mm² Flexible Cord	5	P64AXR/1.0PVC/4	P64AXR/1.0LSF/4

5

P64AXR/1.0PVC/5 P64AXR/1.0LSF/5



P64AXR/1.0

### Plugs, Ceiling Roses





PCR2000

### 3 Pin Plug-in Ceiling Rose & Cover

### **Characteristics:**

- The 6A plug-in ceiling rose is used to offer a pluggable connection for luminaires. The luminaire can be connected and disconnected under load.
- Complies with BS 5733:2010.
- Sockets have 4 terminations: line, neutral, CPC and loop-in. Plugs have 3 terminations: line, neutral and CPC.
- Fixing: 50.8mm Standard Diagonal (BESA).

Description	Quantity	Cat ref.
3 Pin Plug-in Ceiling Rose White	10	PCR2000
3 Pin Plug-in Ceiling Rose Black	10	PCR2000BLACK ★



CR64AX/R

### 4 Pin (including Auxiliary) Plug-in Ceiling Rose & Cover

- Klik 6A pre-wired plug-in ceiling roses are used to connect luminaires to a fixed wiring installation. Auxiliary contact available, a typical use is for emergency lighting.
- Complies with BS 6972 and BS 5733:2010.
- Sockets have 5 terminations: line, neutral, CPC, auxiliary and loop-in.
- Plugs have 4 terminations: line, neutral, CPC and auxiliary.

Description	Quantity	Cat ref.
4 Pin Plug-in Ceiling Rose White	10	CR64AX
4 Pin Plug-in Ceiling Rose Red	10	CR64AX/R



A1/R

### **Spare Ceiling Rose Cover**

Description	Quantity	Cat ref.
Ceiling Rose Cover White	10	A1
Ceiling Rose Cover Red	10	A1/R
Ceiling Rose Cover Black	10	A1BLACK ★



P22

### 3 Pin Plug

### Characteristics:

- Klik 3 pin plugs are used to connect into a Klik socket giving a pluggable connection to luminaires.
- Complies with BS 6972 and BS 5733:2010.
- Suitable for use with any Klik 3 or 4 pin socket.
- P22 plug is supplied in a plug-in ceiling rose, cat ref. PCR2000.
- Plugs have 3 terminations: line, neutral and CPC.

Warning: Plugs must not be fitted on the supply side of any installation - they must be connected to the load / fitting /

Description	Quantity	Cat ref.
3 Pin Plug White	10	P22
3 Pin Plug Black	10	P22BLACK ★



P64AX/R

### 4 Pin (Including Auxiliary) Plug

### Characteristics:

- Klik plugs with auxiliary pin are used to connect into the Klik sockets giving a pluggable connection to luminaires.
- Complies with BS 6972 and BS 5733:2010.
- Suitable for use with any Klik 4 pin sockets.
- P64AX plug is supplied in a plug-in ceiling rose, Cat. ref. CR64AX.
- Plugs have 4 terminations: line, neutral, CPC and auxiliary.

Warning: Plugs must not be fitted on the supply side of any installation - they must be connected to the load / fitting / appliance side of the installation.

Description	Quantity	Cat ref.
4 Pin Plug White	10	P64AX
4 Pin Plug Red	10	P64AX/R



### 3 Pin Plug Socket Outlets

### **Characteristics:**

- 6A socket outlets are used in conjunction with 6A plugs to provide a pluggable connection to luminaires.
- Complies with BS 6972 and BS 5733:2010.
- Suitable for use with standard Klik 3 pin plug.
- **S27** socket is supplied in plug-in ceiling rose, Cat. Ref. **PCR2000**.
- S27 socket will accept A1 cover.
- ${\bf S26/TC}$  socket is an  ${\bf S26}$  architrave socket pre-assembled with a trunking clamp.

Description	Quantity	Cat ref.
3 Pin Round Socket White	10	S27



S27

### 4 Pin (Including Auxiliary) Plug Socket Outlets

### Characteristics:

- Klik auxiliary 6A socket outlets are used in conjunction with Klik auxiliary 6A plugs to provide a pluggable connection to luminaires.
- Complies with BS 6972 and BS 5733:2010.
- Suitable for use with standard Klik 4 pin plug.
- S64AX socket is supplied in plug-in ceiling rose, Cat. Ref. PCR2000.
- S64AX socket will accept A1 cover.
- **S65AX** socket is a square variant.
- All sockets have 5 terminations: line, neutral, CPC, auxiliary and loop-in.
- Can be used with Klik 3 or 4 pin plug.

Description	Quantity	Cat ref.
4 Pin Round Socket White	10	S64AX
4 Pin Round Socket Black	10	S64BLACK ★



S64AX



S64BLACK

### **Moulded Mounting Boxes**

Description	Quantity	Cat ref.
Round Surface Box White	10	MB2



MB2

### Occupancy Sensors, Remote Controls





EEK513W



EE815B

### Occupancy Sensors with Remote Programming & Control Options

### Characteristics:

- Comes complete with integral photocell and the facility for wall switch override.
- Can be programmed for absence or presence.
- Range 7m diameter for large movements, 5m diameter for small movements.
- Factory presets, lux = 400, time = 20 min, presence detection.

Description	Cat ref.
Flush Mounted Standard Occupancy Sensor, Pre-Wired 3m	EEK513W
Flush Mounted Standard Occupancy Sensor (without cable)	EEK510B
Klik Occupancy Sensor 6 Amp Long Range	KLOS6LR
Flush Mounted Standard Occupancy Sensor (without cable) - Black	EE815B *





EEK001

EEK002

### **Remote Controls for EEK Sensors Only**

### Characteristics:

- **EEK001** programming tool is easy to use with 2 memory settings to enable repeatability.
- **EEK002** remote control comes with a wall mounting bracket for storage and allows room occupant to have control of lighting output.

