Klik
Lighting Connection

: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.

From Start to Finish.

With its pre-wired plugs, Klik saves time on site, eliminates the chance of poor connections and allows for the system to adapt as needs change.

Luminaires can be plugged-in in seconds, with absolute safety and without circuit isolation. The secure, simultaneous mechanical & electrical connection gives complete confidence.

01
Design

Klik is able to exploit the benefits of pre-fabricated wiring systems through its modular and adaptable design. From concept to commissioning, Klik adapts to meet your requirements.

By being a pluggable system, the prospect of future refurbishments is also nothing to worry about, lights or groups of lights can be relocated quickly and easily.

02
Install
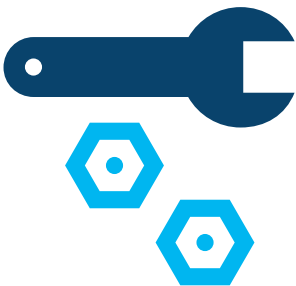
The Klik connector system brings plug-in convenience and versatility to lighting. Lights can be plugged-in, in seconds, with absolute safety, without circuit isolation.
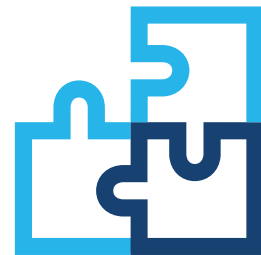
The unique design prevents any unwanted disconnections due to load on cables or vibrations.

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.
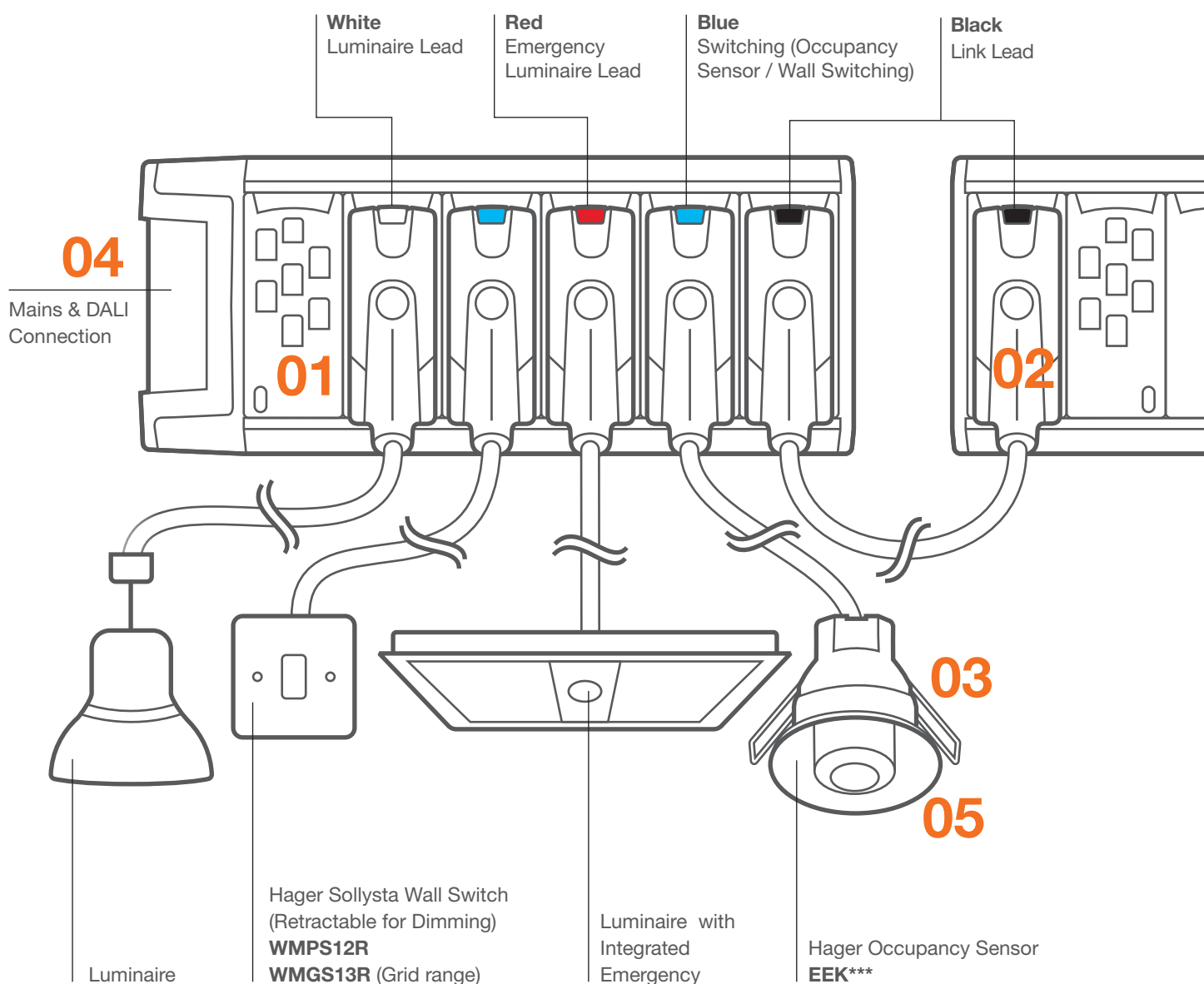
04
Adapt

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.
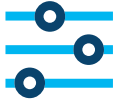
What Klik can do for you

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.

White
Luminaire Lead

Red
Emergency
Luminaire Lead

Blue
Switching (Occupancy
Sensor / Wall Switching)

Black
Link Lead

04
Mains & DALI
Connection

01

02

03

05

Luminaire

Hager Sollysta Wall Switch
(Retractable for Dimming)
WMPS12R
WMGS13R (Grid range)

Luminaire with
Integrated
Emergency

Hager Occupancy Sensor
EEK*

Benefits - At a Glance

			Klik 3 / 4	Klik 7
Connection		Safe on-load connection / disconnection	✓	✓
		Superior electromechanical connection	✓	✓
Control		Occupancy sensing for on / off control	✓	✓
		Occupancy sensing for daylight linked on / off control	✓	✓
		Lux level 'trimming' during commissioning	✗	✓
		Automatic dimming (daylight linked)	✗	✓
		Manual dimming (via wall switch)	✗	✓
		DALI / DSI	✗	✓

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.

			Klik 3 / 4	Klik 7
CIBSE		Use Occupancy Sensors	✓	✓
		Use Daylight Sensors	✓	✓
		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

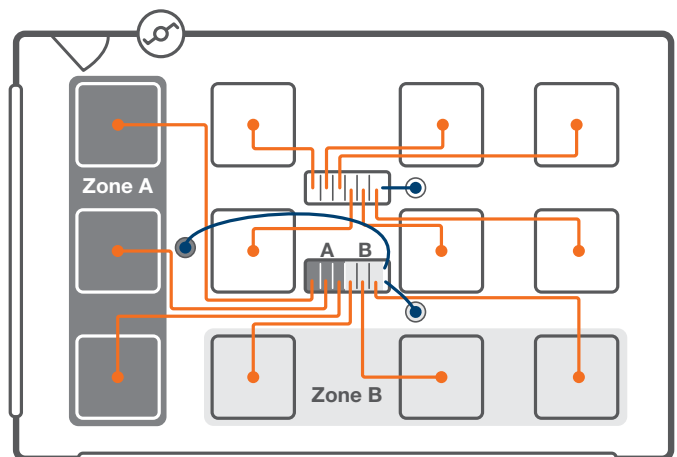| Sensor settings	Presence
Lux sensor used	No
Wall switching	None - auto only

- Two KLMB/KLDS marshalling boxes
- No natural light
- Standard or digital luminaires
- Auto on when entering room
- 20 Minute time out when vacant
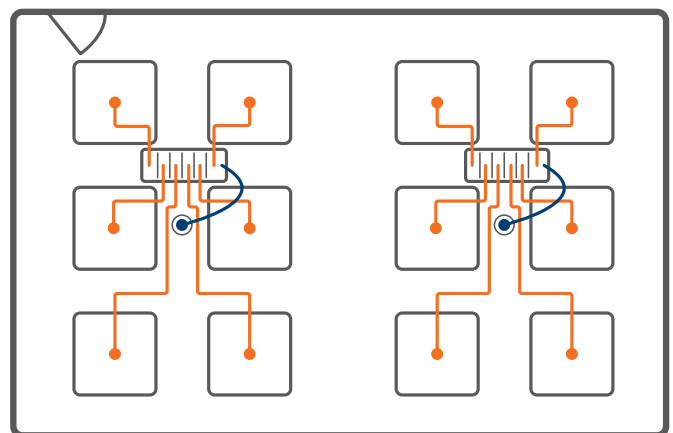
Application 2 - Office with windows on two sides

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

DALI / DSI
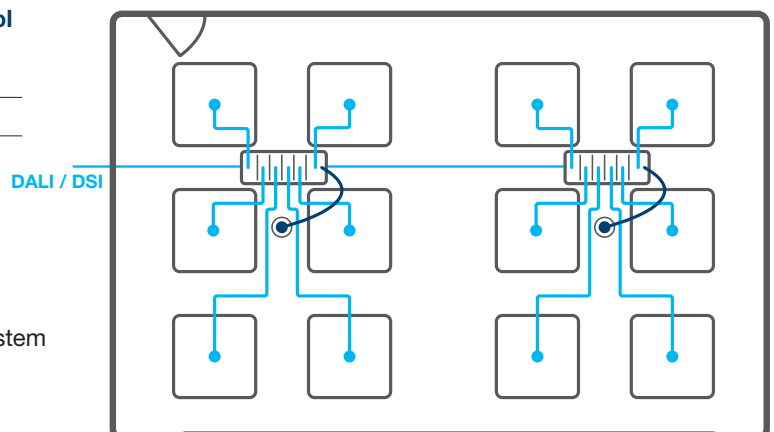
Klik 7

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 click-in 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.

