



klik

klik is a secure lighting and control connection system that provides simultaneous mechanical and electrical connection in one plug-in action. Control solutions are provided utilising Hager wall switching, occupancy sensing, the klik Lighting Control Module and integrating our KNX control products.

Luminaires can be connected in second in absolute safety, without circuit isolation. All live contacts are inaccessible and the earth connection is made before any other. klik exceeds the relevant British Standard requirements and enables compliance with IEE Wiring Regulations.

Whether a conduit based installation or a fully pluggable system, klik is the lighting connection solution for all lighting designs.

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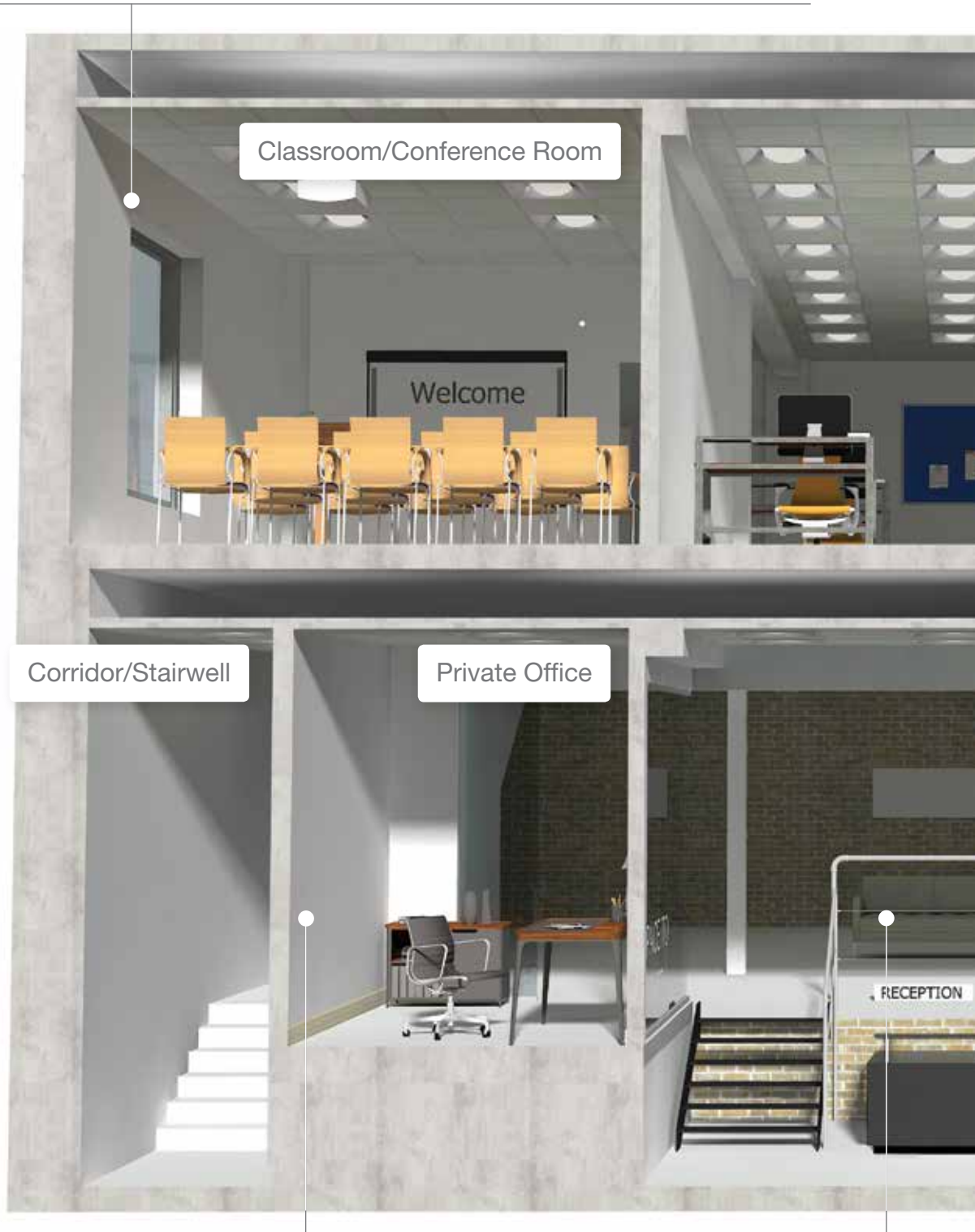
From application to solution...

Functional Needs:

Wall switch to switch on/off (x2) or switch on with wall switch / off automatically with ability to dim up & down all lights when occupied.
Dim front row (next to screen)
Dim lights next to windows when sufficient daylight.

Solution:

klik LCM, 4 channel, with daylight dimming & scene setting & override switch.
2x occupancy sensors set to absence
2x 2 way retractable wall switches - next to door, next to screen.



Functional Needs:

Office permanently occupied 9am to 5pm, lights only come on if switched by wall switch, switch off automatically after time out.
Corridor must stay lit when any ground floor office is occupied.

Solution:

Klik LCM linked to other offices & corridor/stair well, with retractable on/off switch and 1 x occupancy sensor set to absence.

Functional Needs:

Occasionally occupied but lighting needs to be on from 9-5pm and then some lights timed off and some dimmed.

Solution:

LCM with two profiles & daylight dimming at front or standard klik (digital sensor)

Functional Needs:

Light auto on when occupied
Dimming only where near window 20 minutes time out to 50% the after 30 mins off.

Solution:

If corridor linked LCM, if not, KLMB x2 & 4x occupancy sensors (no wall switches)

Functional Needs:

Lights auto on/auto off when occupied/unoccupied with min timeout of 40 mins reduced to 75% for a further 20 mins then off.

Solution:

KLMB6 + occupancy sensor or KLCM + occupancy sensor



Functional Needs:

Occasional use manual, switch on, auto off (After time out).
Dim all lights and ability, to dim from 20%, 50%, 80% front to back.

Solution:

KLCM or KNX (to control blinds).

klik 4 pin

Lighting Distribution System

With the klik connector, luminaires can be plugged in seconds, with absolute safety and without circuit isolation. The secure mechanical and electrical connection gives complete confidence in the systems integrity.

Today there is pressure on all areas of construction is to reduce costs. The installation speed of klik makes a significant contribution to both the on-site wiring and on-going maintenance costs, whether from a single outlet PCR or a multi-outlet marshalling box.



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KLDS4



KLDS4



KLDS12

Marshalling Boxes

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
- Main terminal rating 16 Amps
- Socket outlet rating 6 Amps
- Separate terminals for flexible conductors, rating 10 Amps
- Socket outlets accept either klik lighting (3 pin) plugs, klik auxiliary (4 pin) plugs and klik pre-wired leads

Description	Pack qty.	Cat ref.
4 Way klik Lighting Distribution Unit	1	KLDS4
6 Way klik Lighting Distribution Unit	1	KLDS6
8 Way klik Lighting Distribution Unit	1	KLDS8
10 Way klik Lighting Distribution Unit	1	KLDS10
12 Way klik Lighting Distribution Unit	1	KLDS12

Occupancy Sensors



EEK510B

Hager occupancy sensors come complete with integral photocell and the facility for wall switch override.

- Can be programmed for presence or absence
- Range 7m diameter for large movements, 5m diameter for small movements
- Factory presets, lux = 400, time = 20 min, presence detection

- 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	Pack qty.	Cat ref.
Standard Occupancy Sensor, Pre-Wired 3m	1	EEK513W
Standard Occupancy Sensor, Pre-Wired 5m	1	EEK515W
Standard Occupancy Sensor (without cable)	1	EEK510B
Surface Mount Kit	1	EEK005
Programming Tool	1	EEK001
Remote Control	1	EEK002



EEK001



PCR2000

4 Pin Plug-In Ceiling Rose & Cover

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 6972 and BS 5733:2010
- Sockets have 4 terminations: line, neutral, earth and loop-in

- Plugs have 3 terminations: line, neutral and CPC
Fixing: 50.8mm Standard Diagonal (BESA)

Description	Pack qty.	Cat ref.
4 Pin Plug-in Ceiling Rose White	10	PCR2000



CR64AX/R

4 Pin plus Auxiliary Plug-In Ceiling Rose & Cover

klik.AX 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
- 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
- Sockets have 5 terminations: line, neutral, CPC, auxiliary and loop-in
- Plugs have 4 terminations: line, neutral, CPC and auxiliary

Description	Pack qty.	Cat ref.
5 Pin Plug-in Ceiling Rose White	10	CR64AX
5 Pin Plug-in Ceiling Rose Red	10	CR64AX/R

Spare Ceiling Rose Cover



A1

Description	Pack qty.	Cat ref.
Ceiling Rose Cover White	10	A1
Ceiling Rose Cover Red	10	A1/R



A1/R



PCR2000/1.0

4 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
- 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

Length	Pack qty.	PVC Cat ref.	Low smoke zero halogen Cat ref.
1 Metre 0.75mm ² Flexible Cord	10	PCR2000/1.0	PCR2000/LSF/1.0
2 Metre 0.75mm ² Flexible Cord	10	PCR2000/2.0	PCR2000/LSF/2.0
3 Metre 0.75mm ² Flexible Cord	5	PCR2000/3.0	PCR2000/LSF/3.0
4 Metre 0.75mm ² Flexible Cord	5	PCR2000/4.0	PCR2000/LSF/4.0
2 Metre 1.00mm ² Flexible Cord	10	PCR2000/1.0PVC/2	PCR2000/1.0LSF/2
3 Metre 1.00mm ² Flexible Cord	5	PCR2000/1.0PVC/3	PCR2000/1.0LSF/3
4 Metre 1.00mm ² Flexible Cord	5	PCR2000/1.0PVC/4	PCR2000/1.0LSF/4
5 Metre 1.00mm ² Flexible Cord	5	PCR2000/1.0PVC/5	PCR2000/1.0LSF/5



CR64AX/1.0

4 Pin plus Auxiliary Pre-Wired 6A Plug-in Ceiling Rose

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
- 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

Length	Pack qty.	PVC Cat ref.	Low smoke zero halogen Cat ref.
1 Metre 0.75mm ² Flexible Cord	10	CR64AX/1.0	CR64AX/LSF/1.0
2 Metre 0.75mm ² Flexible Cord	10	CR64AX/2.0	CR64AX/LSF/2.0
3 Metre 0.75mm ² Flexible Cord	5	CR64AX/3.0	CR64AX/LSF/3.0
4 Metre 0.75mm ² Flexible Cord	5	CR64AX/4.0	CR64AX/LSF/4.0
2 Metre 1.00mm ² Flexible Cord	10	CR64AX/1.0PVC/2	CR64AX/1.0LSF/2
3 Metre 1.00mm ² Flexible Cord	5	CR64AX/1.0PVC/3	CR64AX/1.0LSF/3
4 Metre 1.00mm ² Flexible Cord	5	CR64AX/1.0PVC/4	CR64AX/1.0LSF/4
5 Metre 1.00mm ² Flexible Cord	5	CR64AX/1.0PVC/5	CR64AX/1.0LSF/5



P22

4 Pin Plug

klik 4 pin plugs are used to connect into a klik 4 pin socket giving a pluggable connection to luminaires.

- Complies with BS 6972 and BS 5733
- 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	Pack qty.	Cat ref.
4 Pin Plug White	10	P22



P64AX/R

4 Pin plus Auxiliary Plug

klik 4 pin plus auxiliary plugs are used to connect into the klik 4 pin sockets giving a pluggable connection to luminaires.

- Complies with BS 6972 and BS 5733
- Suitable for use with any klik 3 or 4 pin sockets

- P22 plug is supplied in a plug-in ceiling rose, Cat. Ref. PCR2000
- 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	Pack qty.	Cat ref.
White with Cord Grip and Cover, 57mm x 25mm x 44mm	10	P64AX
Red with Cord Grip and Cover, 57mm x 25mm x 44mm	10	P64AX/R



P22/1.0

4 Pin Pre-Wired 6A Plugs

6A pre-wired plugs are used to connect luminaires to a klik ceiling rose or marshalling box.

- Complies with BS 6972 and BS 5733
- 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

Length	Pack qty.	PVC Cat ref.	Low smoke zero halogen Cat ref.
1 Metre 0.75mm ² Flexible Cord	10	P22/1.0	P22/LSF/1.0
2 Metre 0.75mm ² Flexible Cord	10	P22/2.0	P22/LSF/2.0
3 Metre 0.75mm ² Flexible Cord	5	P22/3.0	P22/LSF/3.0
4 Metre 0.75mm ² Flexible Cord	5	P22/4.0	P22/LSF/4.0
2 Metre 1.00mm ² Flexible Cord	10	P22/1.0PVC/2	P22/1.0LSF/2
3 Metre 1.00mm ² Flexible Cord	5	P22/1.0PVC/3	P22/1.0LSF/3
4 Metre 1.00mm ² Flexible Cord	5	P22/1.0PVC/4	P22/1.0LSF/4
5 Metre 1.00mm ² Flexible Cord	5	P22/1.0PVC/5	P22/1.0LSF/5



P64AX/1.0

4 Pin plus Auxiliary Pre-Wired 6A Plugs - White

klik.AX 6A pre-wired plugs are used to connect luminaires to a klik ceiling rose or marshalling box.