Description	Cat ref.
Programming Tool	EEK001
Remote Control	EEK002



EE005

### Accessories

 Description
 Cat ref.

 Backbox for surface/conduit mounting of flush sensors
 EEK005

 Backbox for surface/conduit mounting of flush sensors - Black
 EEK005B ★



EEK005B



### **Occupancy Sensors**

### Characteristics:

- Adjustment achieved by potentiometer only
- Automatic switching of electric loads depending on heat motion and ambient brightness
- **EE804A**: Surface-mounted installation
- EE805A: Cavity/Flush installation (75mm hole diameter)
   Combination of presence and motion detector with enhanced detection sensitivity in the central presence-detection area
- Response brightness adjustable
- Delay time adjustable
- Coverage 360 degrees, Diameter 6m @ 2.5m, (motion) enhanced detection area 4m Diameter (presence) @ 2.5m
- Factory presets: Lux = 200, Time = 3 Minutes





EE804A

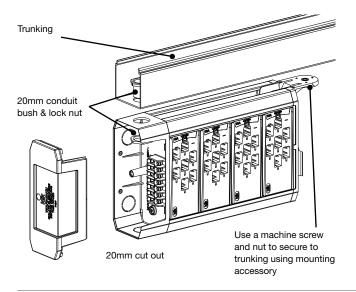


EE805A



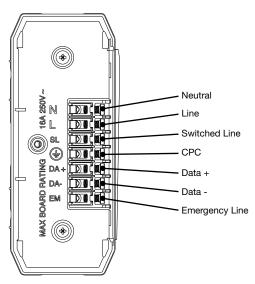
### **Mounting Options for Trunking**

Mounting Accessory can be clipped into the rear or top channel slot. It can be easily removed by inserting a screwdriver in the RELEASE slot.



### **Fixed Wiring Connection**

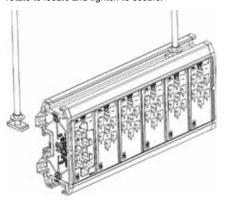
Klik 7 Pin LMB has seven screw terminals available to the installer and are arranged in the end cap as per diagram. DA+/DA- connections can be used for DALI/DSI control.



### Mounting Options for Drop Rod (Lighting Marshalling Box)

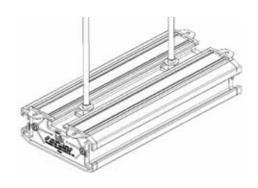
### Option 1.

Klik 7 Pin LMB features open ends to allow you to slide the box into position before tightening for easier installation, or push the box up on to the nut and rotate to locate and tighten to secure.



### Option 2.

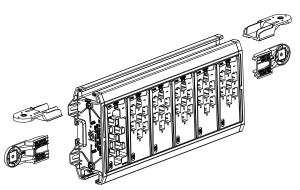
Single sided LMB can be mounted from the top as option 1 or from the rear as shown. Note: Double sided LMBs can only be mounted with option 1.



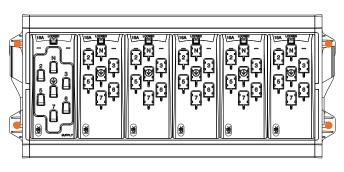
### **Mounting Options for Wall & Ceiling**

Klik 7 Pin LMB includes the Klik mounting accessory, this makes it much easier to mount LMB with Nail Guns or traditional fixings. 2 accessories are included with each LMB. Mounting Accessory can be clipped into the rear or top channel slot. It can be easily removed by inserting a screwdriver in the RELEASE slot.

Note: Double sided LMB can only be mounted on top channel slot.

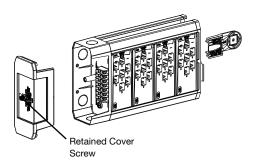


### Screw mounting tabs (x4)



### :hager

### **Lighting Marshalling Boxes (LMB) - Fixed Wiring** 16A Rated LMB Complying to BS 5733:2010



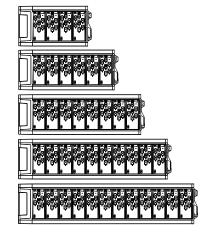
KLMB4W

KLMB6W

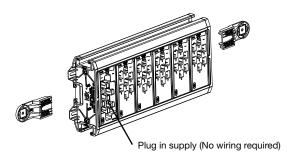
KLMB8W

KLMB10W

KLMB12W



### **Lighting Marshalling Boxes (LMB) - Pluggable** 16A Rated LMB Complying to BS 5733:2010

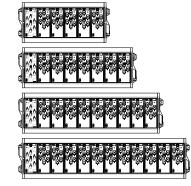


KLMB5P

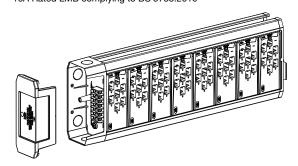
KLMB7P

KLMB9P

KLMB11P



### **Dual Channel Lighting Marshalling Boxes (LMB) - Fixed Wiring** 16A Rated LMB complying to BS 5733:2010



KLMB244W



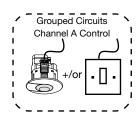
KLMB255W



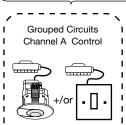
KLMB266W



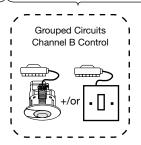
### **Grouped Circuits - Control**



- 1. Grouped Circuits Channel A can be controlled by using pluggable sensors and/or pluggable switch. Alternatively hard wired sensors and/or switches can be used.
- 2. Grouped Circuits Channel B must use pluggable sensors and/or switches for control.