Klik 7
Case Study

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.
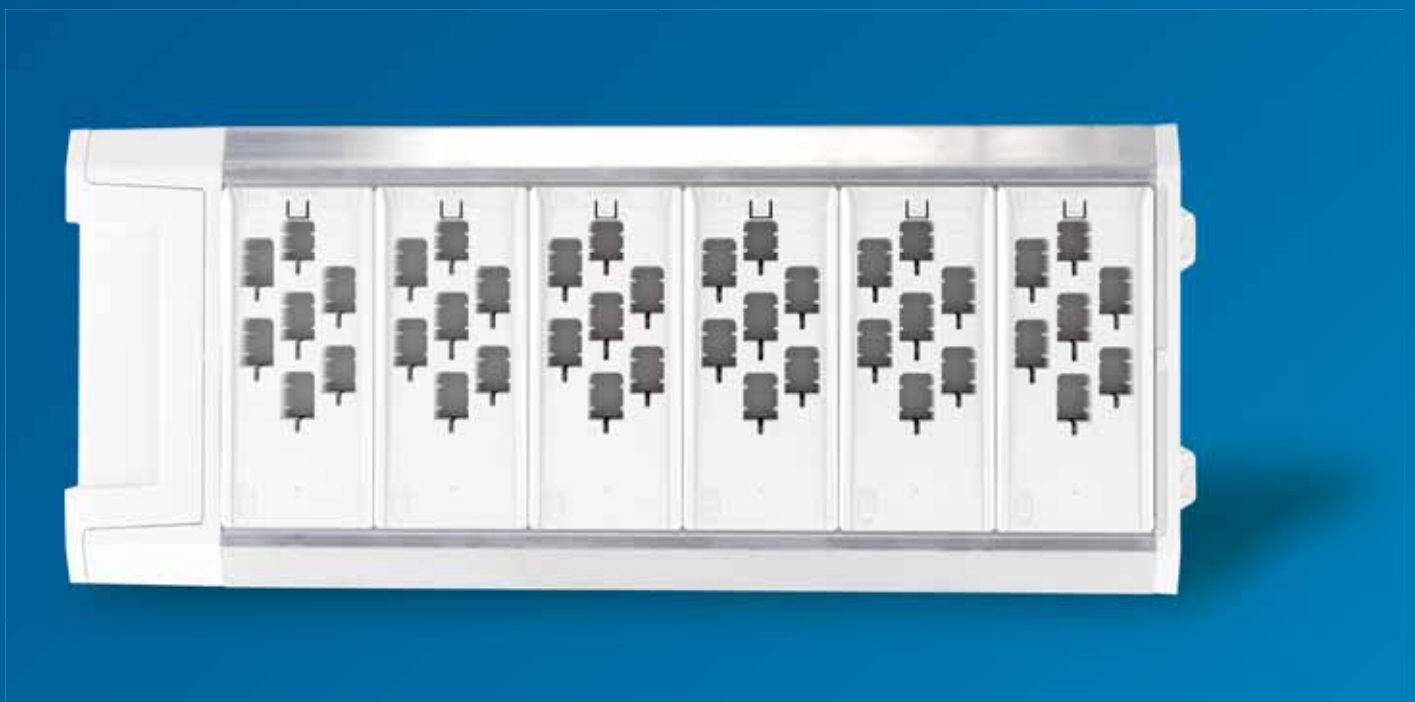
In an effort to stay energy efficient, Facebook designed an agreement with Brookfield renewable Partners, confirming that the site is 100% powered by wind energy and actively investing in constructing renewable generation capacity. At present, Facebook has stated it has added 2,500MW of renewable infrastructure 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, the wholesale distributor 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.

:hager

KLMB6WG

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

Description	Cat ref.
Marshalling Box, Single Supply, Wire In, Plug Out	
6 Way	**KLMB6WG**
12 Way	**KLMB12WG**

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**

Klik 7 Pre-wired Plugs

Characteristics:
- Connections to luminaire is made via pre wired plug and lead. All leads are low smoke zero halogen and carry CPR rating Dca- S1b, d2, a2.
- Standard, digital and emergency luminaires.
- Short circuit tested: 1500A conditional rating.
- Cable standard EN 61535.
- 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 **K7B3M075W** will now become **K7B3M075WDCA**. For a full supersession chart, see page 32.

K7B3M075WDCA

K7	B	3M	075	W	DCA
Range	Function	Length	Core Size	Wired or Plug End	CPR Rating

Z Link Lead, Power, Emergency, Switched Line, Control

J Standard Luminaire, Emergency

T Dimmable Luminaire, Emergency

B Standard Luminaire

F Switch Drop Lead

E Emergency Exit Luminaire

P Dimmable Luminaire

Description	Cat ref.
Pre-wired Plugs for Standard Luminaires	
6A Luminaire Lead 3m 0.75mm^2 3 Core Plug to Wire	**K7B3M075WDCA** ★
6A Luminaire Lead 5m 0.75mm^2 3 Core Plug to Wire	**K7B5M075WDCA** ★
10A Luminaire Lead 3m 1mm^2 3 Core Plug to Wire	**K7B3M1WDCA** ★
10A Luminaire Lead 5m 1mm^2 3 Core Plug to Wire	**K7B5M1WDCA** ★
16A Luminaire Lead 5m 1.5mm^2 3 Core Plug to Wire	**K7B5M15WDCA** ★
10A Luminaire Lead 3m 1mm^2 4 Core Plug to Wire	**K7J3M1WDCA** ★
10A Luminaire Lead 5m 1mm^2 4 Core Plug to Wire	**K7J5M1WDCA** ★
Pre-wired Plugs for Emergency Exit Luminaires	
16A Luminaire Lead 3m 1.5mm^2 3 Core Plug to Wire	**K7E3M15WDCA** ★
16A Luminaire Lead 5m 1.5mm^2 3 Core Plug to Wire	**K7E5M15WDCA** ★
16A Luminaire Lead 7m 1.5mm^2 3 Core Plug to Wire	**K7E7M15WDCA** ★

K7T3M075WDCA

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	**K7P1M075WDCA ★**
6A Luminaire Lead 3m 0.75mm² 5 Core Plug to Wire	**K7P3M075WDCA ★**
6A Luminaire Lead 5m 0.75mm² 5 Core Plug to Wire	**K7P5M075WDCA ★**
6A Luminaire Lead 7m 0.75mm² 5 Core Plug to Wire	**K7P7M075WDCA ★**
10A Luminaire lead 1.5m 1mm² 5 core Plug to Wire	**K7P1M1WDCA ★**
10A Luminaire Lead 3m 1mm² 5 Core Plug to Wire	**K7P3M1WDCA ★**
10A Luminaire Lead 5m 1mm² 5 Core Plug to Wire	**K7P5M1WDCA ★**
10A Luminaire Lead 7m 1mm² 5 Core Plug to Wire	**K7P7M1WDCA ★**
16A Luminaire lead 1.5m 1.5mm² 5 core Plug to Wire	**K7P1M15WDCA ★**
16A Luminaire Lead 3m 1.5mm² 5 Core Plug to Wire	**K7P3M15WDCA ★**
16A Luminaire Lead 5m 1.5mm² 5 Core Plug to Wire	**K7P5M15WDCA ★**
16A Luminaire Lead 7m 1.5mm² 5 Core Plug to Wire	**K7P7M15WDCA ★**
Pre-wired Plugs for Dimmable Luminaires with Emergency	
6A Luminaire Lead 1.5m 0.75mm² 6 Core Plug to Wire	**K7T1M075WDCA ★**
6A Luminaire Lead 3m 0.75mm² 6 Core Plug to Wire	**K7T3M075WDCA ★**
6A Luminaire Lead 5m 0.75mm² 6 Core Plug to Wire	**K7T5M075WDCA ★**
6A Luminaire Lead 7m 0.75mm² 6 Core Plug to Wire	**K7T7M075WDCA ★**
10A Luminaire Lead 1.5m 1mm² 6 Core Plug to Wire	**K7T1M1WDCA ★**
10A Luminaire Lead 3m 1mm² 6 Core Plug to Wire	**K7T3M1WDCA ★**
10A Luminaire Lead 5m 1mm² 6 Core Plug to Wire	**K7T5M1WDCA ★**

K7F5M1WDCA

Klik 7 Pre-wired Plugs for Switch Drops

Characteristics:
- The switch drop pre-wired lead allows plug in switch to KLMB connection. All leads are low smoke zero halogen and are factory connected and tested.
- 16A Rated.
- Short circuit tested: 1500A conditional rating.
- Cable standard BS 7211.
- **Note: for other switch drop options, use wireable plug, see page 33.**

Description	Cat ref.
Pre-wired Plugs for Switch Drops	
10A Switch Drop Lead 5m 1mm² 4 Core Plug to Wire	**K7F5M1WDCA ★**
10A Switch Drop Lead 10m 1mm² 4 Core Plug to Wire	**K7F10M1WDCA ★**
10A Switch Drop Lead 15m 1mm² 4 Core Plug to Wire	**K7F15M1WDCA ★**

Data is subject to errors and technical modifications. ★ **New.**

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 3.4 .
- 1.5mm² CSA.
- 3m, & 5m lengths.
- Standard, Digital and Emergency Luminaires.
- 16A Rated.
- EN 61535.
- Short circuit tested: 1500A conditional rating.