- Complies with BS 6972 and BS 5733
- 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

Length	Pack qty.	PVC Cat ref.	Low smoke zero halogen Cat ref.
1 Metre 0.75mm ² Flexible Cord	10	P64AX/1.0	P64AX/LSF/1.0
2 Metre 0.75mm ² Flexible Cord	10	P64AX/2.0	P64AX/LSF/2.0
3 Metre 0.75mm ² Flexible Cord	5	P64AX/3.0	P64AX/LSF/3.0
4 Metre 0.75mm ² Flexible Cord	5	P64AX/4.0	P64AX/LSF/4.0
2 Metre 1.00mm ² Flexible Cord	10	P64AX/1.0PVC/2	P64AX/1.0LSF/2
3 Metre 1.00mm ² Flexible Cord	5	P64AX/1.0PVC/3	P64AX/1.0LSF/3
4 Metre 1.00mm ² Flexible Cord	5	P64AX/1.0PVC/4	P64AX/1.0LSF/4
5 Metre 1.00mm ² Flexible Cord	5	P64AX/1.0PVC/5	P64AX/1.0LSF/5



P64AXR/1.0

4 Pin plus Auxiliary Pre-Wired 6A Plugs - Red

klik.AX 6A pre-wired plugs are used to connect luminaires to a klik ceiling rose or marshalling box.

- Complies with BS 6972 and BS 5733
- 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

Length	Pack qty.	PVC Cat ref.	Low smoke zero halogen Cat ref.
1 Metre 0.75mm ² Flexible Cord	10	P64AXR/1.0	P64AXR/LSF/1.0
2 Metre 0.75mm ² Flexible Cord	10	P64AXR/2.0	P64AXR/LSF/2.0
3 Metre 0.75mm ² Flexible Cord	5	P64AXR/3.0	P64AXR/LSF/3.0
4 Metre 0.75mm ² Flexible Cord	5	P64AXR/4.0	P64AXR/LSF/4.0
2 Metre 1.00mm ² Flexible Cord	10	P64AXR/1.0PVC/2	P64AXR/1.0LSF/2
3 Metre 1.00mm ² Flexible Cord	5	P64AXR/1.0PVC/3	P64AXR/1.0LSF/3
4 Metre 1.00mm ² Flexible Cord	5	P64AXR/1.0PVC/4	P64AXR/1.0LSF/4
5 Metre 1.00mm ² Flexible Cord	5	P64AXR/1.0PVC/5	P64AXR/1.0LSF/5



S27

4 Pin Plug Socket Outlets

6A socket outlets are used in conjunction with 6A plugs to provide a pluggable connection to luminaires.

- Complies with BS 6972 and BS 5733

- Suitable for use with standard klik 4 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	Pack qty.	Cat ref.
3 Pin Socket Module comes with Panel Mount Kit	10	S20/MOP
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



S60AX/MOP

4 Pin plus Auxiliary Plug Socket Outlets

klik.AX 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
- Suitable for use with standard

- klik 4 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

- All sockets have 5 terminations: line, neutral, CPC, auxiliary and loop-in
- Can be used with klik 3 or 4 pin plug

Description	Pack qty.	Cat ref.
4 Pin Socket Module comes with Panel Mount Kit	10	S60AX/MOP
4 Pin Round Socket White	10	S64AX
4 Pin Square Socket White	10	S65AX



S64AX

Moulded Mounting Boxes



MB2

Description	Pack qty.	Cat ref.
Round Surface Box White	10	MB2
Architrave Flush Box White	10	MB3/E

klik 7 pin

Secure connection system

klik 7 pin can be used as a simple stand-alone digital lighting control unit or as part of a more complex building management system for distribution of power and data.

The klik 7 pin range of unique plug and play connectors has been enhanced with a choice of products ideal for electrical contractors who want to add digital lighting control solutions to their offer.



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KLMB4W

Lighting Marshalling Boxes

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 Outlet
- 16A Rated
- BS 5733
- Short circuit tested: 1500A conditional rating

Single Supply Wire In, Plug Out

	Cat ref.
4 Way LMB Wire In Plug Out	KLMB4W
6 Way LMB Wire In Plug Out	KLMB6W
8 Way LMB Wire In Plug Out	KLMB8W
10 Way LMB Wire In Plug Out	KLMB10W
12 Way LMB Wire In Plug Out	KLMB12W

Dual Channel Wire In, Plug Out

	Cat ref.
8 Way LMB, 4/4 Wire In, Plug Out	KLMB244W
10 Way LMB, 5/5 Wire In, Plug Out	KLMB255W
12 Way LMB, 6/6 Wire In, Plug Out	KLMB266W

Single Supply Plug In, Plug Out

	Cat ref.
5 Way LMB, Plug In Plug out	KLMB5P
7 Way LMB, Plug In Plug out	KLMB7P
9 Way LMB, Plug In Plug out	KLMB9P
11 Way LMB, Plug In Plug out	KLMB11P

Dual Supply Plug In, Plug Out*

	Cat ref.
10 Way LMB, 1 in 5 out, 1 in 5 out	KLMB255DSP
14 Way LMB, 1 in 7 out, 1 in 7 out	KLMB277DSP

Dual Supply Digital Link Plug In, Plug Out*

	Cat ref.
10 Way LMB, 1 in 5 out, 1 in 5 out	KLMB255DSP/DL
14 Way LMB, 1 in 7 out, 1 in 7 out	KLMB277DSP/DL



EEK513P

Occupancy Sensors

Hager occupancy sensors come complete with integral photocell and the facility for wall switch override.

- Can be programmed for presence or absence
- Range 7m diameter for large movements, 5m diameter for small movements
- Factory presets, lux = 400, time = 20 min, presence detection
- 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

Standard & Digital Occupancy Sensors

	Cat ref.
Standard Relay Sensor complete with 3m Lead and Plug LSOH	EEK513P
Standard Relay Sensor complete with 5m Lead and Plug LSOH	EEK515P
Digital Sensor complete with 3m Lead and Plug LSOH	EEK523P
Digital Sensor complete with 5m Lead and Plug LSOH	EEK525P
Programming Tool	EEK001
Remote Control	EEK002
Surface Mount Kit	EEK005



TKK513P

KNX Occupancy Sensors

	Cat ref.
KNX Relay Sensor complete with 3m Lead and Plug LSOH	TKK513PE
KNX Relay Sensor complete with 5m Lead and Plug LSOH	TKK515PE
KNX Digital Sensor complete with 3m Lead and Plug LSOH	TKK523PE
KNX Digital Sensor complete with 5m Lead and Plug LSOH	TKK525PE
KNX Occupancy Sensor (KNX only, without cable)	TCC510S
Programming Tool	EEK001
Remote Control	EEK002
Surface Mount Kit	EEK005



KLCM412W

Lighting Control Module with KlikLink®

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 leave offset (channel to channel)
- See page 41/42 for more information

Description	Cat Ref.
12 Way 4 Channel LCM Plug in, Plug out	KLCM412P
13 Way 4 Channel LCM Wire in, Plug out	KLCM413W
SmartLink iPad App	



KLCM-OS

Lighting Control Module Occupancy Sensor

klik LCM occupancy sensors come complete with a 5m RJ11 lead and have integrated daylight sensing.

Sensing options are selected via the kliklink app (e.g. presence/absence)

Description	Cat ref.
Klik LCM Occupancy Sensor with KlikLink (provided with 5m RJ11 Lead)	KLCM-OS



KLO15RJ45G

Lighting Control Module Switch Drop Lead SELV (Grey)

RJ45 to switch (wire-in) lead available in a variety of lengths

- SELV
- RJ45 connector

(Cables supplied standard with RJ45 plug on both ends)

Description	Cat ref.
5m RJ45 SELV Switch Drop Lead	KLO5RJ45G
10m RJ45 SELV Switch Drop Lead	KLO10RJ45G
15m RJ45 SELV Switch Drop Lead	KLO15RJ45G
20m RJ45 SELV Switch Drop Lead	KLO20RJ45G
30m RJ45 SELV Switch Drop Lead	KLO30RJ45G
40m RJ45 SELV Switch Drop Lead	KLO40RJ45G
50m RJ45 SELV Switch Drop Lead	KLO50RJ45G



KLO15RJ45R

Lighting Control Module Switch Drop Lead SELV (Red)

RJ45 to RJ45 link lead

- SELV
- RJ45 connector

(Cables supplied standard with RJ45 plug on both ends)

Description	Cat ref.
5m RJ45 SELV Link Lead	KLO5RJ45R
10m RJ45 SELV Link Lead	KLO10RJ45R
15m RJ45 SELV Link Lead	KLO15RJ45R
20m RJ45 SELV Link Lead	KLO20RJ45R
30m RJ45 SELV Link Lead	KLO30RJ45R
40m RJ45 SELV Link Lead	KLO40RJ45R
50m RJ45 SELV Link Lead	KLO50RJ45R
RJ45 Splitter	KLORJ45CON



KLA/3/1-5P

Link Leads

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 32.**

- 1.5mm² CSA
- 3M and 5M lengths
- Standard, Digital and Emergency Luminaires
- 16A Rated

- BS 5733
- BS EN 61535
- Short circuit tested: 1500A conditional rating
- Cable standard BS6500 & BS7211

Supply Link Leads 16A Plug Out, Plug In 1.5mm² 3 Core

	Cat ref.
3m 3 Core Link Lead, Plug to Plug	KLA/3/1-5P
5m 3 Core Link Lead, Plug to Plug	KLA/5/1-5P
10m 3 Core Link Lead, Plug to Plug	KLA/10/1-5PX*

Supply Link Leads 16A Plug Out, Plug In 1.5mm² 4 Core

	Cat ref.
3m 4 Core Link Lead, Plug to Plug	KLK/3/1-5P
5m 4 Core Link Lead, Plug to Plug	KLK/5/1-5P
10m 4 Core Link Lead, Plug to Plug	KLK/10/1-5PX*

Supply Link Leads 16A Plug Out, Plug In 1.5mm² 5 Core

	Cat ref.
3m 5 Core Link Lead, Plug to Plug	KLK/3/1-5P
5m 5 Core Link Lead, Plug to Plug	KLK/5/1-5P
10m 5 Core Link Lead, Plug to Plug	KLK/10/1-5PX*

Supply Link Leads 16A Plug Out, Plug In 1.5mm² 6 Core

	Cat ref.
3m 6 Core Link Lead, Plug to Plug	KLV/3/1-5P
5m 6 Core Link Lead, Plug to Plug	KLV/5/1-5P
10m 6 Core Link Lead, Plug to Plug	KLV/10/1-5PX*

Supply Link Leads 16A Plug Out, Plug In 1.5mm² 7 Core

	Cat ref.
3m 6 Core Link Lead, Plug to Plug	KLZ/3/1-5P
5m 6 Core Link Lead, Plug to Plug	KLZ/5/1-5P
10m 6 Core Link Lead, Plug to Plug	KLZ/10/1-5PX*

* Special lengths are available to order (not stocked) which includes 2.5mm² and 4mm² variants



KLB/3/0-75W

Luminaire Leads

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

- Into 5m lengths
- Standard, Digital and Emergency Luminaires
- Short circuit tested: 1500A conditional rating

- Cable standard BS6500 & BS7211

Standard 6A Luminaire Lead 0.75mm² 3 Core

	Cat ref.
1m 3 Core 0.75mm Luminaire Lead Plug to Wire	KLB/1/0-75W
2m 3 Core 0.75mm Luminaire Lead Plug to Wire	KLB/2/0-75W
3m 3 Core 0.75mm Luminaire Lead Plug to Wire	KLB/3/0-75W
4m 3 Core 0.75mm Luminaire Lead Plug to Wire	KLB/4/0-75W
5m 3 Core 0.75mm Luminaire Lead Plug to Wire	KLB/5/0-75W

Standard 10A Luminaire Lead 1mm² 3 Core

	Cat ref.
1m 3 Core 1mm Luminaire Lead Plug to Wire	KLB/1/1W
2m 3 Core 1mm Luminaire Lead Plug to Wire	KLB/2/1W
3m 3 Core 1mm Luminaire Lead Plug to Wire	KLB/3/1W
4m 3 Core 1mm Luminaire Lead Plug to Wire	KLB/4/1W
5m 3 Core 1mm Luminaire Lead Plug to Wire	KLB/5/1W