Grouped Circuits Channel A



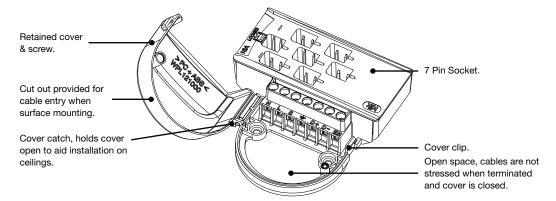
Grouped Circuits Channel B



Previous Part Reference	Description	New Part Reference	New Description
KLA/10/1-5P	16A Lighting Link Lead 10m 1.5mm 3 Core P-P	K7A10M15P ★	16A Lighting Link Lead 10m 1.5mm 3 Core P-F
KLA/5/1-5P	16A Lighting Link Lead 5m 1.5mm 3 Core P-P	K7A5M15P ★	16A Lighting Link Lead 5m 1.5mm 3 Core P-P
KLB/1/0-75W	16A Lighting Lead 1m 0.75mm 3 Core P-W	K7B1M075W ★	16A Lighting Lead 1.5m 0.75mm 3 Core P-W
KLB/1/1W	16A Lighting Lead 1m 1mm 3 Core P-W	K7B1M1W ★	16A Lighting Lead 1.5m 1mm 3 Core P-W
KLB/3/0-75W	16A Lighting Lead 3m 0.75mm 3 Core P-W	K7B3M075W ★	16A Lighting Lead 3m 0.75mm 3 Core P-W
KLB/3/1W	16A Lighting Lead 3m 1mm 3 Core P-W	K7B3M1W ★	16A Lighting Lead 3m 1mm 3 Core P-W
KLB/5/0-75W	16A Lighting Lead 5m 0.75mm 3 Core P-W	K7B5M075W ★	16A Lighting Lead 5m 0.75mm 3 Core P-W
KLB/5/1W	16A Lighting Lead 5m 1mm 3 Core P-W	K7B5M1W ★	16A Lighting Lead 5m 1mm 3 Core P-W
KLE/3/1-5W	16A Lighting Lead 3m 1.5mm 3 Core P-W	K7E3M15W ★	16A Lighting Lead 3m 1.5mm 3 Core P-W
KLE/5/1-5W	16A Lighting Lead 5m 1.5mm 3 Core P-W	K7E5M15W ★	16A Lighting Lead 5m 1.5mm 3 Core P-W
KLG/10/1-5P	16A Lighting Link Lead 10m 1.5mm 4 Core P-P	K7G10M15P *	16A Lighting Link Lead 10m 1.5mm 4 Core P-F
KLG/5/1-5P	16A Lighting Link Lead 5m 1.5mm 4 Core P-P	K7G5M15P ★	16A Lighting Link Lead 5m 1.5mm 4 Core P-P
KLJ/1/0-75W	16A Lighting Lead 1m 0.75mm 4 Core P-W	K7J1M075W ★	16A Lighting Lead 1.5m 0.75mm 4 Core P-W
KLJ/1/1W	16A Lighting Lead 1m 1mm 4 Core P-W	K7J1M1W *	16A Lighting Lead 1.5m 1mm 4 Core P-W
KLJ/3/0-75W	16A Lighting Lead 3m 0.75mm 4 Core P-W	K7J3M075W ★	16A Lighting Lead 3m 0.75mm 4 Core P-W
KLJ/3/1-5P	16A Lighting Lead 3m 1.5mm 4 Core P-P	K7J3M15P ★	16A Lighting Lead 3m 1.5mm 4 Core P-P
KLJ/3/1W	16A Lighting Lead 3m 1mm 4 Core P-W	K7J3M1W ★	16A Lighting Lead 3m 1mm 4 Core P-W
KLJ/5/0-75W	16A Lighting Lead 5m 0.75mm 4 Core P-W	K7J5M075W ★	16A Lighting Lead 5m 0.75mm 4 Core P-W
KLJ/5/1-5P	16A Lighting Lead 5m 1.5mm 4 Core P-P	K7J5M15P ★	16A Lighting Lead 5m 1.5mm 4 Core P-P
KLJ/5/1W	16A Lighting Lead 5m 1mm 4 Core P-W	K7J5M1W ★	16A Lighting Lead 5m 1mm 4 Core P-W
KLK/5/1-5P	16A Lighting Link Lead 5m 1.5mm 5 Core P-P	K7K5M15P ★	16A Lighting Link Lead 5m 1.5mm 5 Core P-P
KLP/1/0-75W	16A Lighting Lead 1m 0.75mm 5 Core P-W	K7P1M075W ★	16A Lighting Lead 1.5m 0.75mm 5 Core P-W
KLP/1/1-5W	16A Lighting lead 1m 1.5mm2 5 core P-W	K7P1M15W ★	16A Lighting lead 1.5m 1.5mm2 5 core P-W
KLP/1/1W	10A Lighting lead 1m 1mm2 5 core P-W	K7P1M1W ★	10A Lighting lead 1.5 1mm2 5 core P-W
KLP/3/0-75W	16A Lighting Lead 3m 0.75mm 5 Core P-W	K7P3M075W ★	16A Lighting Lead 3m 0.75mm 5 Core P-W
KLP/3/1-5W	16A Lighting Lead 3m 1.5mm 5 Core P-W	K7P3M15W ★	16A Lighting Lead 3m 1.5mm 5 Core P-W
KLP/3/1W	16A Lighting Lead 3m 1mm 5 Core P-W	K7P3M1W ★	16A Lighting Lead 3m 1mm 5 Core P-W
KLP/5/0-75W	16A Lighting Lead 5m 0.75mm 5 Core P-W	K7P5M075W ★	16A Lighting Lead 5m 0.75mm 5 Core P-W
KLP/5/1-5W	16A Lighting Lead 5m 1.5mm 5 Core P-W	K7P5M15W ★	16A Lighting Lead 5m 1.5mm 5 Core P-W
KLP/5/1W	16A Lighting Lead 5m 1mm 5 Core P-W	K7P5M1W ★	16A Lighting Lead 5m 1mm 5 Core P-W
KLT/1/0-75W	16A Lighting Lead 1m 0.75mm 6 Core P-W	K7T1M075W ★	16A Lighting Lead 1.5m 0.75mm 6 Core P-W
KLT/1/1W	16A Lighting Lead 1m 1mm 6 Core P-W	K7T1M1W ★	16A Lighting Lead 1.5m 1mm 6 Core P-W
KLT/3/0-75W	16A Lighting Lead 3m 0.75mm 6 Core P-W	K7T3M075W ★	16A Lighting Lead 3m 0.75mm 6 Core P-W
KLT/3/1-5P	16A Lighting Lead 3m 1.5mm 6 Core P-P	K7T3M15P ★	16A Lighting Lead 3m 1.5mm 6 Core P-P
KLT/3/1W	16A Lighting Lead 3m 1mm 6 Core P-W	K7T3M1W ★	16A Lighting Lead 3m 1mm 6 Core P-W
KLT/5/0-75W	16A Lighting Lead 5m 0.75mm 6 Core P-W	K7T5M075W ★	16A Lighting Lead 5m 0.75mm 6 Core P-W
KLT/5/1-5P	16A Lighting Lead 5m 1.5mm 6 Core P-P	K7T5M15P ★	16A Lighting Lead 5m 1.5mm 6 Core P-P
KLT/5/1W	16A Lighting Lead 5m 1mm 6 Core P-W	K7T5M1W ★	16A Lighting Lead 5m 1mm 6 Core P-W
KLTB/1/1-5W	16A T Connector 1m 1.5mm 3 Core P-W	K7B1M15WTEE ★	16A T Connector 1.5m 1.5mm 3 Core P-W
KLTJ/1/1-5W	16A T Connector 1m 1.5mm 4 Core P-W	K7J1M15WTEE ★	16A T Connector 1.5m 1.5mm 4 Core P-W
KLTP/1/1-5W	16A T Connector 1m 1.5mm 5 Core P-W	K791M15WTEE *	16A T Connector 1.5m 1.5mm 5 Core P-W
KLTF/1/1-5W KLTT/1/1-5W	16A T Connector 1m 1.5mm 6 Core P-W	K7T1M15WTEE *	16A T Connector 1.5m 1.5mm 6 Core P-W
KLZ/3/1-5P			16A Lighting Link Lead 3m 1.5mm 7 Core P-P
1.LE/U/1-UF	16A Lighting Link Lead 3m 1.5mm 7 Core P-P	K7Z3M15P ★	TOA LIGHTING LINK LEAG SITT T.SHIIIT / COIE P-P