K7Z3M15PDCA

Description	Cat ref.
Pre-wired Link Leads - L, N, SL, CPC, DA+, DA-, Emergency	
16A Link Lead 5m 1.5mm² 7 Core Plug to Plug	**K7Z5M15PDCA** ★

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.

Description	Cat ref.
16A 7 Pin Ceiling Rose	**KLPCR7**

KLPCR7

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

EE816

EED503

EED513

EE807

Occupancy Sensors with Remote Programming & Control Options

- **EE816** - Detector for control of digital (DSI/DALI) luminaires
- Direct control of a light load.
- Lux level and ON delay adjustable via potentiometers or **EE807** remote control.
- DALI/DSI bus output accommodates up to 24 ballasts.
- 230V wall switch override.
- Presence or absence detection available.
- Presence or Absence detection available.
- Programmable from **EE807**
- 7m Range
- **EE807** - IR programming tool
- Installer remote control to commission settings.
- **EE808** - IR remote control
- Customer remote control for override operation.
- Complies with EN 60669-2-1.
- **EED503, EED513, EER503, EER513** -
- For spaces requiring modern, high-performance equipment
- Can be adjusted with the EE807 remote control
- Controlled with the EE808 remote control
- Can function as both master and slave
- Zero-crossing contact compatible with LED loads
- LED status visible on the front of the product
- 20m Range
- Commercial applications,office floors, reception areas, high traffic areas

Description	Cat ref.
Wireable Digital PIR Occupancy Sensor - Dimmable & Daylight Linked	**EE816**
Large area motion/presence detector 20 m, DALI 2 flush mounted	**EED503 ★**
Large area motion/presence detector 20 m, DALI 2 surface mounted	**EED513 ★**
Large area motion/presence detector 20 m, ON/OFF flush mounted	**EER503 ★**
Large area motion/presence detector 20 m, ON/OFF surface mounted	**EER513 ★**
Programming Tool	**EE807**
Remote Control for the End User	**EE808**
Backbox Accessory for Surface BESA Detectors	**EEK005**

EED518

High Bay, High Ceiling Detector

EED518, EER518 -For spaces requiring modern, high-performance equipment.
- Can be adjusted with the EE807 remote control
- Controlled with the EE808 remote control
- Can function as both master and slave
- Zero-crossing contact compatible with LED loads
- LED status visible on the front of the product
- Commercial applications,high ceilings, storage warehouse

Description	Cat ref.
Motion detector for high ceilings 22 x 12 metres, DALI 2 surface mounted	**EED518 ★**
Motion detector for high ceilings 22 x 12 metres, ON/OFF surface mounted	**EER518 ★**

Data is subject to errors and technical modifications. ★ **New.**

Occupancy Sensors

Characteristics
EE810, EE811 and EE812
- High performance presence detector that will be used in premises or in passage areas, where they increase comfort and reduce drastically the energy costs.

Combination of a presence area and a motion area.
- The presence area is especially interesting in offices, where the motion area may be used in long corridors.
- Head rotation for detection area adjustment.
- Settings via potentiometers.

Applications
EE810 - 1 channel detector
- Direct control of a light load or used as a slave for detection area enlargement.
- Lux level and ON delay setting via potentiometers.
- Test mode in order to set lux level and the detection pattern.
EE811 - 2 channels detector
- Light relay output for direct control of a light load.
- Presence output potential free relay.
- Lux level, on delay setting for light channel and presence channel via potentiometers.
- Input for slave (EE810) and/or override push button.
EE812 - Light regulator 1/10V
- Light regulator with 1/10V output in order to control electronic ballasts and/or Hager dimmers EV100/EV102.
- Detector especially dedicated for energy saving and comfort purpose.
- Input for slave (EE810) and/or overide pushbutton in order to modify the setpoints.
- Lux level, On delay for light channel and min level via potentiometers.
- 3 functional modes : no dimming, dimming with local setpoint, dimming with remote setpoint.
EE813 : accessory to surface mounting.

Complies with IEC 60 609-1 and 60 669-2-1.

EE810

Description	Cat ref.
Presence detector 1 channel	**EE810**
Presence detector 2 channels	**EE811**
Presence detector 1/10V	**EE812**
Mounting accessory for surface mounting can be used with EE810, EE811, EE812	**EE813**
Presence detector monobloc on/off, switched phase 16A AC1 230V, power supply: 230V AC, 360°	**EE815**
Presence detector monobloc DALi/DSI for lighting regulation, power supply: 230V AC, 360°	**EE816**

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

EE880 - Infra-red corridor motion detector for surface mounting.
- 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.
- **EED505, EED515, EER505, EER515** -For spaces requiring modern, high-performance equipment
- Can be adjusted with the EE807 remote control
- Controlled with the EE808 remote control
- Can function as both master and slave
- Zero-crossing contact compatible with LED loads
- LED status visible on the front of the product
- 30x5m Range

EE880

Description	Flush Cat ref.	Surface Cat ref.
PIR Corridor Motion Detector 4x20 metres		**EE880**
Corridor motion detector 30 x 5 metres ON/OFF	**EER505** ★	**EER515** ★
Corridor motion detector 30 x 5 metres DALI 2	**EED505** ★	**EED515** ★

EE820

Motion Detectors

Characteristics:
- These devices are made for automatic control of lighting in both the residential and private/public industry sectors.
- They automatically switch on lighting when a person's movement is detected and light is needed. The lights turn off after a preset duration.

EE820/821, EE830/831, EE840/841, EE825/826, EE827/828
- This waterproof detector range (IP55) is mainly dedicated to outdoor applications.
- They are equipped with Fresnel lenses that permit to get a high detection performance.
- Detector 140° for access control and perimeter lighting
- 200° models to survey a house facade
- 360° to cover a house corner
- The fixing accessories allow ceiling and corner mounting.
- Settings: The timer and the lux level are set locally, via potentiometer.

Complies to IEC 60 669-1 and 60 669-2-1.

Standard IR Detectors

Characteristics:
- Surface
- 230 V~ 50/60 Hz
- Lux: 5 to 1000 lux
- Timer: pulse, 5s to 15 min
- Contact 10A AC1

Description	Version	Cat ref.
Standard wall-mounted IR detectors		
Phase outlet 230V 10A resistive	140° white	**EE820**
	140° anthracite	**EE821**
	200° white	**EE830**
	200° anthracite	**EE831**
Dry contact outlet 230V 10A resistive	360° white	**EE840**
	360° anthracite	**EE841**

EE850

Description	Version	Cat ref.
Enhanced wall-mounted IR detectors		
Dry contact outlet 230V 16A resistive setting and override through IR remote control	140° white	**EE850**
	140° anthracite	**EE851**
	220° white	**EE860**
	220° anthracite	**EE861**
	220/360° white	**EE870**
	220/360° anthracite	**EE871**
IR remote control for enhanced detectors, setting and lighting control functions		**EE806**

EE825

Description	Version	Cat ref.
Mounting accessories		
Corner mounting accessories for standard 140° and 200°detectors	white	**EE825**
	anthracite	**EE826**
Corner mounting accessories for standard 360° enhanced & radio TRExxx detectors	white	**EE855**
	anthracite	**EE856**
Ceiling mounting accessories for standard 140° and 200°detectors	white	**EE827**
	anthracite	**EE828**

Data is subject to errors and technical modifications. ★ New.

Klik LCM

Lighting Control Module

Most lighting control requires commissioning.

Klik LCM can be set up using our easy programming tool KlikLink, allowing quick and easy commissioning, whether completed by the contractor or a commissioning engineer.

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Klik
Lighting Control Module

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.

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

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.

KLCM413WETBT

Description	Cat ref.
13 Way 4 Channel LCM Wire in, Plug out, 230V EM Test Override	**KLCM413WETBT**
KlikLink iPad App	**Search KlikLink in iPad App Store**

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-5OS** is designed for use as a whole room sensor.