Standard 16A Luminaire Lead 1.5mm² 3 Core

	Cat ref.
1m 3 Core 1.5mm Luminaire Lead Plug to Wire	KLB/1/1-5W
2m 3 Core 1.5mm Luminaire Lead Plug to Wire	KLB/2/1-5W
3m 3 Core 1.5mm Luminaire Lead Plug to Wire	KLB/3/1-5W
4m 3 Core 1.5mm Luminaire Lead Plug to Wire	KLB/4/1-5W
5m 3 Core 1.5mm Luminaire Lead Plug to Wire	KLB/5/1-5W



KLP/3/0-75W

Standard 6A Luminaire Lead 0.75mm² with Emergency 4 Core

	Cat ref.
2m 4 Core 0.75mm Luminaire Lead Plug to Wire	KLJ/2/0-75W
3m 4 Core 0.75mm Luminaire Lead Plug to Wire	KLJ/3/0-75W
4m 4 Core 0.75mm Luminaire Lead Plug to Wire	KLJ/4/0-75W
5m 4 Core 0.75mm Luminaire Lead Plug to Wire	KLJ/5/0-75W

Standard 10A Luminaire Lead 1mm² with Emergency 4 Core

	Cat ref.
2m 4 Core 1mm Luminaire Lead Plug to Wire	KLJ/2/1W
3m 4 Core 1mm Luminaire Lead Plug to Wire	KLJ/3/1W
4m 4 Core 1mm Luminaire Lead Plug to Wire	KLJ/4/1W
5m 4 Core 1mm Luminaire Lead Plug to Wire	KLJ/5/1W

Standard 16A Luminaire Lead 1.5mm² with Emergency 4 Core

	Cat ref.
2m 4 Core 1.5mm Luminaire Lead Plug to Wire	KLJ/2/1-5W
3m 4 Core 1.5mm Luminaire Lead Plug to Wire	KLJ/3/1-5W
4m 4 Core 1.5mm Luminaire Lead Plug to Wire	KLJ/4/1-5W
5m 4 Core 1.5mm Luminaire Lead Plug to Wire	KLJ/5/1-5W

Digital 6A Luminaire Lead 0.75mm² 5 Core

	Cat ref.
1m 5 Core 0.75mm Luminaire Lead Plug to Wire	KLP/1/0-75W
2m 5 Core 0.75mm Luminaire Lead Plug to Wire	KLP/2/0-75W
3m 5 Core 0.75mm Luminaire Lead Plug to Wire	KLP/3/0-75W
4m 5 Core 0.75mm Luminaire Lead Plug to Wire	KLP/4/0-75W
5m 5 Core 0.75mm Luminaire Lead Plug to Wire	KLP/5/0-75W

Digital 10A Luminaire Lead 1mm² 5 Core

	Cat ref.
1m 5 Core 1mm Luminaire Lead Plug to Wire	KLP/1/1W
2m 5 Core 1mm Luminaire Lead Plug to Wire	KLP/2/1W
3m 5 Core 1mm Luminaire Lead Plug to Wire	KLP/3/1W
4m 5 Core 1mm Luminaire Lead Plug to Wire	KLP/4/1W
5m 5 Core 1mm Luminaire Lead Plug to Wire	KLP/5/1W

Digital 16A Luminaire Lead 1.5mm² 5 Core

	Cat ref.
1m 5 Core 1.5mm Luminaire Lead Plug to Wire	KLP/1/1-5W
2m 5 Core 1.5mm Luminaire Lead Plug to Wire	KLP/2/1-5W
3m 5 Core 1.5mm Luminaire Lead Plug to Wire	KLP/3/1-5W
4m 5 Core 1.5mm Luminaire Lead Plug to Wire	KLP/4/1-5W
5m 5 Core 1.5mm Luminaire Lead Plug to Wire	KLP/5/1-5W

Digital 6A Luminaire Lead 0.75mm² with Emergency 6 Core

	Cat ref.
1m 6 Core 0.75mm Luminaire Lead Plug to Wire	KLT/1/0-75W
2m 6 Core 0.75mm Luminaire Lead Plug to Wire	KLT/2/0-75W
3m 6 Core 0.75mm Luminaire Lead Plug to Wire	KLT/3/0-75W
4m 6 Core 0.75mm Luminaire Lead Plug to Wire	KLT/4/0-75W
5m 6 Core 0.75mm Luminaire Lead Plug to Wire	KLT/5/0-75W

Digital 10A Luminaire Lead 1mm² with Emergency 6 Core

	Cat ref.
1m 6 Core 1mm Luminaire Lead Plug to Wire	KLT/1/1W
2m 6 Core 1mm Luminaire Lead Plug to Wire	KLT/2/1W
3m 6 Core 1mm Luminaire Lead Plug to Wire	KLT/3/1W
4m 6 Core 1mm Luminaire Lead Plug to Wire	KLT/4/1W
5m 6 Core 1mm Luminaire Lead Plug to Wire	KLT/5/1W

Digital 16A Luminaire Lead 1.5mm² with Emergency 6 Core

	Cat ref.
1m 6 Core 1.5mm Luminaire Lead Plug to Wire	KLT/1/1-5W
2m 6 Core 1.5mm Luminaire Lead Plug to Wire	KLT/2/1-5W
3m 6 Core 1.5mm Luminaire Lead Plug to Wire	KLT/3/1-5W
4m 6 Core 1.5mm Luminaire Lead Plug to Wire	KLT/4/1-5W
5m 6 Core 1.5mm Luminaire Lead Plug to Wire	KLT/5/1-5W

16A Emergency Light Lead

	Cat ref.
3m 3 Core 1.5mm Luminaire Lead Plug to Wire	KLE/3/1-5W
5m 3 Core 1.5mm Luminaire Lead Plug to Wire	KLE/5/1-5W



KLE/3/1-5W



KLPCR/7

Connectors, Ceiling Rose & Sockets

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
- Short circuit tested: 1500A conditional rating

Connectors

16A 7 pin Tee Connector LMB Pluggable
16A 7 pin 2-Way Switch Block

Cat ref.

KL/T

KL/2

Ceiling Rose

16A 7 pin Plug-in Ceiling Rose

Cat ref.

KLPCR/7

Sockets

16A 3 Pin Panel Mount Socket
16A 4 Pin Panel Mount Socket
16A 5 Pin Panel Mount Socket
16A 6 Pin Panel Mount Socket

Cat ref.

KLPB/3

KLPJ/4

KLPP/5

KLPT/6



KLPB/3



KLPCR/7

Switch Drop Lead Mains Voltage (not for use with LCM)

The switch drop prewired lead allows plug in switch to KLMB connection. All leads are low smoke zero halogen and are factory connected and tested

- 1.5mm² CSA
- 5m, 10m & 15m lengths
- Standard, Digital and Emergency Luminaires
- 16A Rated

- Short circuit tested: 1500A conditional rating
- Cable standard BS6500 & BS7211

Switch Drop Lead (Retractive N/O switch absence or override off for OS)

	Cat ref.
5m 3 Core 1.5mm Switch Drop Lead, Plug to Wire	KLL/5/1-5W
10m 3 Core 1.5mm Switch Drop Lead, Plug to Wire	KLL/10/1-5W
15m 3 Core 1.5mm Switch Drop Lead, Plug to Wire	KLL/15/1-5W

Switch Drop Lead (1-gang 1-way or retractive N/O for digital OS wall dimming)

	Cat ref.
5m 3 Core 1.5mm Switch Drop Lead, Plug to Wire	KLD/5/1-5W
10m 3 Core 1.5mm Switch Drop Lead, Plug to Wire	KLD/10/1-5W
15m 3 Core 1.5mm Switch Drop Lead, Plug to Wire	KLD/15/1-5W

Switch Drop Lead (2-gang 1-way plus emergency key)

	Cat ref.
5m 4 Core 1.5mm Switch Drop Lead, Plug to Wire	KLH/5/1-5W
10m 4 Core 1.5mm Switch Drop Lead, Plug to Wire	KLH/10/1-5W
15m 4 Core 1.5mm Switch Drop Lead, Plug to Wire	KLH/15/1-5W

Switch Drop Lead (1-gang 2-way)

	Cat ref.
5m 4 Core 1.5mm Switch Drop Lead, Plug to Wire	KLM/5/1-5W
10m 4 Core 1.5mm Switch Drop Lead, Plug to Wire	KLM/10/1-5W
15m 4 Core 1.5mm Switch Drop Lead, Plug to Wire	KLM/15/1-5W

Switch Drop Lead (2-gang 2-way plus emergency key)

	Cat ref.
5m 5 Core 1.5mm Switch Drop Lead, Plug to Wire	KLR/5/1-5W
10m 5 Core 1.5mm Switch Drop Lead, Plug to Wire	KLR/10/1-5W
15m 5 Core 1.5mm Switch Drop Lead, Plug to Wire	KLR/15/1-5W

Switch Drop Lead (Emergency Key)

	Cat ref.
5m 3 Core 1.5mm Switch Drop Lead, Plug to Wire	KLC/5/1-5W
10m 3 Core 1.5mm Switch Drop Lead, Plug to Wire	KLC/10/1-5W
15m 3 Core 1.5mm Switch Drop Lead, Plug to Wire	KLC/15/1-5W



klik project service

One of the characteristics of prefabricated wiring systems is that they are bespoke and made for a particular project. The product range is complemented by our specially developed klik 7 pin service offer.

Sales

Highly trained, with an in depth technical understanding of klik, the engineers are able to discuss in detail both the pluggability and control options available to the designer/consultant for the project.

klik training

Klik project installations are carried out by electrical contractors who have been trained to the relevant level of competence. We will continually provide training to contractors from basic level through to advanced commissioning level. Our klik project partners will have access to dedicated technical information and support from our technical engineers.

Design and quotation

Our design and quotation team use a dedicated software package to produce a fully marked up lighting distribution design layer drawing showing positions of products and cable runs. Volt drop and Z_s calculations for the system based on design length and cross sectional area. A comprehensive product list, presented in your format, by room, area or floor. A quotation in the format you require and finally a schedule of circuits with all necessary information already completed.

Once your quote has been sent to you we will contact you to ascertain it has been received, is clear, and meets your requirements. At this stage we will add to, or change the design as necessary to meet any changes to specification.

Order process

Once the order has been received our system will break it down to sub-orders to match the delivery schedule and products required by room or area. You will receive an order and delivery schedule confirmation.

Delivery and logistics

A dedicated team will fulfil the orders as required for dispatch direct to site. The klik 7 pin components will be grouped to the customers requirements.

Technical support and commissioning

A dedicated team of Technical Support Engineers are on hand to assist with any system issues arising during installation. Most klik 7 pin products will be easily setup on site by installers. However, some of the more in-depth control systems may require commissioning, we can quote for this service as part of the project.

To learn more about our klik Project Service offering, please contact us:

Contact number: 01952 675600
Email: estimation@hager.co.uk
Faxline: 01952 675557

Product Description	klik Product identification	BS number	Description
klik Lighting Distribution System	KLDS	BS 5733:2010	General requirements for Electrical Accessories
Occupancy Sensor	EEK*W	IEC 60669-1, IEC 60669-2-1	Switches for household & similar fixed electrical installations Part 2-1 for Electronic switches.
Mounting Boxes	MB	BS 6972:1988	General requirements for Luminaire supporting couplers for domestic, light industrial & commercial use
Mounting Boxes	MP	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
PVC Flexible Cord	PVC	BS 6500:2000	Flexible cords rated to 300/350V for use with appliances & equipment intended for domestic, office & similar environments.
LSF Flexible Cord	LSF	BS 6500:2000 BS 7211:1998	Flexible cords rated to 300/350V for use with appliances & equipment intended for domestic, office & similar environments.

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

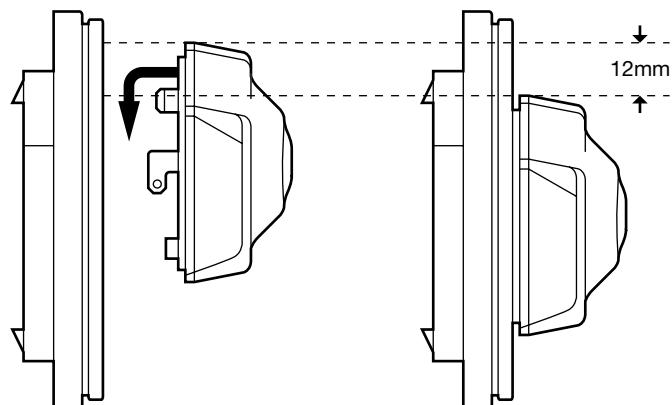
	Number of Conductors				
	0.75mm ²	1.0mm ²	1.5mm ²	2.5mm ²	4.0mm ²
Socket Outlets	-	5	4	3	2
Plugs P22, P64X, P26	1	1	-	-	-

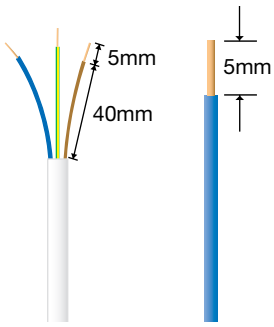
Cables for klik Plugs

	0.75mm ² PVC / LSF 3 Core	0.75mm ² PVC / LSF 4 Core	1.0mm ² PVC / LSF 3 Core	1.0mm ² PVC / LSF 4 Core
P22	Y	-	Y	-
P64AX	Y	Y	Y	Y

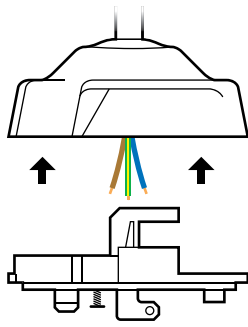
Application Notes

The mating face of each interface module must be mounted 0.1mm minimum proud of its proposed surround. Engaged plug sits centrally on socket but a minimum of 12mm extra clearance should be maintained north of the upper load grip to allow plug travel.