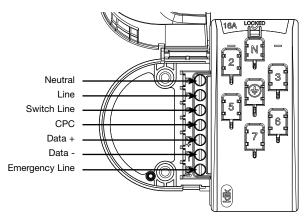
### **KLPCR - Surface Mount Connector**



PCR can be mounted in two ways, firstly on to conduit box or secondly direct on to a surface.



Terminating cables.
Terminal screws are retained in pockets.
Max Terminal Capacity 2x4mm²
Conductor strip length: 10mm.



### K7PLUG Wireable Plug Configurations and Labels

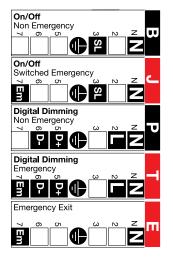
### Self Adhesive ID Labels:

Apply label for the type of lead you are making.

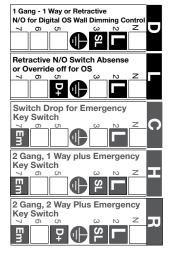
Lighting configurations for on / off and dimmable solutions.



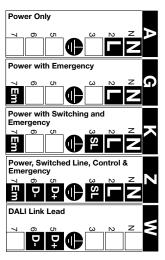
### **Luminaire Connections**



### **Switch Drops**



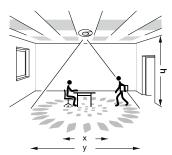
### Link Lead



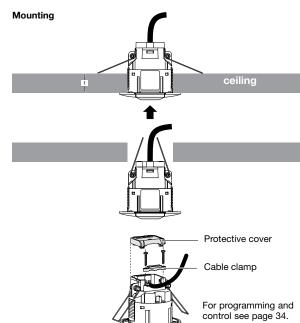


### **EEK Sensors**

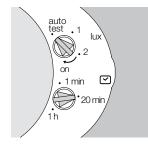
### **Detection areas**



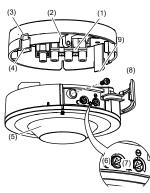
Н	2.5m	3m	3.5m
Х	5m	5m	5m
Υ	7m	8m	9m



### Settings EEK513P/EEK515P EEK523P/EEK525P



### EE804A / EE805A Sensors



1. Connecting terminals

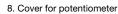
7. Potentiometer delay time

3. Release opening

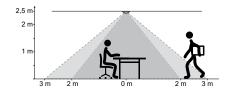
2. Mounting device locking screw

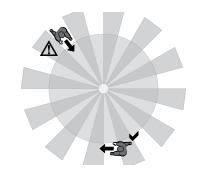
4. Fastening grids
5. Detector lens
6. Response brightness potentiometer

- (5)