KLCM-OS

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-5OS

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	White Cat ref.	Black Cat ref.
4 Way Klik Lighting Distribution Unit	**KLDS4**	
6 Way Klik Lighting Distribution Unit	**KLDS6**	**KLDS6BLACK**
8 Way Klik Lighting Distribution Unit	**KLDS8**	
10 Way Klik Lighting Distribution Unit	**KLDS10**	
12 Way Klik Lighting Distribution Unit	**KLDS12**	

PCR2000/1.0

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

Characteristics:
- 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.
- Connections to luminaire is made via pre wired plug and lead. All leads are low smoke zero halogen and carry CPR rating Dca- S1b, d2, a2.
- All leads have prepared ends.

Description	Box Qty.	LSZH Cat ref.
6A Plug-in Ceiling Rose with 0.75mm² Flexible Cord		
1 Metre	10	**K4PCR20001M075DCA ★**
2 Metre	10	**K4PCR20002M075DCA ★**
3 Metre	5	**K4PCR20003M075DCA ★**
4 Metre	5	**K4PCR20004M075DCA ★**
6A Plug-in Ceiling Rose with 1mm² Flexible Cord		
2 Metre	10	**K4PCR20002M1DCA ★**
3 Metre	5	**K4PCR20003M1DCA ★**
4 Metre	5	**K4PCR20004M1DCA ★**
5 Metre	5	**K4PCR20005M1DCA ★**

CR64AX/1.0

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

Characteristics:
- 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.
- Connections to luminaire is made via pre wired plug and lead. All leads are low smoke zero halogen and carry CPR rating Dca- S1b, d2, a2
- All leads have prepared ends.

Description	Box Qty.	LSZH Cat ref.
6A Pre-wired Ceiling Rose with 0.75mm² Flexible Cord		
1 Metre	10	**K4PCR64AX1M075DCA ★**
2 Metre	10	**K4PCR64AX2M075DCA ★**
3 Metre	5	**K4PCR64AX3M075DCA ★**
4 Metre	5	**K4PCR64AX4M075DCA ★**
6A Pre-wired Ceiling Rose with 1mm² Flexible Cord		
2 Metre	10	**K4PCR64AX2M1DCA ★**
3 Metre	5	**K4PCR64AX3M1DCA ★**
4 Metre	5	**K4PCR64AX4M1DCA ★**
5 Metre	5	**K4PCR64AX5M1DCA ★**

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.
- Connections to luminaire is made via pre wired plug and lead. All leads are low smoke zero halogen and carry CPR rating Dca- S1b, d2, a2.

Description	Quantity	LSZH Cat ref.
6A Pre-wired Plugs		
2 Metre	10	K4P222M075DCA ★
3 Metre	5	K4P223M075DCA ★
4 Metre	5	K4P224M075DCA ★
6A Pre-wired Plugs with 1mm² Flexible Cord		
2 Metre	10	K4P222M1DCA ★
3 Metre	5	K4P223M1DCA ★
4 Metre	5	K4P224M1DCA ★
5 Metre	5	K4P225M1DCA ★

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.
- Connections to luminaire is made via pre wired plug and lead. All leads are low smoke zero halogen and carry CPR rating Dca- S1b, d2, a2
- All leads have prepared ends.

Description	Quantity	LSZH Cat ref.
6A Pre-wired Plugs with 0.75mm² Flexible Cord		
2 Metre	10	K4P64AX2M075DCA ★
3 Metre	5	K4P64AX3M075DCA ★
4 Metre	5	K4P64AX4M075DCA ★
6A Pre-wired Plugs with 1mm² Flexible Cord		
2 Metre	10	K4P64AX2M1DCA ★
3 Metre	5	K4P64AX3M1DCA ★
4 Metre	5	K4P64AX4M1DCA ★
5 Metre	5	K4P64AX5M1DCA ★

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.
- Connections to luminaire is made via pre wired plug and lead. All leads are low smoke zero halogen and carry CPR rating Dca- S1b, d2, a2.
- All leads have prepared ends.

Description	Quantity	LSZH Cat ref.
6A Pre-wired Plugs with 0.75mm² Flexible Cord		
2 Metre	10	K4P64AXR2M075DCA ★
3 Metre	5	K4P64AXR3M075DCA ★
4 Metre	5	K4P64AXR4M075DCA ★
6A Pre-wired Plugs with 1mm² Flexible Cord		
2 Metre 1.00mm² Flexible Cord	10	K4P64AXR2M1DCA ★
3 Metre 1.00mm² Flexible Cord	5	K4P64AXR3M1DCA ★
4 Metre 1.00mm² Flexible Cord	5	K4P64AXR4M1DCA ★
5 Metre 1.00mm² Flexible Cord	5	K4P64AXR5M1DCA ★

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

Characteristics:
- 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 / appliance side of the installation.

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

P64AX

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**

Data is subject to errors and technical modifications. ★ **New.**

:hager

3 Pin Plug Socket Outlets

Characteristics:
- 6A socket outlets are used in conjunciton 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.
- **S26/TC** socket is an **S26** architrave socket pre-assembled with a trunking clamp.

Description	Quantity	Cat ref.
Ultra Flush Socket White	10	**S21**
Architrave Socket White	10	**S26**
Architrave Socket comes with Trunking Clamp	10	**S26/TC**
3 Pin Round Socket White	10	**S27**
Ultra Flush Round Socket White	10	**S28**

S27

4 Pin (Including Auxiliary) Plug Socket Outlets

Characteristics:
- Klik auxiliary 6A socket outlets are used in conjunciton 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

Moulded Mounting Boxes

Description	Quantity	Cat ref.
Round Surface Box White	10	**MB2**

MB2

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 (without cable)	**EE815**

EE815

Remote Controls for Sensors

Characteristics:
- **EE807** programming tool is easy to use with 2 memory settings to enable repeatability.
- **EE808** 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	**EE807**
Remote Control	**EE808**

EE807   EE808

Accessories

Description	Cat ref.
Backbox Accessory for Surface BESA Detectors	**EEK005**

EE005

Occupancy/Movement 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

Description	Cat ref.
Occupancy/Movement Detector 360° Surface Mounted	**EE804A**
Occupancy/Movement Detector 360° Flush Mounted	**EE805A**

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.

Trunking

20mm conduit
bush & lock nut

20mm cut out

Use a machine screw
and nut to secure to
trunking using mounting
accessory
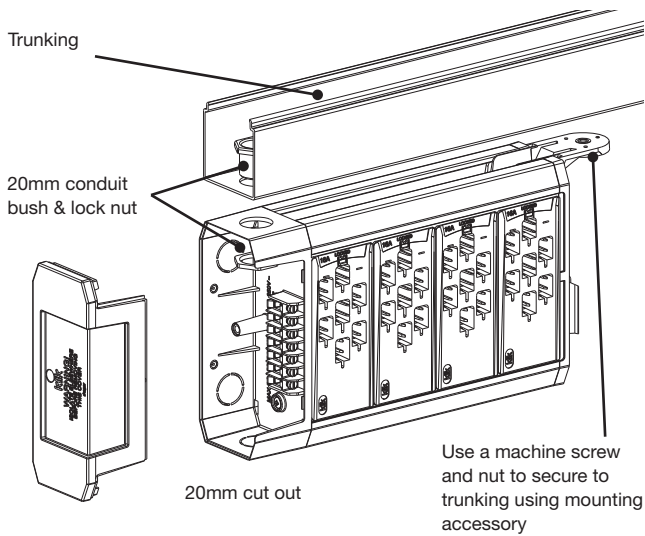
Fixed Wiring Connection

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.