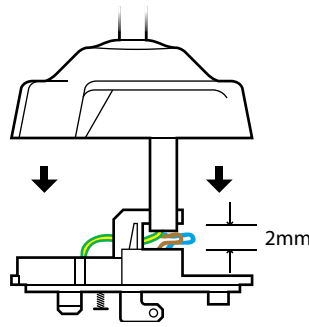




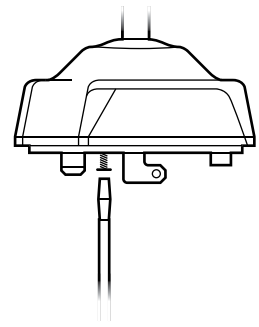
1. Strip cable as above -
Note: Trim cable tails to double over for better terminal contact.



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.

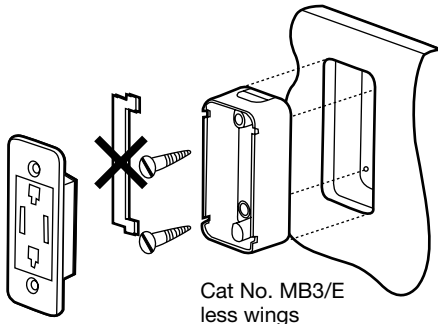
klik Mounting Box Installation

Cable entry through spout in base of box for maximum wiring space.

MB2 knockouts in base and sides. Supplied with M4 x 20mm long fixing screws.

MB3/E is dual purpose box for flush mounting in solid or partition walls. Provided with mounting wings for partition use. Supplied with M3.5 x 20mm long fixing screws. Cable entry in one end.

Flush Mounting for Solid Walls

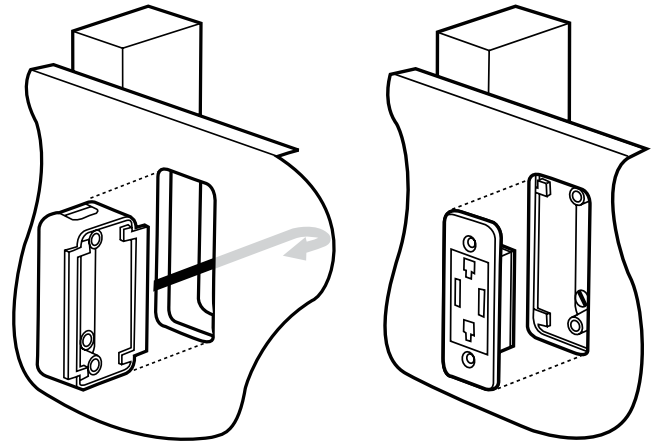


Cat No. S21

Cat No. MB3/E
less wings

Flush Mountings for Partition Walls

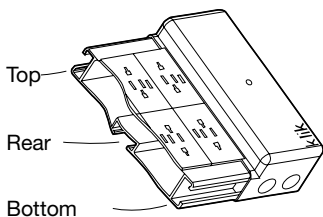
The mounting wings act as a flange, stopping the box from being pulled out of the partition.



Cat No. MB3/E

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

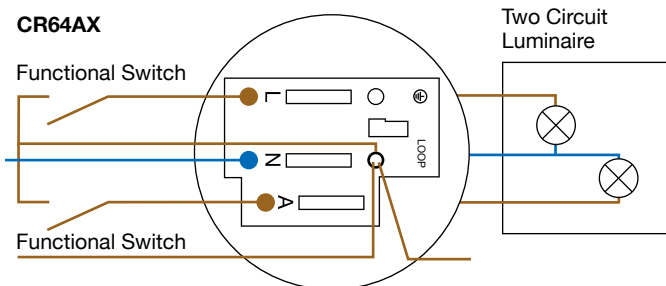
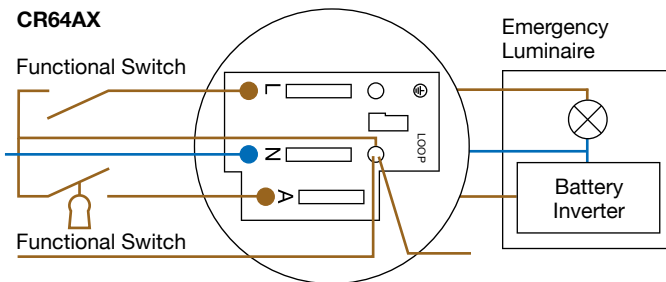
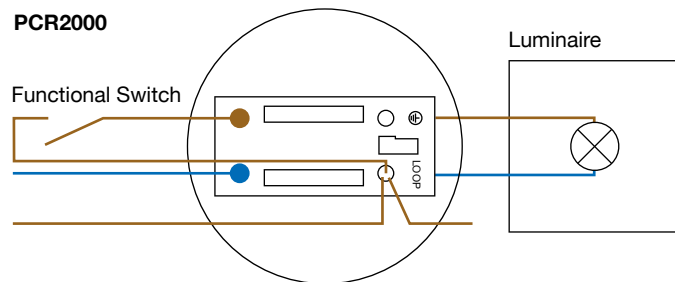


Screw to surface



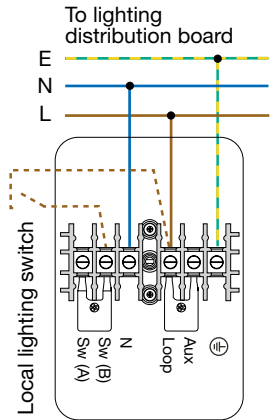
Drop rods on rear



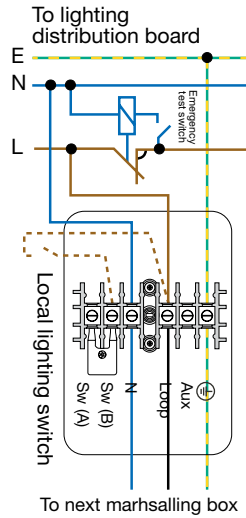


Note: earth connections omitted for clarity

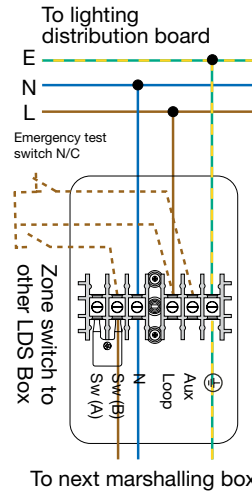
Local Lighting Switch Control Permanent emergency feed



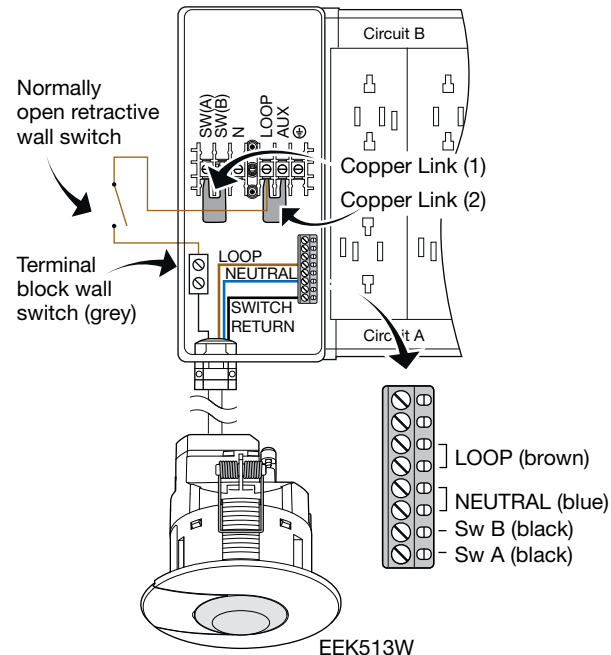
Local Lighting Switch Control Centralised emergency test via keyswitch



Zone Lighting Control Local emergency test control

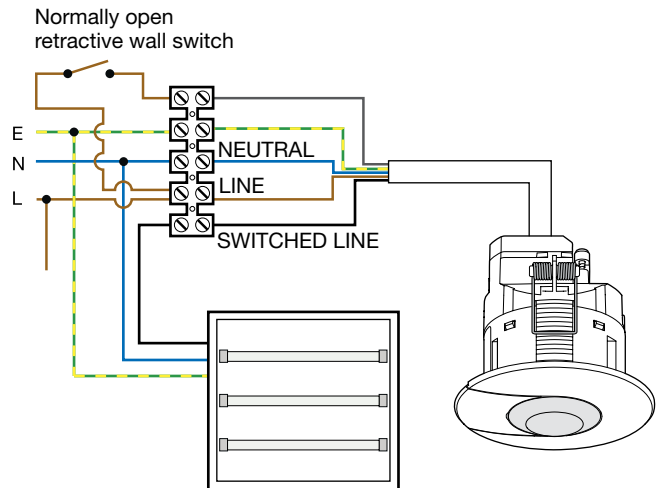


All ways switched by a single Hager EEK513W occupancy sensor



Switch wire to be connected as required.

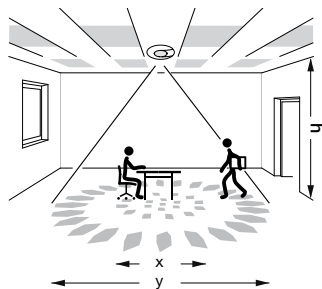
Connected directly to a single luminaire



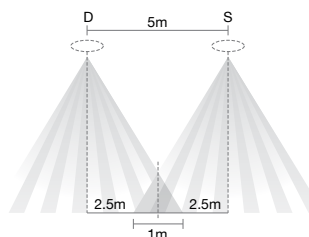
Technical Characteristics

	EEK513W / EEK515W
Detection range	motion area: diameter 7m (product installed at 2½m height) presence area: diameter 5m (product installed at 2½m height)
Supply voltage	230 V AC + 10% -15%
Frequency	50/60 Hz
Local lux threshold setting	5 to 1000 lux
Local time setting	1 min to 1hr
Commissioning via installer remote control	EEK001 for power up, absence / presence mode, timer active / passive cell
Control with IR user remote control	EEK002 for ON / OFF override
Output	16A AC1 relay output (cut live): - 2300W incandescent or 230V halogen: > 26000 cycles - 1500W VLV halogen lamps with ferromagnetic or electronic transformer: > 35000 cycles - 1000W / 130 µF parallel compensated fluo tube: > 50000 cycles - 23 x 23W fluo-compact with electronic ballast: > 20000 cycles
Push button input	phase input for absence / presence detection (semi-automatic / automatic mode) same phase as power supply.
Terminals	for 1.5mm ² rigid / flexible wires
Power dissipation	300mW
Isolation class	II
Protection	IP41 / IK03
Operating temperature	-10°C to +45°C
Storage temperature	-20°C to +60°C
Standards	IEC 60669-1, IEC 60669-2-1