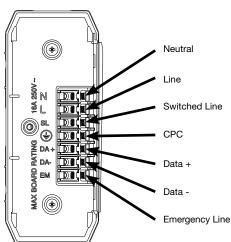


- 9. Locking screw
- 10. Fixing springs11. Strain relief with mounting device for cable ties
- 12. Cover for connection compartment



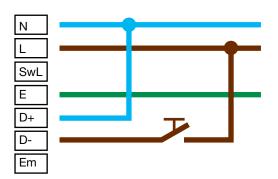


### Manual dimming with retractable switch (no OS)



### Hager Sollysta retractable wall switch references

Description	Cat ref.
1 Gang Grid Plate	WMGP1
1 Gang Grid Frame	WMGF1
2 Way & Centre Off Retractive Wall Switch	WMGS13R





### Klik 7 Pin Product Standards

Product Description	Klik Product identification	BS number	Description	
Klik 7 pin Marshalling Boxes	KLMB*W / P	BS 5733:2010	General Requirements for Electrical Accessories.	
Occupancy Sensor	EEK*	IEC 60669-1, IEC 60669-2-1	Switches for household & similar fixed electrical installations Part 2-1 for Electronic switches.	
Conduit Box / Surface Connector	KLPCR/7	BS 5733:2010	General requirements for Luminaire supporting coup for domestic, light industrial & commercial use.  Thermosetting insulated & thermoplastic sheathed	
Luminaire Leads	K7B*, K7J*, K7P*, K7T*	BS 5733:2010 BS EN 61535	Thermosetting insulated & thermoplastic sheathed cables for voltages up to & including 450 / 750 V for electric power & lighting & having low emission of smoke & corrosive gases when affected by fire.	
LS0H Flexible Cord	Supplied with luminaire lead	BS 6500:2000 BS 7211:2012	Thermosetting insulated & thermoplastic sheathed cables for voltages up to & including 450 / 750 V for electric power & lighting & having low emission of smoke & corrosive gases when affected by fire.	

### Klik 4 Pin Product Standards

Product Description	Klik Product identification	BS number	Description
Klik Distribution Boxes	KLDS KLMB	BS 5733:2010	General requirements for Electrical Accessories
Occupancy Sensor	EEK*W	BS EN 60669-1, BS EN 60669-2-1	Switches for household & similar fixed electrical installations Part 2-1 for Electronic switches.
Mounting Boxes	MB	BS 5733:2010	General requirements for Electrical Accessories
Klik Ceiling Roses, Plugs, Outlets & Pre-Wired Leads	S, P, PCR	BS 5733:2010 BS 6972:1988	General requirements for Electrical Accessories General requirements for Luminaire supporting couplers for domestic, light industrial & commercial use Installation couplers intended for permanent connection in fixed installations
PVC Flexible Cord	PVC BS 6500:2000 cables for voltages up to & in electric power & lighting & ha		Thermosetting insulated & thermoplastic sheathed cables for voltages up to & including 450 / 750 V for electric power & lighting & having low emission of smoke & corrosive gases when affected by fire.
LSF Flexible Cord	LS0H	BS 6500:2000 BS 7211:1998	Thermosetting insulated & thermoplastic sheathed cables for voltages up to & including 450 / 750 V for electric power & lighting & having low emission of smoke & corrosive gases when affected by fire.

### **Product Materials**

Klik plugs and sockets feature solid brass terminals and phosphor bronze contacts for good conductivity. Moulded components are manufactured from high quality thermoplastics.

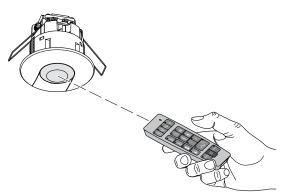
### Klik Terminal Capacities

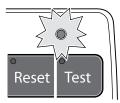
### Number of Conductors

	0.75mm <sup>2</sup>	1.0mm <sup>2</sup>	1.5mm²	2.5mm <sup>2</sup>	4.0mm <sup>2</sup>
Socket Outlets	-	5	4	3	2
Plugs P22, P64X, K7PLUG	1	1	1	-	-









The acknowledgment LED blinks during the sending of the IR message.

### **Technical specification**

Power supply:1x 3V CR2032 Shelf life of battery: 2½ years Protection index: IP 30

### Use

The remote control allows the user to set or modify presence detector settings. When the potentiometer is on auto test it allows single and multiple settings. The SET key is used to send the IR messages to the occupancy sensors. Multiple settings can be stored in Memo 1 and Memo 2 and re-called to set several devices.

### Single setting

Example: reset



### Multiple settings

Define the parameters to be changed and press SET to send.

Example: for 25 minutes and corridor use, press 20', 5' and corridor.

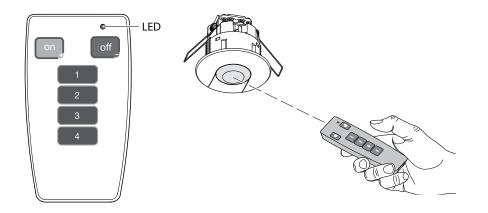


In the case of 2 opposite states the green LED denotes ON and red LED denotes OFF (except Presence / Absence).

When no function is selected all LED's are OFF.