Neutral
Line
Switched Line
CPC
Data +
Data -
Emergency Line
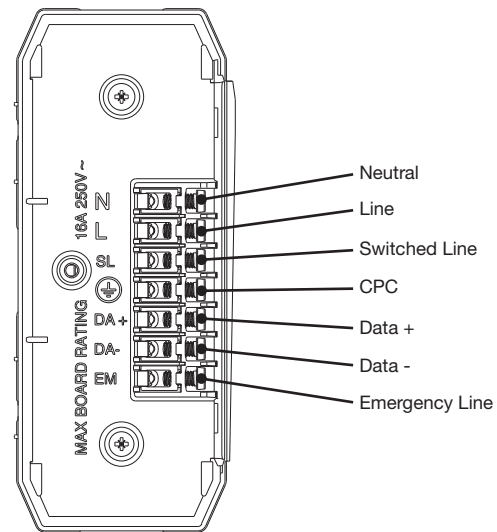
Mounting Options for Drop Rod (Lighting Marshalling Box)

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.
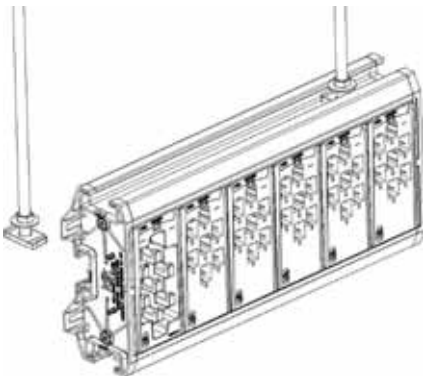
Option 2.
Single sided LMB can be mounted from the top as option 1 or from the rear
as shown. Note: Double sided LMBs can only be mounted with option 1.
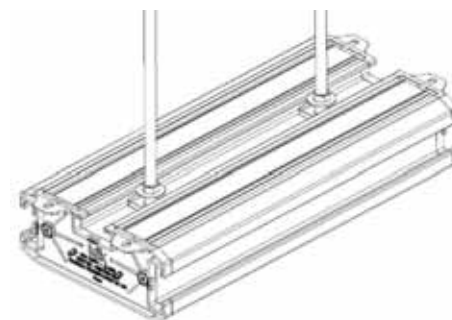
Mounting Options for Wall & Ceiling

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)

Data is subject to errors and technical modifications.
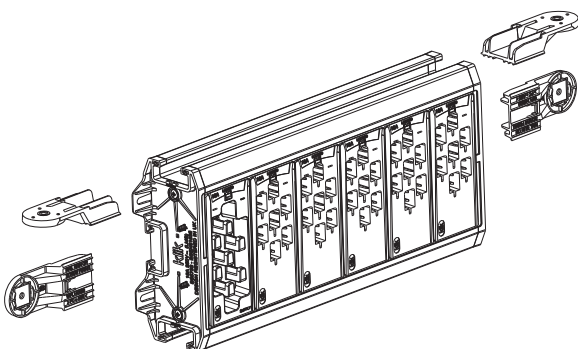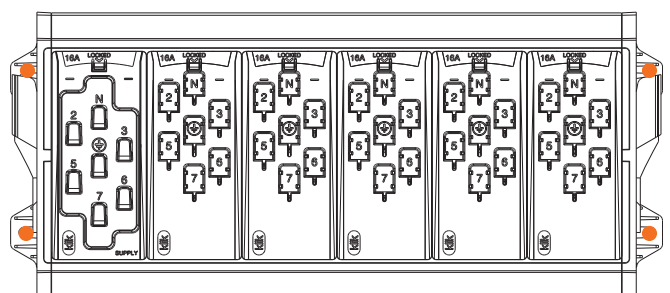
Lighting Marshalling Boxes (LMB) - Fixed Wiring
16A Rated LMB Complying to BS 5733:2010

Retained Cover
Screw
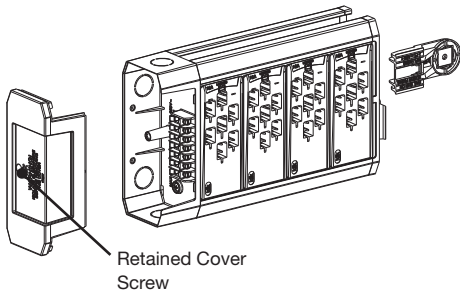
KLMB6W
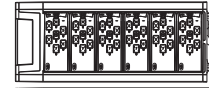
KLMB12W

Lighting Marshalling Boxes (LMB) - Pluggable
16A Rated LMB Complying to BS 5733:2010
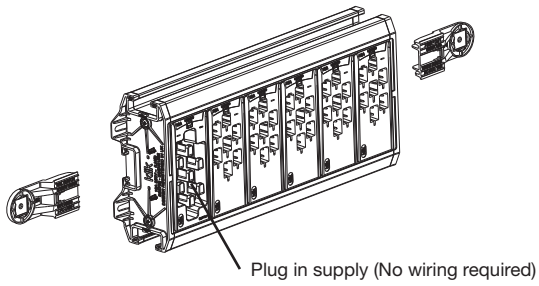
KLMB5P

KLMB7P

KLMB9P

KLMB11P

Plug in supply (No wiring required)
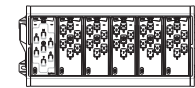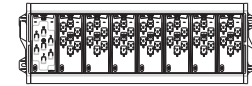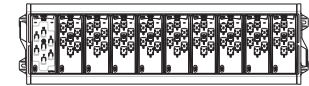
| Previous Reference	Description	New Reference	New Description
K7B3M075W	6A Lighting Lead 3m 0.75mm 3 Core P-W	K7B3M075WDCA ★	6A Lighting Lead 3m 0.75mm 3 Core P-W
K7B3M1W	10A Lighting Lead 3m 1mm 3 Core P-W	K7B3M1WDCA ★	10A Lighting Lead 3m 1mm 3 Core P-W
K7B5M075W	6A Lighting Lead 5m 0.75mm 3 Core P-W	K7B5M075WDCA ★	6A Lighting Lead 5m 0.75mm 3 Core P-W
K7B5M1W	10A Lighting Lead 5m 1mm 3 Core P-W	K7B5M1WDCA ★	10A Lighting Lead 5m 1mm 3 Core P-W
K7E3M15W	16A Lighting Lead 3m 1.5mm 3 Core P-W	K7E3M15WDCA ★	16A Lighting Lead 3m 1.5mm 3 Core P-W
K7E5M15W	16A Lighting Lead 5m 1.5mm 3 Core P-W	K7E5M15WDCA ★	16A Lighting Lead 5m 1.5mm 3 Core P-W
K7F5M1W	10A Switch Drop Lead 5m 1mm 4 Core P-W	K7F5M1WDCA ★	10A Switch Drop Lead 5m 1mm 4 Core P-W
K7E7M15W	16A Luminaire Lead 7m $1.5mm^2$ 3 Core Plug to Wire	K7E7M15WDCA ★	16A Luminaire Lead 7m $1.5mm^2$ 3 Core Plug to Wire
K7F10M1W	10A Switch Drop Lead 10m 1mm 4 Core P-W	K7F10M1WDCA ★	10A Switch Drop Lead 10m 1mm 4 Core P-W
K7F15M1W	10A Switch Drop Lead 15m 1mm 4 Core P-W	K7F15M1WDCA ★	10A Switch Drop Lead 15m 1mm 4 Core P-W
K7J3M1W	10A Lighting Lead 3m 1mm 4 Core P-W	K7J3M1WDCA ★	10A Lighting Lead 3m 1mm 4 Core P-W
K7J5M1W	10A Lighting Lead 5m 1mm 4 Core P-W	K7J5M1WDCA ★	10A Lighting Lead 5m 1mm 4 Core P-W
K7P1M075W	6A Lighting Lead 1.5m 0.75mm 5 Core P-W	K7P1M075WDCA ★	6A Lighting Lead 1.5m 0.75mm 5 Core P-W
K7P1M15W	16A Lighting lead 1m 1.5mm 5 core P-W	K7P1M15WDCA ★	16A Lighting lead 1.5m 1.5mm 5 core P-W
K7P1M1W	10A Lighting lead 1m 1mm 5 core P-W	K7P1M1WDCA ★	10A Lighting lead 1.5 1mm 5 core P-W
K7P3M075W	6A Lighting Lead 3m 0.75mm 5 Core P-W	K7P3M075WDCA ★	6A Lighting Lead 3m 0.75mm 5 Core P-W
K7P3M15W	16A Lighting Lead 3m 1.5mm 5 Core P-W	K7P3M15WDCA ★	16A Lighting Lead 3m 1.5mm 5 Core P-W
K7P3M1W	10A Lighting Lead 3m 1mm 5 Core P-W	K7P3M1WDCA ★	10A Lighting Lead 3m 1mm 5 Core P-W
K7P5M075W	6A Lighting Lead 5m 0.75mm 5 Core P-W	K7P5M075WDCA ★	6A Lighting Lead 5m 0.75mm 5 Core P-W
K7P5M15W	16A Lighting Lead 5m 1.5mm 5 Core P-W	K7P5M15WDCA ★	16A Lighting Lead 5m 1.5mm 5 Core P-W
K7P7M15W	16A Lighting Lead 7m 1.5mm 5 Core P-W	K7P7M15WDCA ★	16A Lighting Lead 5m 1.5mm 5 Core P-W
K7P5M1W	10A Lighting Lead 5m 1mm 5 Core P-W	K7P5M1WDCA ★	10A Lighting Lead 5m 1mm 5 Core P-W
K7P7M1W	10A Lighting Lead 7m 1mm 5 Core P-W	K7P7M1WDCA ★	10A Lighting Lead 7m 1mm 5 Core P-W
K7T1M075W	6A Lighting Lead 1.5m 0.75mm 6 Core P-W	K7T1M075WDCA ★	6A Lighting Lead 1.5m 0.75mm 6 Core P-W
K7T1M1W	10A Lighting Lead 1.5m 1mm 6 Core P-W	K7T1M1WDCA ★	10A Lighting Lead 1.5m 1mm 6 Core P-W
K7T3M075W	6A Lighting Lead 3m 0.75mm 6 Core P-W	K7T3M075WDCA ★	6A Lighting Lead 3m 0.75mm 6 Core P-W
K7T3M1W	10A Lighting Lead 3m 1mm 6 Core P-W	K7T3M1WDCA ★	10A Lighting Lead 3m 1mm 6 Core P-W
K7T5M075W	6A Lighting Lead 5m 0.75mm 6 Core P-W	K7T5M075WDCA ★	6A Lighting Lead 5m 0.75mm 6 Core P-W
K7T7M075W	6A Lighting Lead 7m 0.75mm 6 Core P-W	K7T7M075WDCA ★	6A Lighting Lead 7m 0.75mm 6 Core P-W
K7T5M1W	10A Lighting Lead 5m 1mm 6 Core P-W	K7T5M1WDCA ★	10A Lighting Lead 5m 1mm 6 Core P-W
K7B5M15W	16A Lighting Lead 5m $1.5mm^2$ 3 Core Plug to Wire	K7B5M15WDCA ★	16A Lighting Lead 5m $1.5mm^2$ 3 Core Plug to Wire
K7Z3M15P	16A Lighting Link Lead 3m 1.5mm 7 Core P-P	K7Z3M15PDCA ★	16A Lighting Link Lead 3m 1.5mm 7 Core P-P
K7Z5M15P	16A Lighting Link Lead 5m 1.5mm 7 Core P-P	K7Z5M15PDCA ★	16A Lighting Link Lead 5m 1.5mm 7 Core P-P