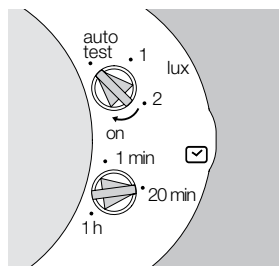
Detection areas



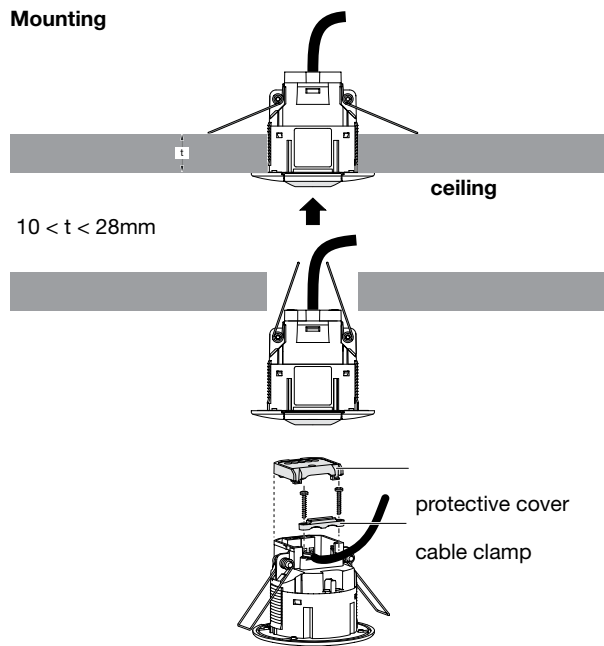
H	2.5m	3m	3.5m
X	5m	5m	5m
Y	7m	8m	9m



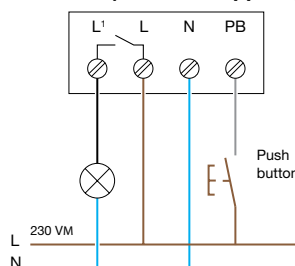
Settings EEK513W/EEK515W



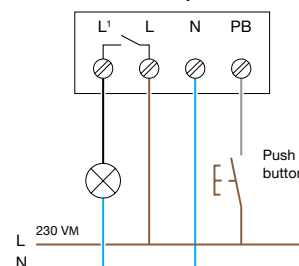
Mounting

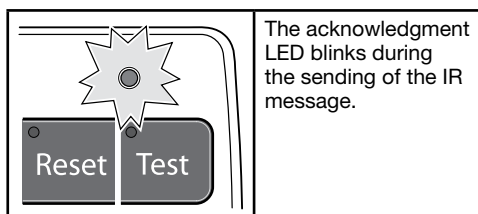
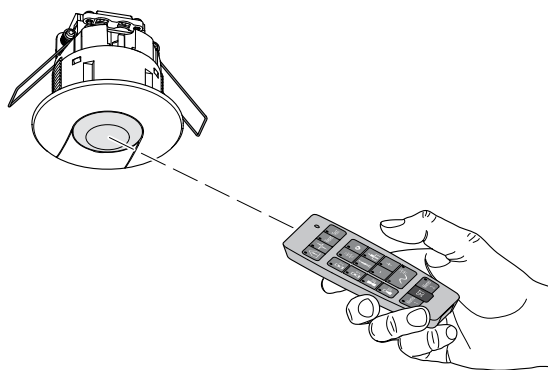
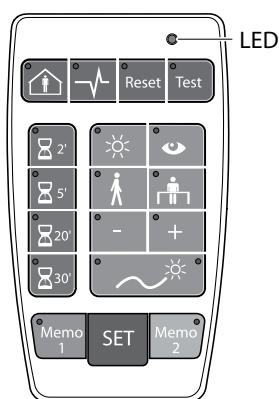


Wiring diagram EEK510B (no cable supplied)



EEK513W (Cable supplied connected to OS)





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 recalled to set several devices.

Single setting

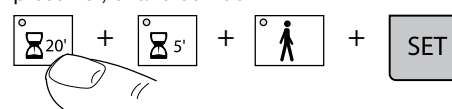
Example: reset



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.

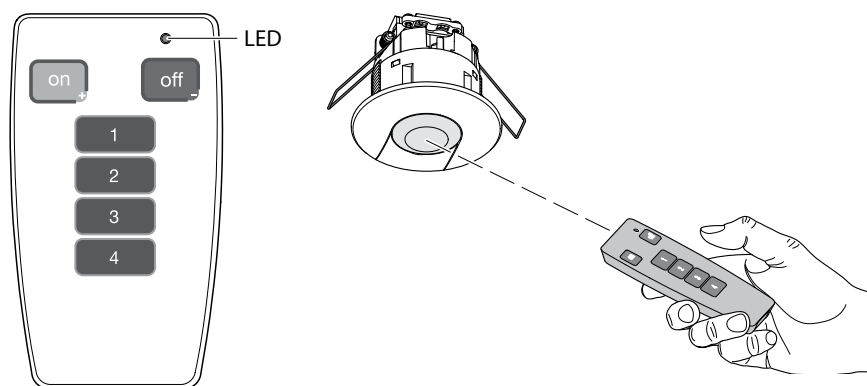


In the case of 2 opposite states the green LED denotes ON and red LED denotes OFF (except Presence / Absence).

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

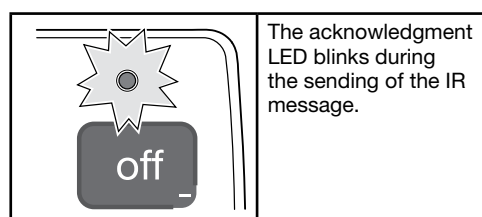
Settings available

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
		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	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
	Learn	LED on	To learn the current Lux level
	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
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



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	
	Long Press (> 5s.)	To start scene 1	
2	Short Press	To start scene 2	
	Long Press (> 5s.)	To start scene 2	
3	Short Press	To start scene 3	
	Long Press (> 5s.)	To start scene 3	
4	Short Press	To start scene 4	
	Long Press (> 5s.)	To start scene 4	

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	General Requirements for Electrical Accessories. Installation couplers intended for permanent connection in fixed installations.
LS0H Flexible Cord	Supplied with luminaire lead	BS 6500:2000 BS 7211:1998	Flexible cords rated to 300/350V for use with appliances & equipment intended for domestic, office & similar environments.
Klik Lighting Control Module	KLCM	BS 5733:2010 F _{pr} EN 60669-2-5 BS EN 61335:2009	General Requirements for Electrical Accessories. Switches for household and similar fixed electrical installations - Part 2-5: Particular requirements - Switches for related accessories for use in home and building electronic systems Installation couplers intended for permanent connection in fixed installations. Excluding classes 10.1 & 10.3 are to aluminium enclosures

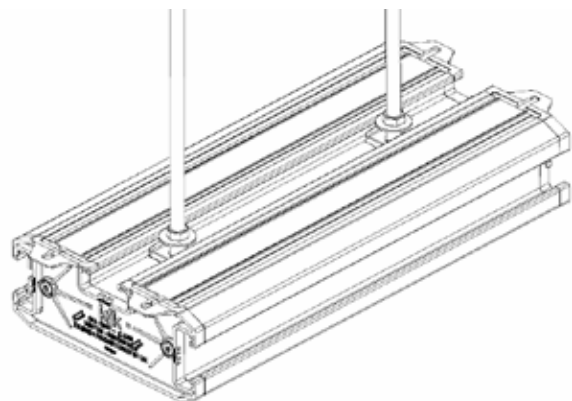
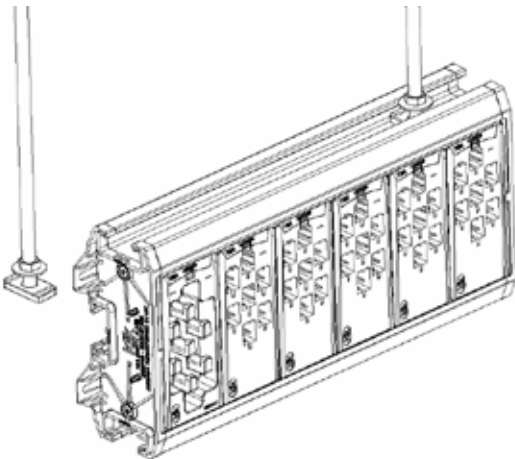
Mounting Options for Drop Rod

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.

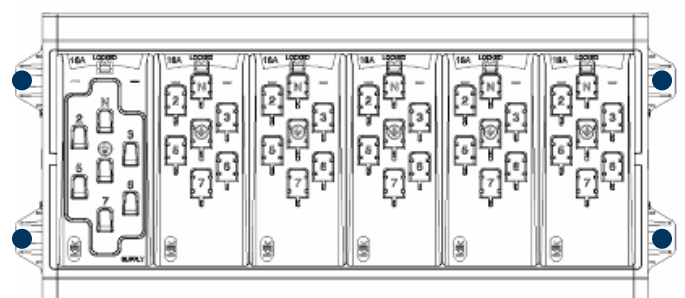
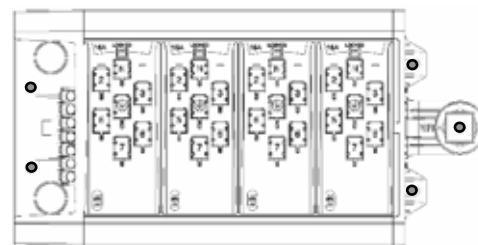
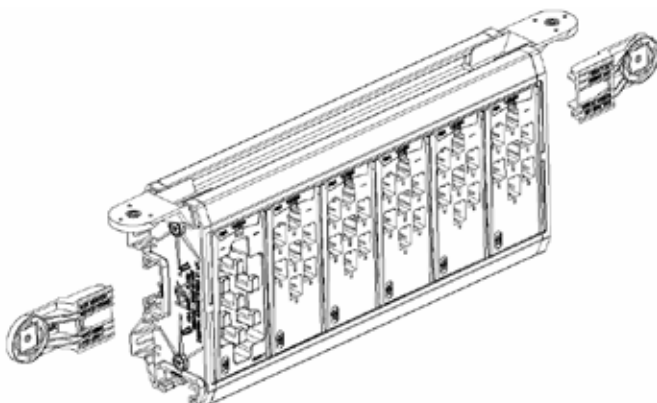


Mounting Options for Wall & Ceiling

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.

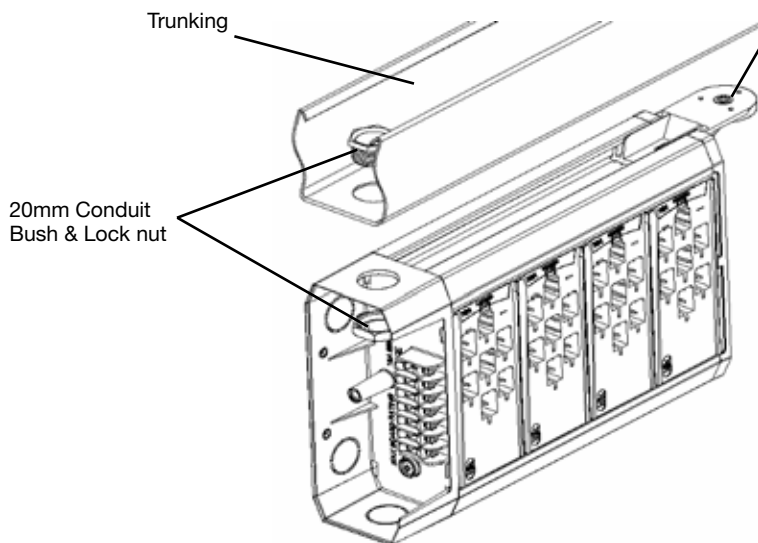
Screw mounting tabs (x4)



Mounting Options for Trunking

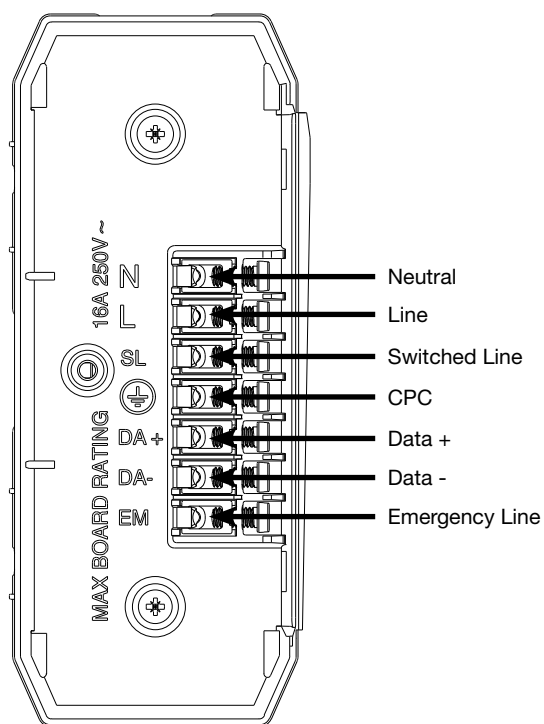
Mounting Accessory can be clipped into the rear or top channel slot. It can be easily removed by inserting a screwdriver in the RELEASE slot.

Use a machine screw and nut to secure to trunking using Mounting Accessory



Fixed Wiring Connection

klik.system LMB has 7 screw terminals available to the installer and are arranged in the end cap as per diagram. Alternative Circuit layouts can be found in the klik.system catalogue. DA+/DA- connections can be used for DALI/DSI control.