### Settings available

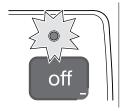
Key	Meaning	Indication	Function
	Presence	Green LED on	Presence on (automation mode)
	Absence	Red LED on	Absence on (semi automatic mode)
	Power Up	Green LED on	The light is automatically switched on for 30 seconds after power up
Y		Red LED on	During warm up phase, the light output is off
Reset	Reset	LED on	To return to factory settings (Lux = 400, time = 20 min, presence on, power up off and cell active)
Test	Test	LED on	To validate the detection area
$\Xi$	Time	LED on	To set the time It is possible to add times together e.g. press 2' and 5' for a time value of 7'
— >><	Day level 1000 Lux	LED on	To set the value to 1000 Lux
<b>v</b>	Learn	LED on	To learn the current Lux level
Å	Corridor 200 Lux	LED on	To set the value to 200 Lux
	Office 400 Lux	LED on	To set the value to 400 Lux
+	Lux +	LED on	To increase the Lux level (+100)
=	Lux -	LED on	To decrease the Lux level (-100)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Active cell	Green LED on	The light is continuously measured
	Passive cell	RED LED on	The sensor will not switch the light off even if the ambient luminosity is sufficient
Memo and set Key	Meaning	Indication	Function
Mama	Press	LED is on until a setting is changed	To load/unload Memo 1
Memo 1	Long press	LED is on for 5s, then will blink until released. After release, the LED goes off in case of setting change	To save the current setting as Memo 1
N 4	Press	LED is on until a setting is changed	To load/unload Memo 2
Memo 2	Long press	LED is on for 5s, then will blink until released. After release, the LED goes off in case of setting change	To save the current setting as Memo 2
	Short press (<5s)	LED flashes	To send an IR message of the current setting
SET	Long press (>5s but <10s) only available if no setting active	LED blinks until release press	To toggle automatic mode on DALI/DSI



### Use

The remote control allows the user to set or modify settings on the presence detectors **EEK513W** and **EEK510B**.

Each button corresponds to a command.



The acknowledgment LED blinks during the sending of the IR message.

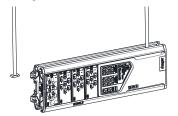
Technical specification

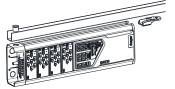
Power supply: 1x 3V CR2032 Shelf life of battery: 3½ years Protection index: IP 30

### Settings available

Key	Action	Function	Product Type
on	Short Press (< 5s.)	On	EEK513W / EEK510B
+	Long Press (> 5s.)	Dim up	EEK513W / EEK510B
off	Short Press	Off	EEK513W / EEK510B
-	Long Press (> 5s.)	Dim down	EEK513W / EEK510B
1	Short Press	To start scene 1	
2	Short Press	To start scene 2	
3	Short Press	To start scene 3	
4	Short Press	To start scene 4	•

### Fixing Methods







Drop Rods

Trunking (Not possible for plug-in KLCM412P)

Direct: e.g. nail gun or screw fixing (not possible for hard-wire KLCM413W)

### Switch inputs - 1 to 4 (retractive wall switch ref: WMGS13R)

Orange/White	Scene 1
Orange	Scene 2
Green/White	Scene 3
Blue	Scene 4 O Scene 4
Brown/White	On/Dim Up
Blue/White	Off/Dim Down
Brown	0V (Common)
Green	12V (Not Used, must not be connected.)

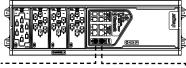
### Emergency test in & out

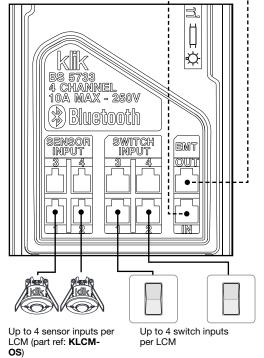
Orange/White Override - All Outputs On Orange Override - All Outputs Off Green/White Corridor Hold Line Blue Emergency Test (Timer 1) Blue/White Emergency Test (Timer 2) Green Emergency Test (Timer 3) Brown Common

Brown/White Not Used.

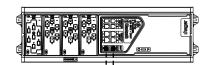
### **Occupancy Sensor Technical Characteristics**

<b>Technical Characteristics</b>	KLCM-OS	KLCM-10S	KLCM-3OS	KLCM-50S
Supply Voltage	12V DC	SELV (12VDC)	SELV (12VDC)	SELV (12VDC)
Detection Area	Motion area: diameter 6m (product installed at 2½m height) presence area: diameter 6m (product installed at 2½m height)	360° 10m	360° 5m to 15m	360° 15m
Receiver Class	2	2	2	2
Parasitic Power		.672mW	.672mW	1.044mW
Duration of lighting output operation	Via KlikLink App & LCM	Via KlikLink App & LCM	Via KlikLink App & LCM	Via KlikLink App & LCM
Luminocity threshold	Via KlikLink App & LCM	Via KlikLink App & LCM	Via KlikLink App & LCM	Via KlikLink App & LCM
Recommended installation height	2.5m	2.5m	2.5m	2.5m
Operating temperature	-20C to +60C	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C
Storage temperature	-2-C to +70C	-35°C to +70°C	-35°C to +70°C	-35°C to +70°C
Insulation class	II	II	II	II
Protection rating	IP41	IP41	IP41	IP41
Standards	BS EN 55015:2013	BS EN55015:2013, BS EN61547:2009	BS EN55015:2013, BS EN61547:2009	BS EN55015:2013, BS EN61547:2009
Maximum installation altitude	2000m	2000m	2000m	2000m
Polution degree	2	2	2	2
Connection	RJ11	RJ11 6P4C	RJ11 6P4C	RJ11 6P4C
Dimensions		High: 70mm, Diameter: 101mm	High: 70mm, Diameter: 101mm	High: 70mm, Diameter: 101mm
Weight		110 grams	110 grams	110 grams
Mounting hole diameter		85mm	85mm	85mm





per LCM



- Plug-in sensor and switch control
- Any port can be configured via the KlikLink App.
- Grouping LCMs via RJ45 leads for corridor hold and groups for emergency test
- Programmed via the KlikLink app. Download from the App Store.