KLPCR - Surface Mount Connector

Retained cover & screw.

Cut out provided for cable entry when surface mounting.

Cover catch, holds cover open to aid installation on ceilings.

7 Pin Socket.

Cover clip.
Open space, cables are not stressed when terminated and cover is closed.
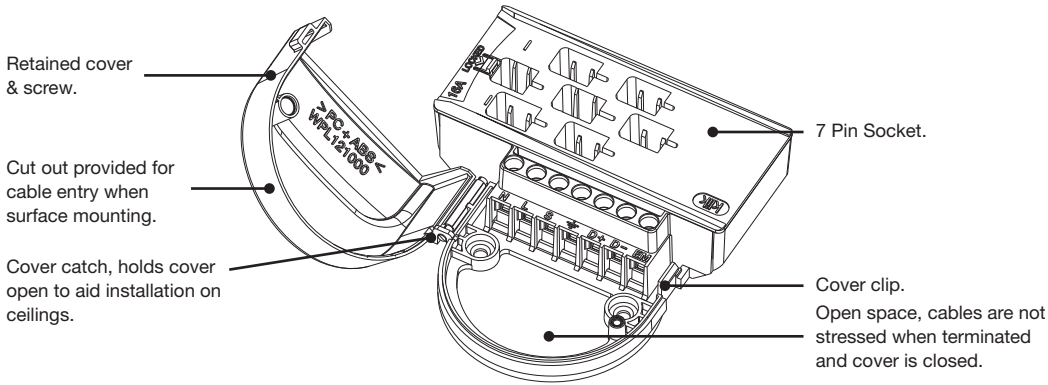
PCR can be mounted in two ways, firstly on to conduit box or secondly direct on to a surface.
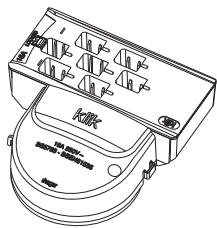
Terminating cables.
Terminal screws are retained in pockets.
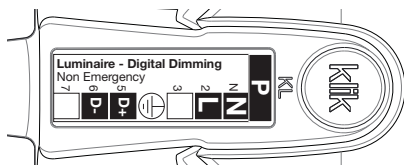Max Terminal Capacity 2x4mm²
Conductor strip length: 10mm.

Neutral
Line
Switch Line
CPC
Data +
Data -
Emergency Line
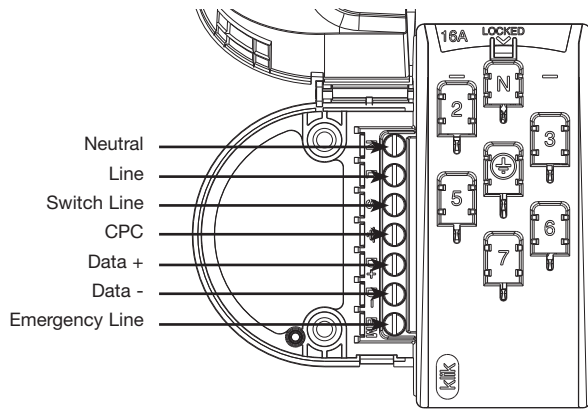
K7PLUG Wireable Plug Configurations and Labels

Self Adhesive ID Labels:
Apply label for the type of lead you are making.

Lighting configurations for on / off and dimmable solutions.

Luminaire - Digital Dimming
Non Emergency

Luminaire Connections	**Switch Drops**	**Link Lead**
On/Off Non Emergency — **B**	**1 Gang - 1 Way or Retractive** N/O for Digital OS Wall Dimming Control — **D**	**Power Only** — **A**
On/Off Switched Emergency — **J**	**Retractive N/O Switch Absense or Override off for OS** — **L**	**Power with Emergency** — **G**
Digital Dimming Non Emergency — **P**	**Switch Drop for Emergency Key Switch** — **C**	**Power with Switching and Emergency** — **K**
Digital Dimming Emergency — **T**	**2 Gang, 1 Way plus Emergency Key Switch** — **H**	**Power, Switched Line, Control & Emergency** — **N**
Emergency Exit — **E**	**2 Gang, 2 Way Plus Emergency Key Switch** — **R**	**DALI Link Lead** — **W**

EEK Sensors

Detection areas
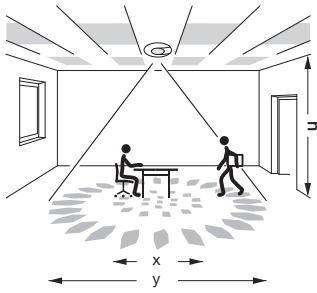
H	2.5m	3m	3.5m
X	5m	5m	5m
Y	7m	8m	9m

Mounting

ceiling

Protective cover

Cable clamp

For programming and control see page 36.

**Settings EEK513P/EEK515P EEK523P/EEK525P**
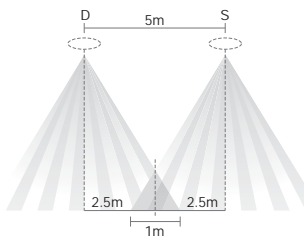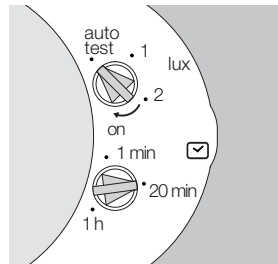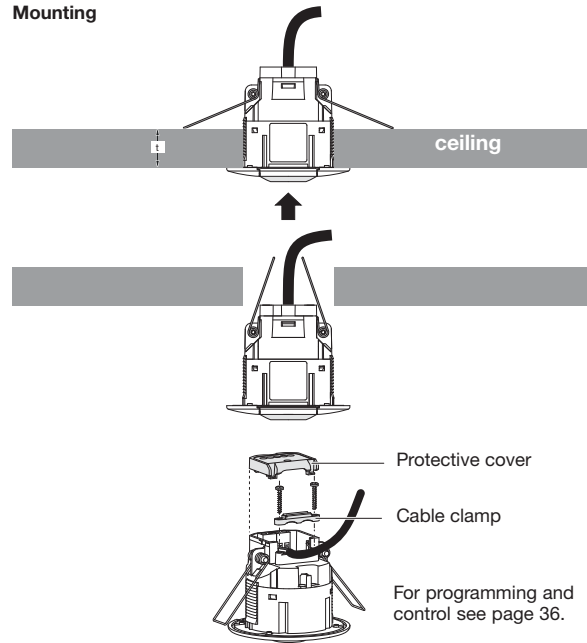
EE804A / EE805A Sensors
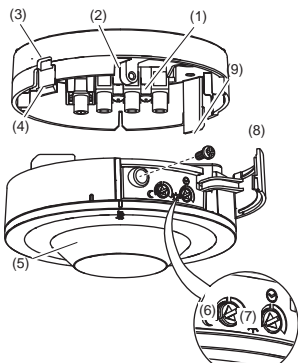
1. Connecting terminals
2. Mounting device locking screw
3. Release opening
4. Fastening grids
5. Detector lens
6. Response brightness potentiometer
7. Potentiometer delay time
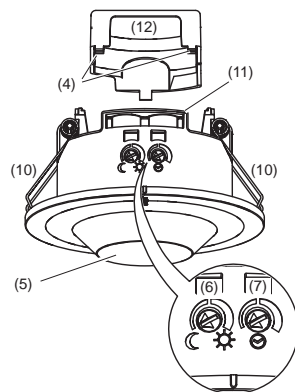
8. Cover for potentiometer
9. Locking screw
10. Fixing springs
11. Strain relief with mounting device for cable ties
12. Cover for connection compartment
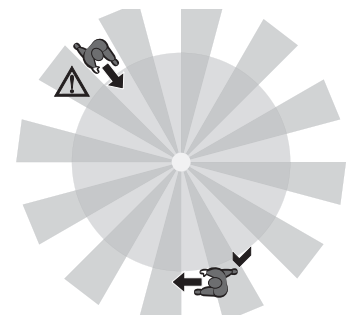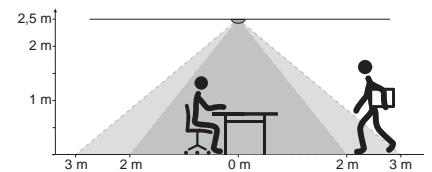
Klik 7 Pin Product Standards