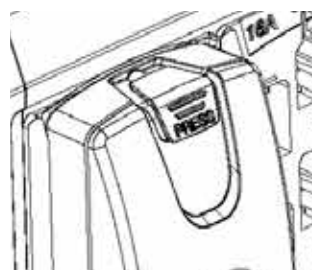
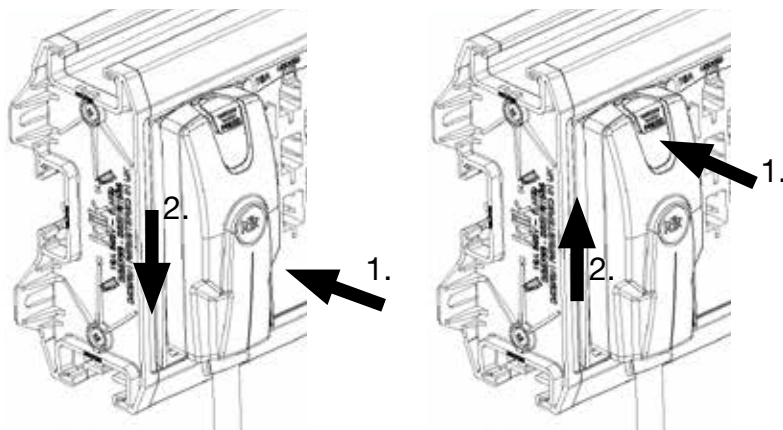


Making a Connection

To connect, locate plug in socket and push down to connect and lock

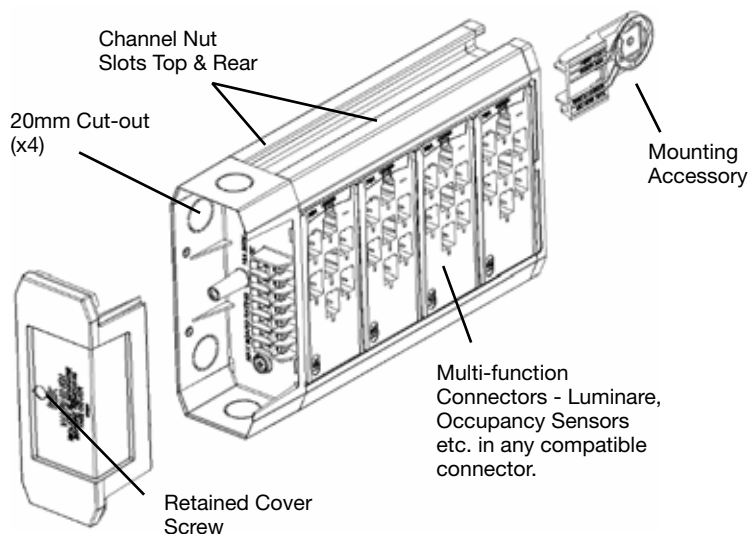
To disconnect, press button to unlock and push up to remove.

Plug type is identifiable by the colour of the button

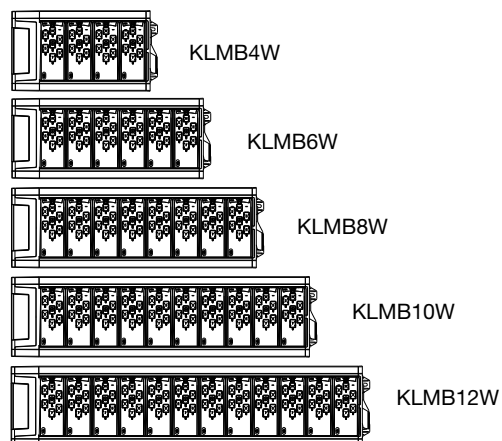


White: Luminaire Lead
Red: Luminaire + Emergency
Black: Link Lead
Blue: Switching (OS, Wall)

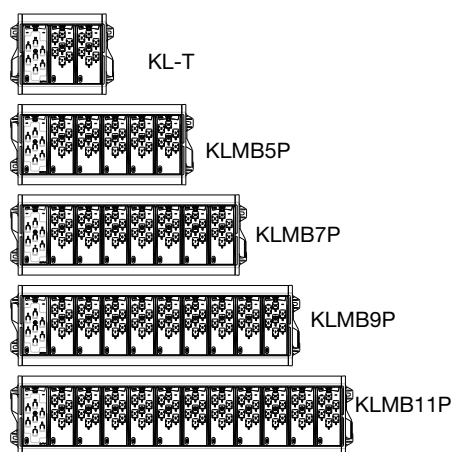
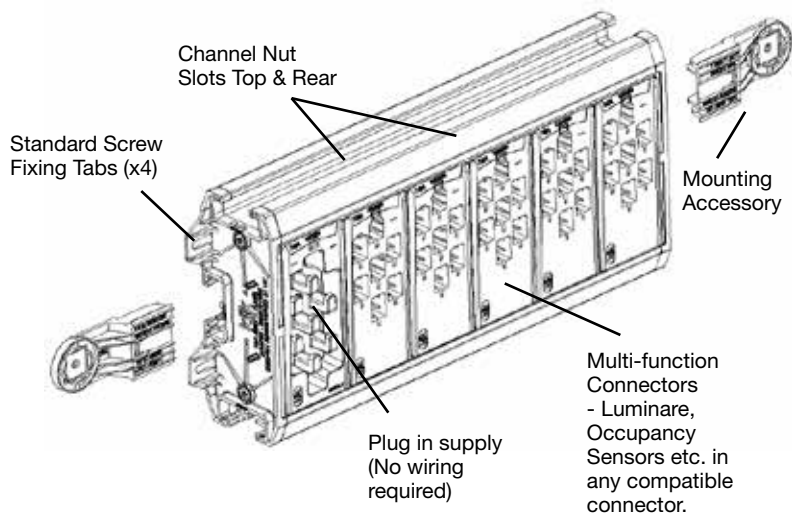
Lighting Marshalling Boxes (LMB) - Fixed Wiring 16A Rated LDU Complying to BS 5733



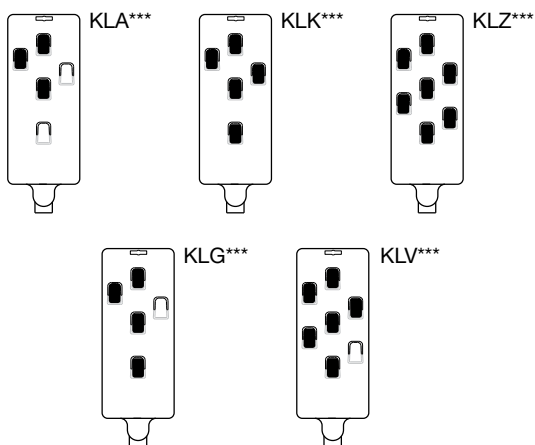
Hard Wire LMB Range



Lighting Marshalling Boxes (LMB) - Pluggable 16A Rated LDU Complying to BS 5733



Link leads



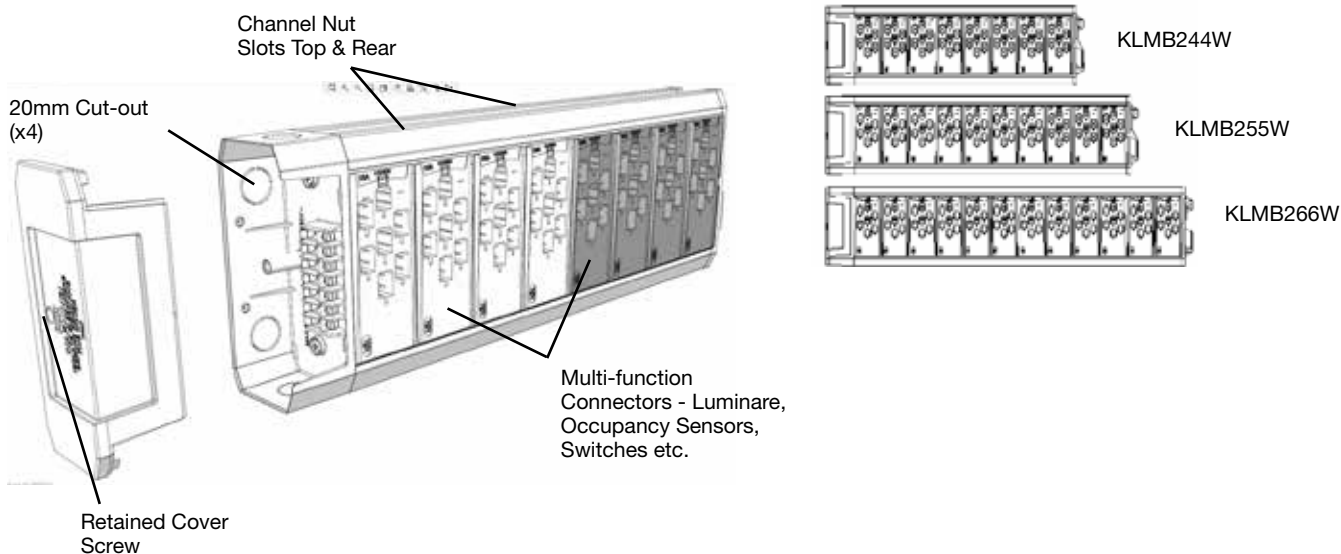
KLA*** L, N, CPC
 KLG*** L, N, E, CPC
 KLK*** L, N, S, E, CPC
 KLV*** L, N, S, E, DA+, CPC
 KLV*** L, N, S, E, DA+, DA-, CPC

Key	
L	Permanent Line
N	Neutral
S	Switched Line
E	Emergency Line
(cpc)	Circuit Protective Conductor
+	DA+
-	DA-

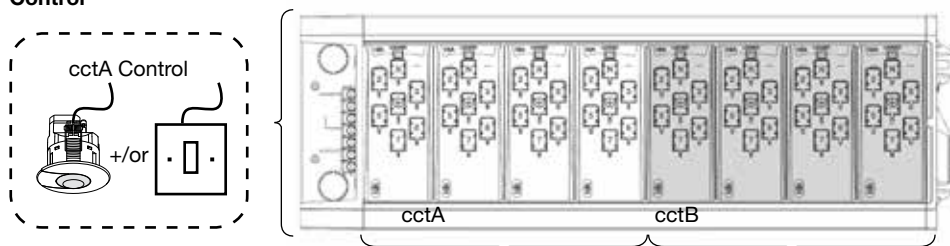


Dual Channel Lighting Marshalling Boxes (LMB) - Fixed Wiring

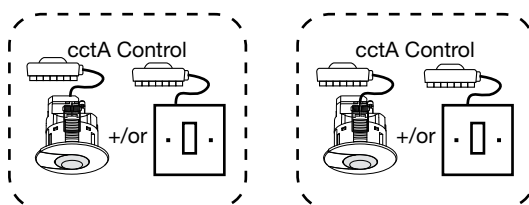
16A Rated LDU Complying to BS 5733



Control



1. cctA can be controlled by using pluggable sensors and or luggable switch. Alternatively hard wired sensors and/or switches can be used.
2. cctB must use pluggable sensors and/or switches for control.



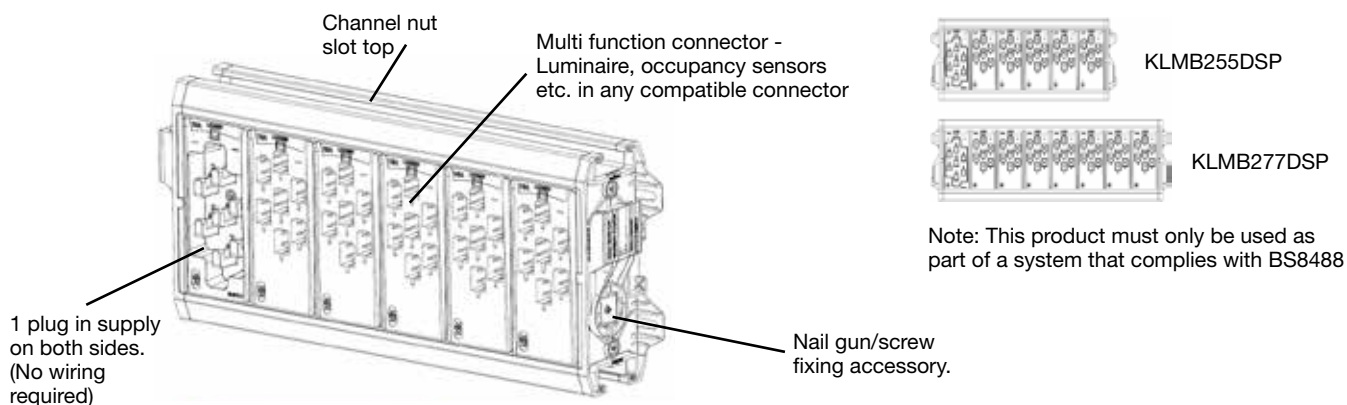
Dual Supply Lighting Marshalling Boxes (LMB) - Pluggable.