### Wiring accessories from the Sollysta Grid range

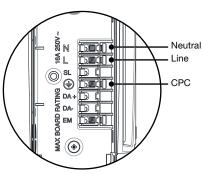
Centre off retractive switch module	WMGS13R
White moulded Grid Plates	<b>WMGPx</b> (1,2,3,4,6 & 8) G
Grid Frames	<b>WMGFx</b> (1,2 & 3/4) G

### **Technical Characteristics**

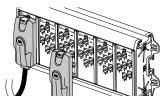
Number of channels	4			
Number of outputs per channel	3 (hard wired LCM has 4 outputs on channel A)			
Number of sensor inputs	4 (KLCM-OS 1OS / 3OS / 5OS)			
Number of switch inputs	4			
Supply Voltage	230V AC 50Hz			
Rated current	10A (total load)			
Rated current each connector	10A			
Complies with	BS 5733:2010, BS EN 60669-2-5 BS EN 61535:2009 - (Excluding clauses 10.1 and 10.3 due to Aluminium enclosure)			e to Aluminium
IP protection	IP20			
Connection for programming	Bluetooth Smart (Bluetooth 4) (only available on Apple iPad)			ad)
Dimensions	Height 145mm Width 440mm Depth 58mm Weight 1.9kg			

### **Supply input connection**

### Hard wired



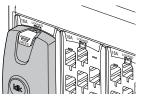
### Pluggable



in and push down Disconnecting the supply lead:

Connecting the supply lead: plug

press button and push up.



### Plug colour coding

White: Luminaire Lead Red: Luminaire & Emergency

Black: Link Lead

### Klik 4











	+ 3m Lead, Flush Mount	Wireable, Flush Mount	Klik 4 Direct Plug-In	Wireable, Surface Mount	Wireable, Flush Mount
Technical characteristics	EEK513W	EEK510B/EE815B	KLOS6LR	EE804A	EE805A
Supply voltage	230V~ 50Hz	230V~ 50Hz	230V - 50Hz	230V - 50Hz	230V - 50Hz
Detection type	Presence	Presence	Presence	Motion / Presence	Motion / Presence
Parasitic power	270mW	270mW	-	0.3W	0.3W
Detection (Length)	7m	7m	25m	6m	6m
Detection (Width)	7m	7m	-	6m	6m
Detection angle	360°	360°	6-18°	360°	360°
Detection frequency	-	-	-	-	-
Receiver class	-	-	-	-	-
Standby consumption	2.4VA/270mW	2.4VA/270mW	-	-	-
Duration of lighting output operation (S1)	1min to 1hour	1min to 1hour	10 Secs to 40 Mins	5s - 30min	5s - 30min
Duration of time delay (S2)	-	-	-	-	-
Luminosity threshold	5 to 1000 Lux	5 to 1000 Lux	30 Lux	5 - 1000	5 - 1000
Recommended installation height	2.5m	2.5m	2.5m	2.5m	2.5m
Operating temperature	-10°C to +45°C	-10°C to +45°C	-	-5 - +45	-5 - +45
Storage temperature	-20°C to +60°C	-20°C to +60°C	-	-25 - +70	-25 - +70
Insulation class	II	II	-	11	11
Protection rating	IP41	IP41	IP20	IP21	IP21
Standards	BS EN 60669-1 BS EN 60669-2-1	BS EN 60669-1 BS EN 60669-2-1	-		
Pollution degree	2	2	-		
Connection stranded	0.5mm <sup>2</sup> to 1.5mm <sup>2</sup>	0.5mm <sup>2</sup> to 1.5mm <sup>2</sup>	-	1mm - 2.5mm	1mm - 2.5mm
Connection solid	0.5mm² to 1.5mm²	0.5mm² to 1.5mm²	-	1mm - 2.5mm	1mm - 2.5mm
Switching channel	1	1	1	1	1
Lighting loads 230V~ AC1	16A	16A	6A	10A	10A
Switching capacity (Incandescent)	2300W	2300W	1500W	2300W	2300W
Halogen lamps LV	-	-	-		
Halogen ELV (12 or 24V) via ferromagnetic or electronic transformer	1500W	1500W	-	2300W	2300W
Compact fluorescent	23 X 23W	23 X 23W	1500W Max	20 x 20W	20 x 20W
LED	20 X20W	20 X20W	500W Max	20 x 20W	20 x 20W
Parallel compensated fluorescent tubes	1000W	1000W	500W Max	1000W	1000W
Fluorescent tubes non-compensated	1000W	1000W	-	1000W	1000W
Electronic ballast	-	-	750W-	1000W	1000W
DSI/DALI ballast	-	-	-	-	-
Remote programming	EEK001	EEK001	-	-	-
Remote control	EEK002	EEK002	-	-	-
Adjustable shutters (supplied)	×	×	×	×	×
Dimensions (L*W*H)	80 x 80 x 70mm	80 x 80 x 70mm	80 x 80 x 50mm	ø 100 x 50mm	ø 90 x 61mm