Product Description	Klik Product identification	BS number	Description
Klik 7 pin Marshalling Boxes	KLMB*W	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 couplers for domestic, light industrial & commercial use.
Luminaire Leads	KLB*, KLJ*, KLP*, KLT*	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.
LSOH 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 K7*	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
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				
	0.75mm²	1.0mm²	1.5mm²	2.5mm²	4.0mm²
Socket Outlets	-	5	4	3	2
Plugs P22, P64X, P26 K7PLUG	1	1	1	-	-
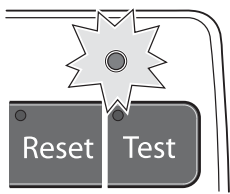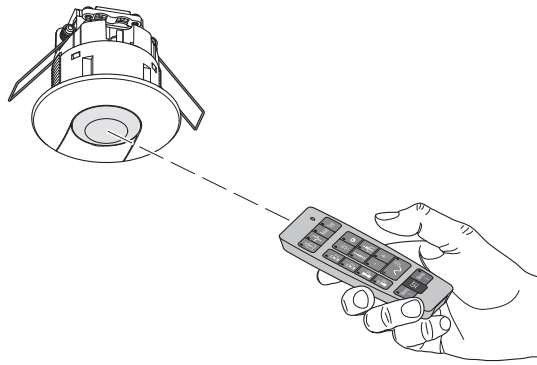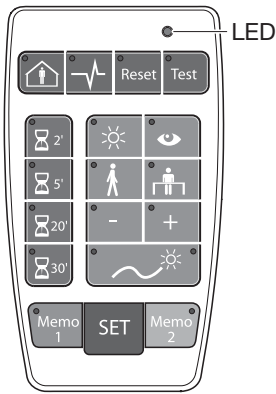
LED

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

Reset + SET

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.

20' + 5' + (corridor) + SET
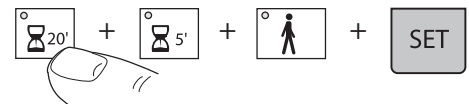
In the case of 2 opposite states the green LED denotes ON and red LED denotes OFF (except Presence / Absence).
When no function is selected all LED's are OFF.
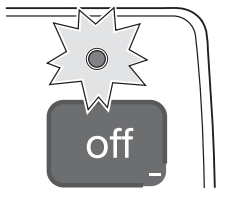
Settings available

Key	Meaning	Indication	Function
(presence icon)	Presence	Green LED on	Presence on (automation mode)
	Absence	Red LED on	Absence on (semi automatic mode)
(power up icon)	Power Up	Green LED on	The light is automatically switched on for 30 seconds after power up
		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
(time icon)	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'
(sun icon)	Day level 1000 Lux	LED on	To set the value to 1000 Lux
(eye icon)	Learn	LED on	To learn the current Lux level
(person icon)	Corridor 200 Lux	LED on	To set the value to 200 Lux
(office icon)	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)
(cell icon)	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**
Memo 1	Press	LED is on until a setting is changed	To load/unload 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
Memo 2	Press	LED is on until a setting is changed	To load/unload 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
SET	Short press (<5s)	LED flashes	To send an IR message of the current setting
	Long press (>5s but <10s) only available if no setting active	LED blinks until release press	To toggle automatic mode on DALI/DSI

Data is subject to errors and technical modifications.

:hager

LED
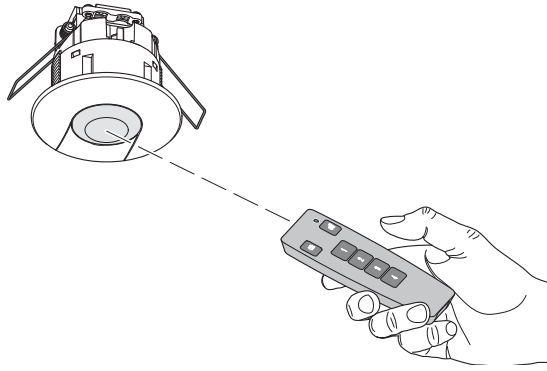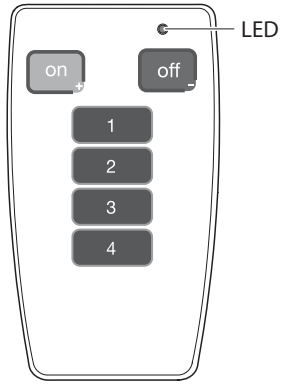
Use
The remote control allows the user to set or modify settings on the presence detectors **EEK513W** and **EE815**.

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	**EE815**
	Long Press (> 5s.)	Dim up	**EE815**
off −	Short Press	Off	**EE815**
	Long Press (> 5s.)	Dim down	**EE815**
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	

Technical characteristics	Klik 4 Wireable, Flush Mount **EE815**	Wireable, Surface Mount **EE804A**	Wireable, Flush Mount **EE805A**
Supply voltage	230V~ 50Hz	230V - 50Hz	230V - 50Hz
Detection type	Presence	Motion / Presence	Motion / Presence
Parasitic power	270mW	0.3W	0.3W
Detection (Length)	7m	6m	6m
Detection (Width)	7m	6m	6m
Detection angle	360°	360°	360°
Detection frequency	-	-	-
Receiver class	-	-	-
Standby consumption	2.4VA/270mW	-	-
	1min to 1hour	5s - 30min	5s - 30min
Duration of time delay (S2)	-	-	-
Luminosity threshold	5 to 1000 Lux	5 - 1000	5 - 1000
Recommended installation height	2.5m	2.5m	2.5m
Operating temperature	-10°C to +45°C	-5 - +45	-5 - +45
Storage temperature	-20°C to +60°C	-25 - +70	-25 - +70
Insulation class	II	11	11
Protection rating	IP41	IP21	IP21
Standards	BS EN 60669-1 BS EN 60669-2-1		
Pollution degree	2		
Connection stranded	0.5mm^2 to 1.5mm^2	1mm - 2.5mm	1mm - 2.5mm
Connection solid	0.5mm^2 to 1.5mm^2	1mm - 2.5mm	1mm - 2.5mm
Switching channel	1	1	1
Lighting loads 230V~ AC1	16A	10A	10A
Switching capacity (Incandescent)	2300W	2300W	2300W
Halogen lamps LV	-		
Halogen ELV (12 or 24V) via ferromagnetic or electronic transformer	1500W	2300W	2300W
Compact fluorescent	23 X 23W	20 x 20W	20 x 20W
LED	20 X20W	20 x 20W	20 x 20W
Parallel compensated fluorescent tubes	1000W	1000W	1000W
Fluorescent tubes non-compensated	1000W	1000W	1000W
Electronic ballast	-	1000W	1000W
DSI/DALI ballast	-	-	-
Remote programming	EE807	-	-
Remote control	EE808	-	-
Adjustable shutters (supplied)	✕	✕	✕
Dimensions (L*W*H)	80 x 80 x 70mm	ø 100 x 50mm	ø 90 x 61mm

Klik 7 — Special Applications

Digital, Wireable, Flush	Wireable, Surface Mount, Corridor	Wireable, Surface Mount, Hyper Frequency	Wireable, Semi-Recessed, 1 / 2 Channel		Large area motion/presence detector 20 m Flush / surface
EE815	**EE880**	**EE883**	**EE810 / EE811**		**EER503/EER513**
230V~ 50Hz	230V~ 50Hz	230V~ 50Hz	230V~ 50Hz		230 V v, +10%/-15%,240 V v, +6/-6% 50/60 Hz
Presence	Motion	Motion	Presence		Motion and presence detector
60mW	1W	1W	1.2W		
7m	20m	1m to 8m	15.5m		20m
7m	4m	1m to 8m	8m		10m
360°	360°	360°	360°		360°
-	-	5.8 Ghz ± 0.075 Ghz	-		
-	-	2	-		
60mW	1W	1W	1.2W		< 0.5 W
1min to 1hour	5sec to 15 min	5sec to 15 min	1min to 30min		
-	-	-	30sec to 60min		
5 to 1000 Lux	2 to 2000 lux	2… 2000 lux	5 to 1200Lux		
2.5m	3 m	2.5 m	3 m		
-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	35°C to +70°C	35°C to +70°C	10°C to +60°C		
II	II	II	II		
IP41	IP54	IP54	IP41		
BS EN 60669-1 BS EN 60669-2-1	BS EN 60669-1 BS EN 60669-2-1	BS EN 60669-2-1 EN 300 440-1 V1.3.1	BS EN 60669-1 BS EN 60669-2-1		
2	2	2	2		
0.5mm^2 to 1.5mm^2	Max 1.5mm^2	Max 1.5mm^2	1mm^2 to 4mm^2		
0.5mm^2 to 1.5mm^2	Max 1.5mm^2	Max 1.5mm^2	1mm^2 to 4mm^2		
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)	-	-	-		
EE807	✗	✗	✗		EE807
EE808	✗	✗	✗		EE808
✗	✗	✗	✗		
80 x 80 x 70mm	125 x 125 x 60mm		110 x 110 x 70mm		(Ø x H) 85 x 75.9 mm flush mounted EER503 (Ø x H) 105 x 59.7 mm surface mounted EER513