2 x 16A Rated LDU Complying to BS 5733

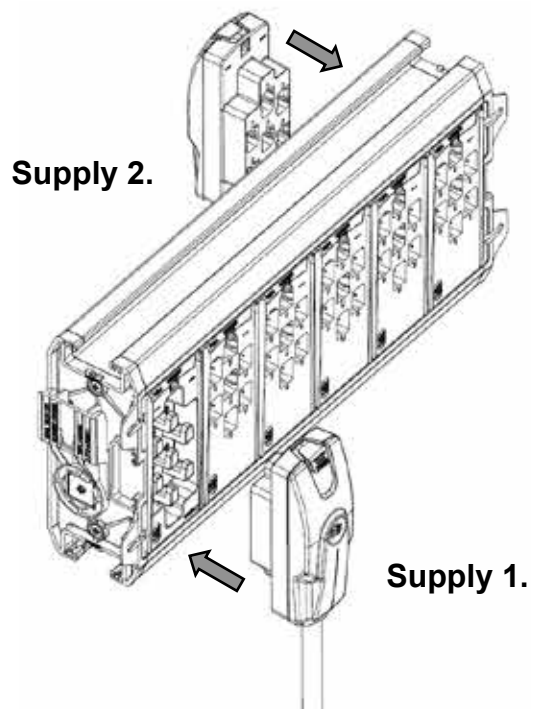
Designed for use with dual supply where independent control of each supply is required.

- Dual supply - Essential & Non-essential from one box.
- Independent control of each supply
- Wall switch* override & dimming

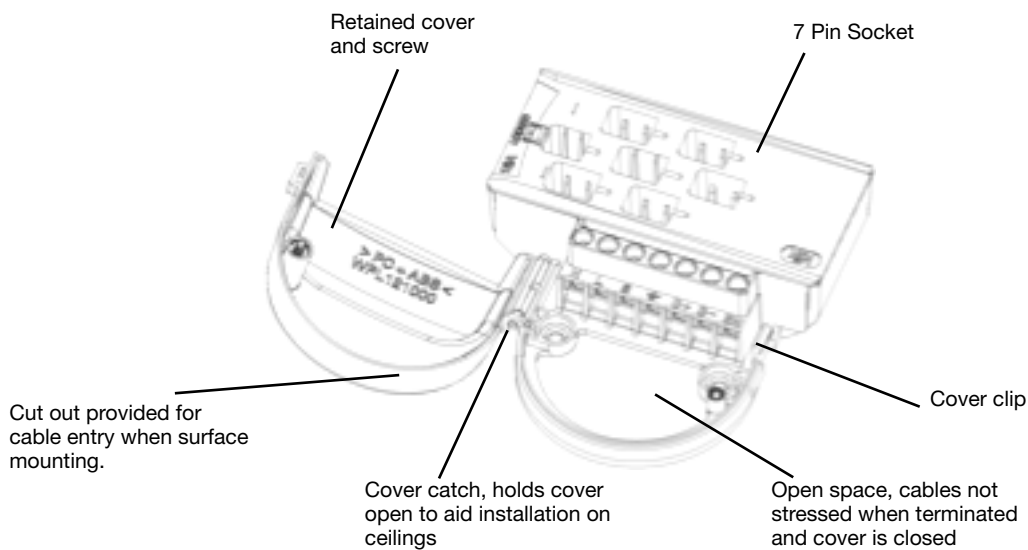
*When wall switch is used it must be connected on the same side as the sensor.



Dual Channel Lighting Marshalling Boxes (LMB) - Fixed Wiring
16A Rated LDU Complying to BS 5733



Dual Channel Lighting Marshalling Boxes (LMB) - Fixed Wiring
16A Rated LDU Complying to BS 5733



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

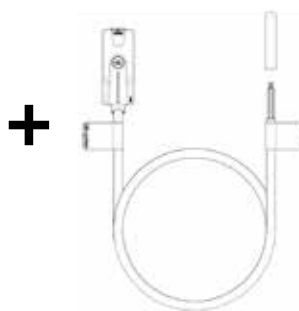
Note: Surface must be non combustable. When used as part of a pre-fabricated wiring system, the system must comply with BS8488.



KLPCR/7



KLPCR/B/3/0-75W
KLPCR/J/3/0-75W
KLPCR/P/3/0-75W
KLPCR/T/3/0-75W



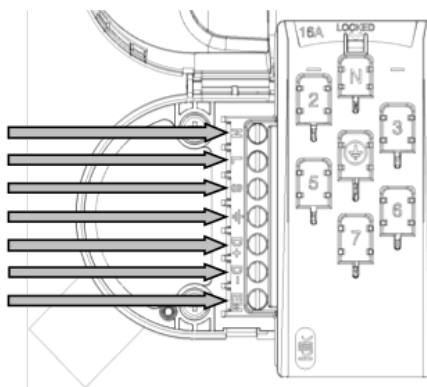
Terminating cables.

Terminal screws are retained in pockets.

Max Terminal Capacity 2x4mm²

Conductor strip length: 10mm.

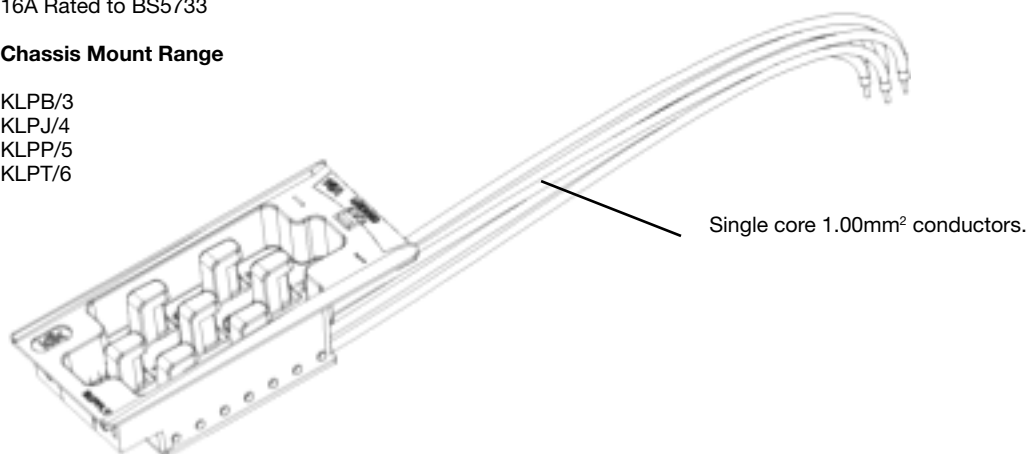
Neutral
Line
Switch Line
CPC
Data +
Data -
Emergency Line



16A Rated to BS5733

Chassis Mount Range

KLPB/3
KLPJ/4
KLPP/5
KLPT/6

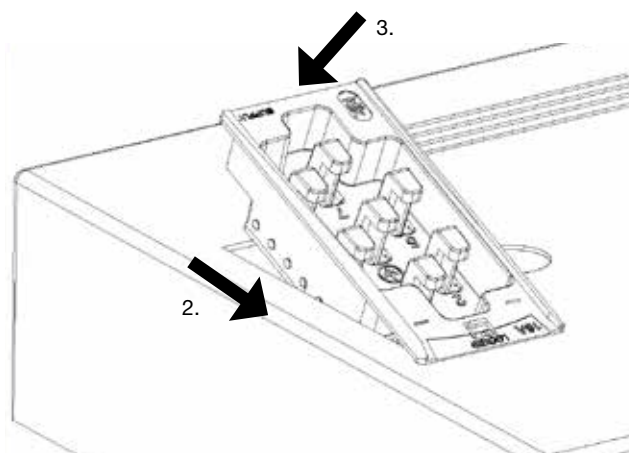


Installation:

Create aperture in Luminaire if not already existing.

1. Insert cables through aperture
2. Locate fixed clips of socket in position at one end of aperture and push in.
3. Push down bottom end of connector until it clips down onto luminaire

Aperture Size: 97mmx42mm ($\leq 1.2\text{mm}$ wall)



Terminating Cables:

KLPB/3 (Standard)

Brown - Switched line
Blue - Natural
Green/Yellow - CPC

KLPJ/4 (Standard + Emergency)

Brown - Switched Line
Blue - Neutral
Green/Yellow - CPC
Black - Emergency Line

KLPP/5 (Digital)

Brown - Line
Blue - Neutral
Green/Yellow - CPC
Orange - DA+
White - DA-

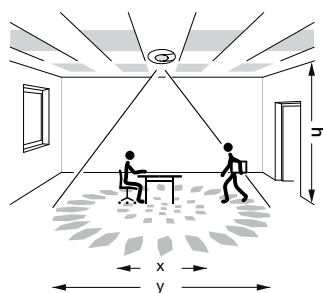
KLPT/6 (Digital + Emergency)

Brown - Line
Blue - Neutral
Green/Yellow - CPC
Orange - DA+
White - DA-
Black - Emergency Line

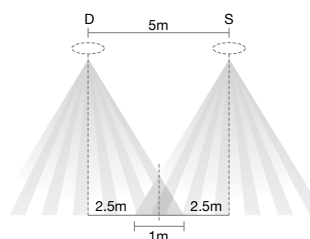
Technical Characteristics

	EEK513P / EEK515P	EEK523P / EEK525P	KLCM-OS
Detection range	motion area: diameter 7m (product installed at 2½m height) presence area: diameter 5m (product installed at 2½m height)		motion area: diameter 6m (product installed at 2½m height) presence area: diameter 6m (product installed at 2½m height)
Supply voltage	230 V AC + 10% -15%		12V DC
Frequency	50/60 Hz		
Local lux threshold setting	5 to 1000 lux	3 modes available	0 - 4000 Lux
Local time setting	1 min to 1hr		Via KLCM
Commissioning via installer remote control	EEK001 for power up, absence / presence mode, timer active / passive cell		KlikLink App
Control with IR user remote control	EEK002 for ON / OFF override	EEK002 for ON / OFF override and dimming up / down	KlikLink App
Output	16A AC1 relay output (cut live): - 2300W incandescent or 230V halogen: > 26000 cycles - 1500W VLV halogen lamps with ferromagnetic or electronic transformer: > 35000 cycles - 1000W / 130 µF parallel compensated fluo tube: > 50000 cycles -23 x 23W fluo-compact with electronic ballast: > 20000 cycles	14V / 50mA (for a DALI bus with 24 ballasts) - No isolation between the mains and the DALI bus	RS485
Push button input	phase input for absence / presence detection (semi-automatic / automatic mode) same phase as power supply.	to dim up / down and absence / presence detection (semi-automatic / automatic mode) same phase as power supply.	N/A
Terminals	for 1.5mm² rigid / flexible wires		RJ11
Power dissipation	300mW	60mW	3mA @ 12V DC
Isolation class	II		
Protection	IP41 / IK03		
Operating temperature	-10°C to +45°C		-20C to +60C
Storage temperature	-20°C to +60°C		-2-C to +70C
Standards	IEC 60669-1, IEC 60669-2-1		BS EN55015:2013

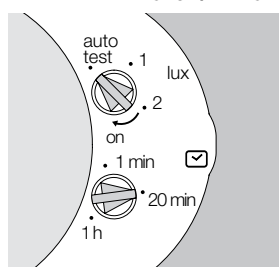
Detection areas



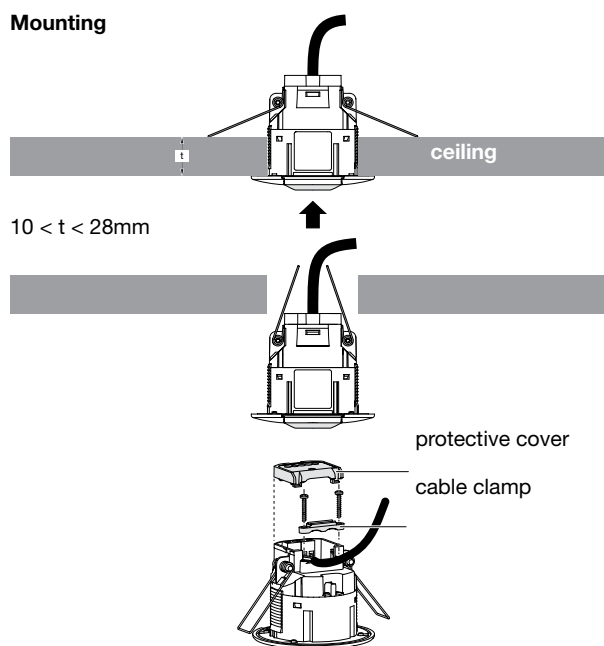
H	2.5m	3m	3.5m
X	5m	5m	5m
Y	7m	8m	9m

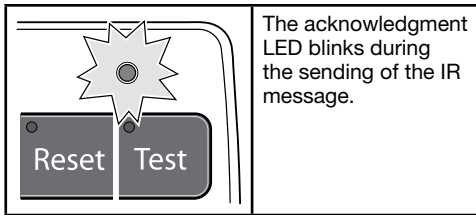
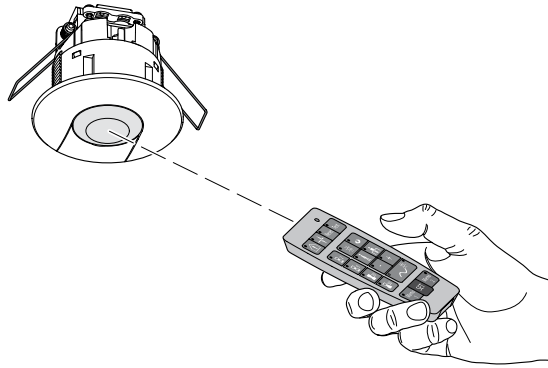
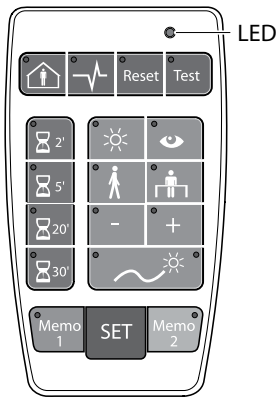


Settings EEK513P/EEK515P
EEK523P/EEK525P



Mounting





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.