### Klik 7

### **Special Applications**











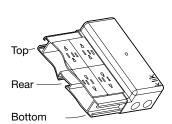


On / Off, Plug-In Flush, 3m / 5m	Digital, Plug-In Flush, 3m / 5m	Digital, Wireable, Flush	Wireable, Surface Mount, Corridor	Wireable, Surface Mount, Hyper Frequency	Wireable, Semi-Recessed, 1 / 2 Channel
EEK513P EEK515P	EEK523P EEK525P	EEK520B	EE880	EE883	EE810 / EE811
230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz
Presence	Presence	Presence	Motion	Motion	Presence
60mW	60mW	60mW	1W	1W	1.2W
7m	7m	7m	20m	1m to 8m	15.5m
7m	7m	7m	4m	1m to 8m	8m
360°	360°	360°	360°	360°	360°
-	-	-	-	5.8 Ghz ± 0.075 Ghz	-
-	-	-	-	2	-
60mW	60mW	60mW	1W	1W	1.2W
1min to 1hour	1min to 1hour	1min to 1hour	5sec to 15 min	5sec to 15 min	1min to 30min
-	-	-	-	-	30sec to 60min
5 to 1000 Lux	5 to 1000 Lux	5 to 1000 Lux	2 to 2000 lux	2 2000 lux	5 to 1200Lux
2.5m	2.5m	2.5m	3 m	2.5 m	3 m
-10°C to +45°C	-10°C to +45°C	-10°C to +45°C	20°C to +50°C	20°C to +50°C	0°C to +45°C
-20°C to +60°C	-20°C to +60°C	-20°C to +60°C	35°C to +70°C	35°C to +70°C	10°C to +60°C
II	II	II	II	II	II
IP41	IP41	IP41	IP54	IP54	IP41
BS EN 60669-1 BS EN 60669-2-1	BS EN 60669-1 BS EN 60669-2-1	BS EN 60669-1 BS EN 60669-2-1	BS EN 60669-1 BS EN 60669-2-1	BS EN 60669-2-1 EN 300 440-1 V1.3.1	BS EN 60669-1 BS EN 60669-2-1
2	2	2	2	2	2
0.5mm <sup>2</sup> to 1.5mm <sup>2</sup>	0.5mm² to 1.5mm²	0.5mm² to 1.5mm²	Max 1.5mm <sup>2</sup>	Max 1.5mm <sup>2</sup>	1mm² to 4mm²
0.5mm <sup>2</sup> to 1.5mm <sup>2</sup>	0.5mm² to 1.5mm²	0.5mm² to 1.5mm²	Max 1.5mm <sup>2</sup>	Max 1.5mm <sup>2</sup>	1mm <sup>2</sup> to 4mm <sup>2</sup>
1	1	1	1	1	1 2
-	-	-	10A	10A	16A 2A
-	-	-	2300W	2300W	2300W
-	-	-	2300W	2300W	-
-	-	-	1500VA	1500VA	1500W
-	-	-	20 x 20W	20 x 20W	20 X 18W
-	-	-	20 x 20W	20 x 20W	20 X 18W
-	-	-	1000W/C=110μf	1000W/C=110μf	290W/C=32μf
-	-	-	1200W	1200W	-
-	-	-	580W	580W	1000W
Yes (24)	Yes (24)	Yes (24)	-	-	-
EEK001	EEK001	EEK001	×	×	×
EEK002	EEK002	EEK002	×	×	×
×	×	×	×	×	×
80 x 80 x 70mm	80 x 80 x 70mm	80 x 80 x 70mm	125 x 125 x 60mm		110 x 110 x 70mm



### **Mounting Methods**

- Hanging from ceiling suspension system with Caddy Clips™
- Direct fixing to lighting trunking
- Direct fixing to ceiling or wall with No. 8 screws







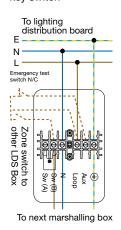
Screw to surface



### **Local Lighting Switch Control**Permanent emergency feed

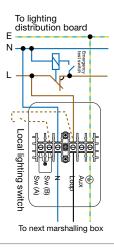
To lighting distribution board E N L Cocal lighting switch N L Cocal l

### Local Lighting Switch Control Centralised emergency test via key switch

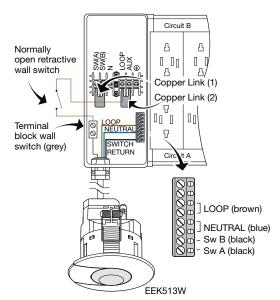


### Zone Lighting Control

Local emergency test control

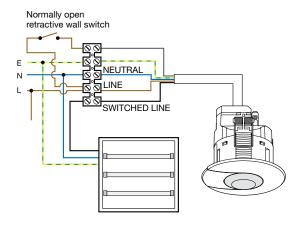


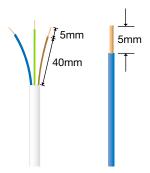
### All ways switched by a single Hager EEK513W occupancy sensor



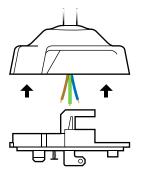
Switch wire to be connected as required.

### Connected directly to a single luminaire

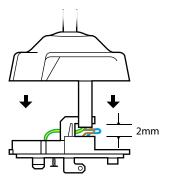




1. Strip cable as above -Note: Trim cable tails to double over for better terminal contact.

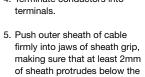


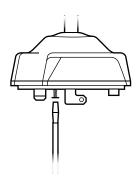
- 2. Remove plug cover.
- 3. Pass cable through plug cover centre hole.



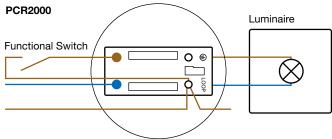
4. Terminate conductors into

grip.

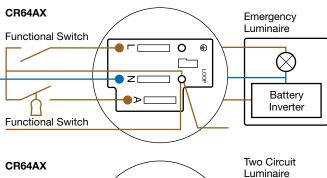


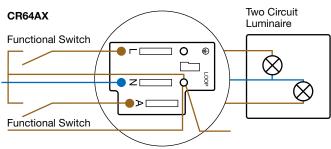


6. Refit cover.



Note: earth connections omitted for clarity












Hager Ltd. Hortonwood 50 Telford Shropshire TF1 7FT

Customer Contact Centre: 01952 675612 Technical Helpline: 01952 675689

hager.com/uk sales@hager.co.uk technical@hager.co.uk