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
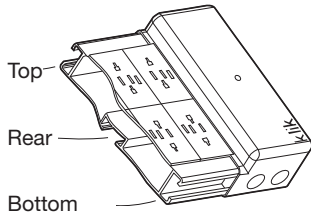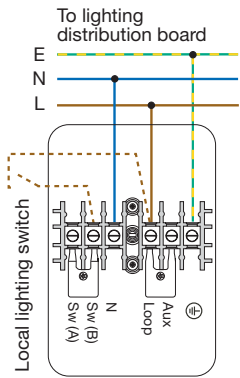
Drop rods on sides

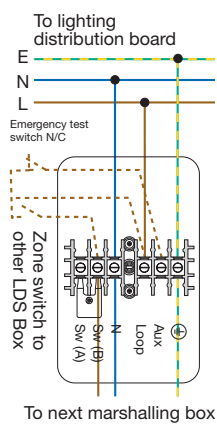Screw to surface

Drop rods on rear

Top

Rear

Bottom

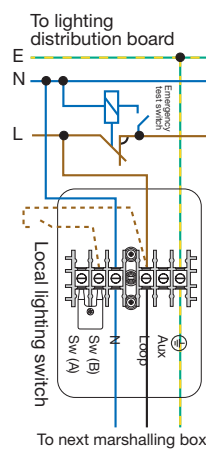**Local Lighting Switch Control**
Permanent emergency feed

To lighting distribution board

E
N
L

Local lighting switch

N
Sw (B)
Sw (A)
Aux
Loop

Local Lighting Switch Control
Centralised emergency test via key switch

To lighting distribution board

E
N
L

Emergency test switch N/C

Zone switch to other LDS Box

N
Sw (B)
Sw (A)
Aux
Loop

To next marshalling box

Zone Lighting Control
Local emergency test control

To lighting distribution board

E
N
L

Emergency test switch

Local lighting switch

N
Sw (B)
Sw (A)
Aux
Loop

To next marshalling box

All ways switched by a single Hager occupancy sensor

Circuit B

Normally open retractive wall switch

SW(A)
SW(B)
N
LOOP
AUX

Copper Link (1)
Copper Link (2)

LOOP
NEUTRAL
SWITCH
RETURN

Terminal block wall switch (grey)

Circuit A

LOOP (brown)
NEUTRAL (blue)
Sw B (black)
Sw A (black)
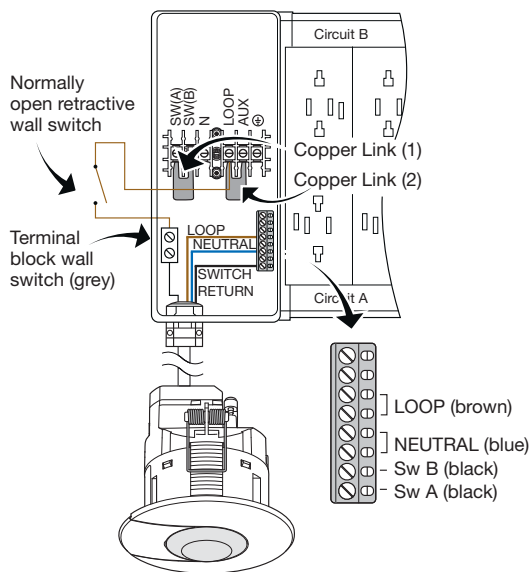
Switch wire to be connected as required.

Connected directly to a single luminaire

Normally open retractive wall switch
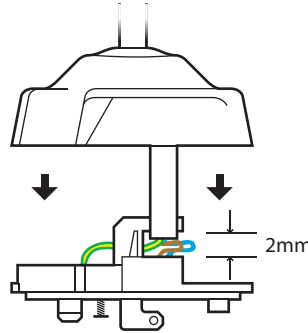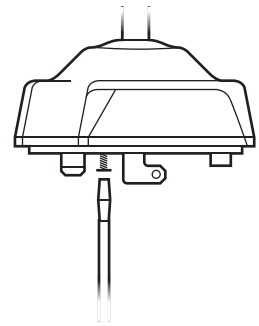
E
N
L

NEUTRAL
LINE
SWITCHED LINE
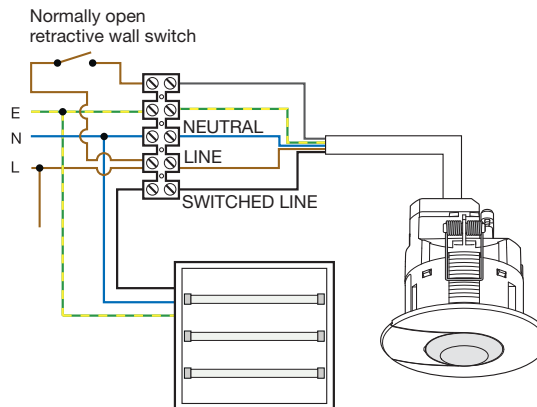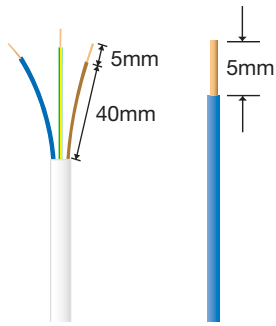
1. Strip cable as above -
Note: Trim cable tails to double over for better terminal contact.
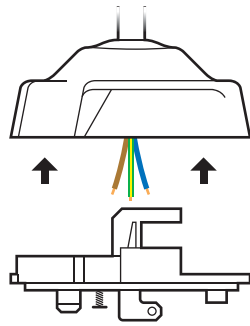
2. Remove plug cover.

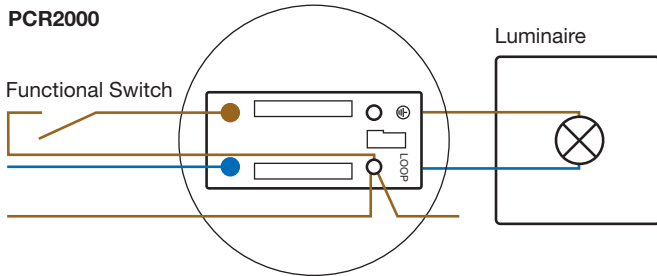3. Pass cable through plug cover centre hole.

4. Terminate conductors into terminals.

5. Push outer sheath of cable firmly into jaws of sheath grip, making sure that at least 2mm of sheath protrudes below the grip.
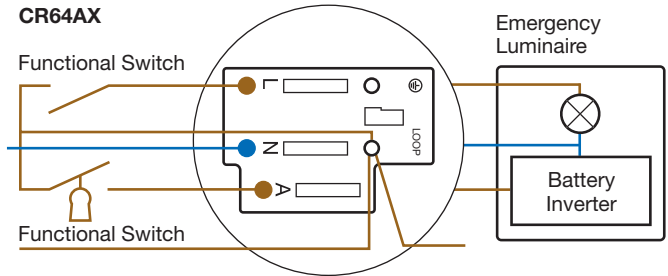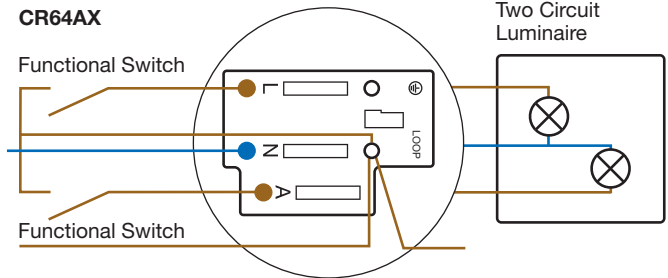
6. Refit cover.

PCR2000

Functional Switch

Luminaire

CR64AX

Functional Switch

Functional Switch

Emergency Luminaire

Battery Inverter

CR64AX

Functional Switch

Functional Switch

Two Circuit Luminaire

Note: earth connections omitted for clarity

:hager

:hager

Hager Ltd. - Ireland
Unit M2
Furry Park Industrial Estate
Swords Road
Santry
Dublin
D09 NY19
Ireland

Republic of Ireland Tel: 1890 551 502
Republic of Ireland Fax: 1890 551 503
Northern Ireland Tel: 00 44 (0)28 90020165
Northern Ireland Fax: 00 353 1 8869520

customer.service@hager.ie
technical.service@hager.ie

hager.ie