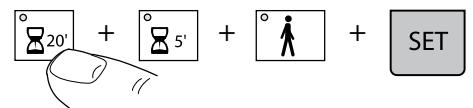
Single setting
Example: reset



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.

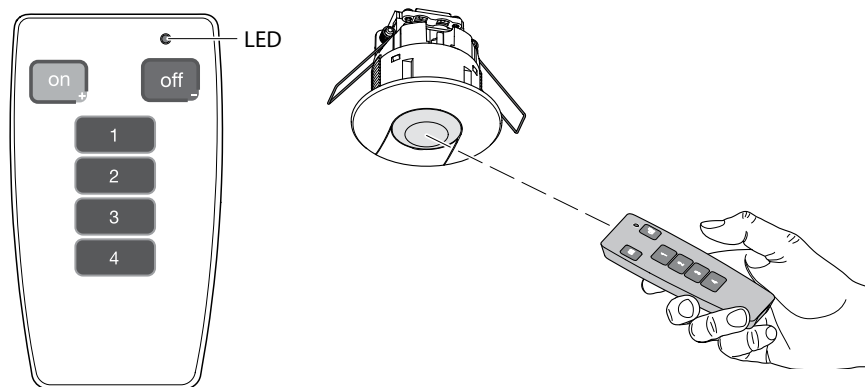


In the case of 2 opposite states the green LED denotes ON and red LED denotes OFF (except Presence / Absence).

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

Settings available

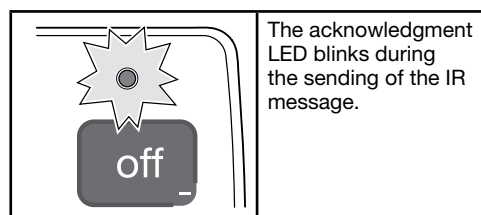
Key	Meaning	Indication	Function
	Presence	Green LED on	Presence on (automation mode)
	Absence	Red LED on	Absence on (semi automatic mode)
	Power Up	Green LED on	The light is automatically switched on for 30 seconds after power up
		Red LED on	During warm up phase, the light output is off
Reset	Reset	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	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
	Learn	LED on	To learn the current Lux level
	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
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



Use

The remote control allows the user to set or modify settings on the presence detectors EEK513P/EEK515P and EEK523P and EEK525P

Each button corresponds to a command.



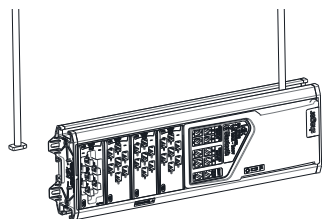
Technical specification

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

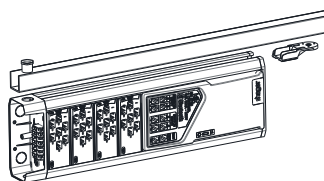
Settings available

Key	Action	Function	Product Type
on +	Short Press (< 5s.)	On	EEK513P / EEK515P EEK523P / EEK525P
	Long Press (> 5s.)	Dim up	EEK523P / EEK525P
off -	Short Press	Off	EEK513P / EEK515P EEK523P / EEK525P
	Long Press (> 5s.)	Dim down	EEK523P / EEK525P
1	Short Press	To start scene 1	EEK523P / EEK525P
	Long Press (> 5s.)	To start scene 1	
2	Short Press	To start scene 2	
	Long Press (> 5s.)	To start scene 2	
3	Short Press	To start scene 3	
	Long Press (> 5s.)	To start scene 3	
4	Short Press	To start scene 4	
	Long Press (> 5s.)	To start scene 4	

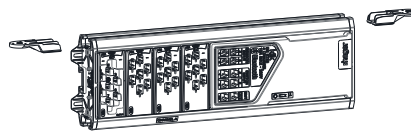
Fixing Methods



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 (retractable wall switch ref: WMGS13R)

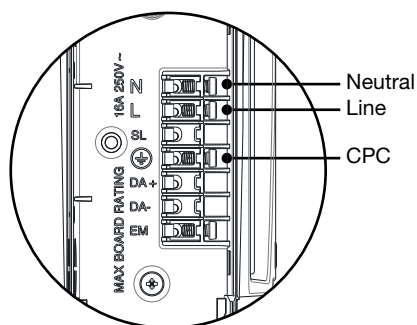
Orange/White	Scene 1		
Orange	Scene 2		
Green/White	Scene 3		
Blue	Scene 4		
Brown/White	On/Dim Up		
Blue/White	Off/Dim Down		
Brown	0V (Common)		
Green	12V (Not Used, must not be connected.)		

Emergency test, override, corridor hold, in & out.

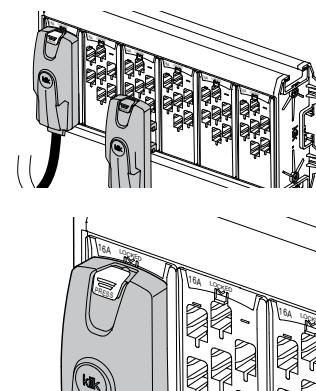
Orange/White	Override - All Outputs On
Orange	Override - All Outputs Off
Green/White	Corridor Hold Line
Blue	Emergency Test (Timer 1)
Blue/White	Emergency Test (Timer 2)
Green	Emergency Test (Timer 3)
Brown	Common
Brown/White	Not Used.

Supply input connection

Hard wired



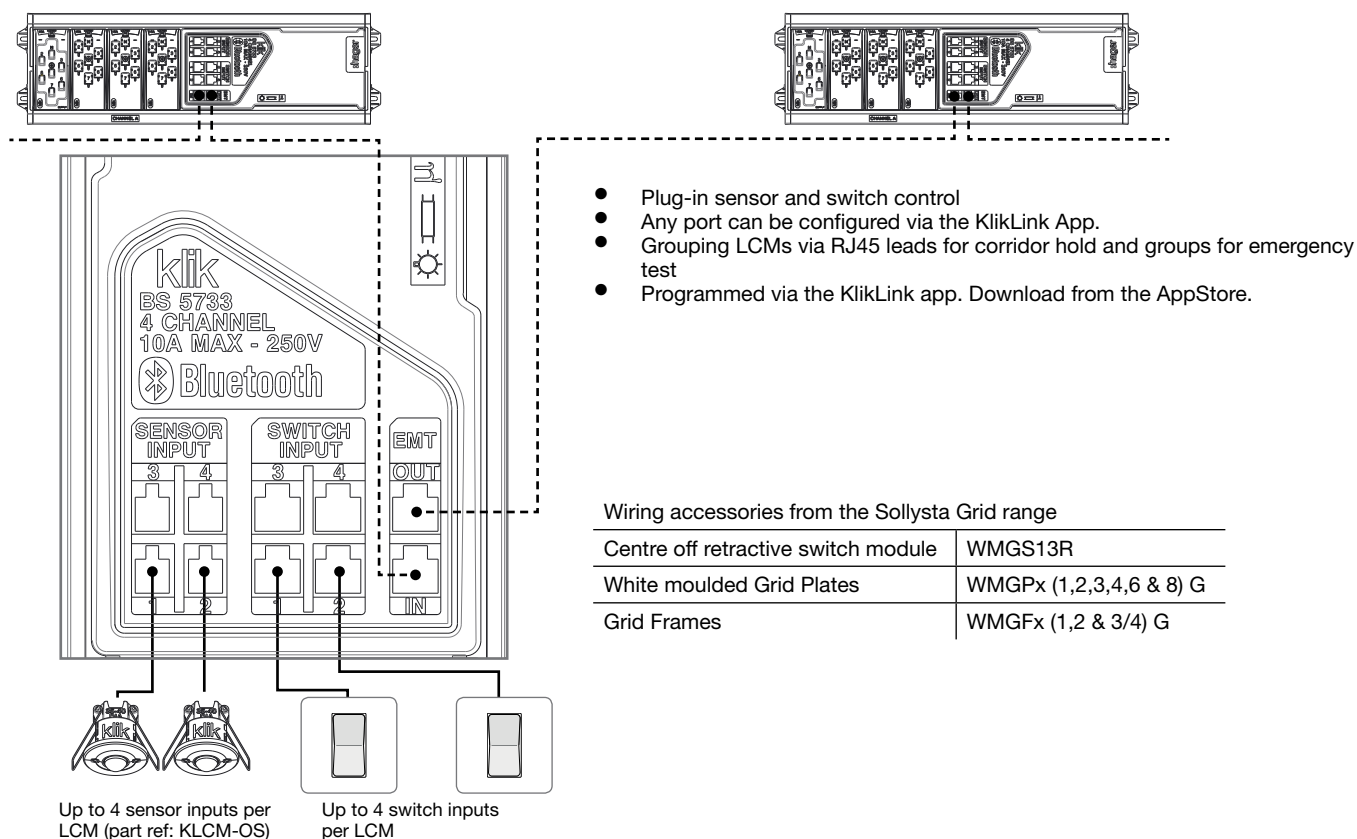
Pluggable



- Connecting the supply lead: plug in and push down
- Disconnecting the supply lead: press button and push up.

Plug colour coding

White: Luminaire Lead
Red: Luminaire & Emergency
Black: Link Lead



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)			
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)			
IP protection	IP20			
Connection for programming	Bluetooth Smart (Bluetooth 4) (only available on Apple iPad)			
Dimensions	Height 145mm	Width 440mm	Depth 58mm	Weight 1.9kg

LCM Functions (via the KlikLink App)

Lighting Configuration Profiles.

The KLCM KlikLink App can be pre-loaded with the most common room type configuration profiles. These are selected in the File Manager section of the KlikLink App and are provided to speed up the LCM set-up.

Switching - On/Off.

Each channel is capable of being switched via one of 4 switch inputs. This is an on/ off state utilised for standard luminaires.

Presence and Absence Sensing.

Each output channel can be set to Presence or Absence and can be different on each channel. Absence detection will give the best energy efficiencies by minimising unwanted activations, whilst Presence gives an immediate response to occupation in an area.

Sensor with integral lux sensor.

This allows daylight dimming and switch utilising any natural light available

Dimming – DSI, DALI (Broadcast).

The LCM takes information from the sensor and broadcasts a signal on the required channel to all connected luminaires and can be controlled via a retractive wall switch or utilising the daylight dimming function. The protocol for this broadcast is selected during programming.

Scene Setting.

4 lighting scenes are possible (plus global Up/Down-On/Off) and can be achieved with via centre off 2 pole retractive grid switch modules (3 grid modules to control all inputs) The LCM can be configured during programming to have 2 separate Scene profiles.

Partition Switch Function.

This allows the control of a room with a partition and switch fitted. If a partitioned room has individual wall switches controlling each section, when the partition is removed, both sets of switches could control the whole area. This can be used in conjunction with profiles.

Corridor Hold Function.

This is achieved by linking a series of LCMs together with an RJ45 lead and assigning certain channels with the attributes of a corridor. If there is any area occupied, the associated corridor lighting will be held ON.

Variable burn in up to 250 hrs.

Allows dimmable luminaires to be set at 100% output for the required burn in time period (Dimming is disabled during this period) This may be beneficial to the life of the lamps. After the burn in time, the LCM will return to any programmes set (e.g. dimming)

Integral Emergency Test Timers.

This allows the emergency test to be carried out via an emergency test switch. The timers can be set for up to 5 hours within the App. Whilst on test the other luminaires will dim to a pre-set value.

Light Level Offset between Channels.

This function allows the levels from different channels to be set as a percentage of the lead channel. For example when a number of different dimming levels are set within an area as a scene set, the lighting levels can be adjusted universally across all channels, whilst maintaining the relationship between channels.

3 Level Timeout.

Allows the lighting to turn Off or Down in three stages. When no presence has been detected for the timeout period, the lighting can be turned down to the first set level, after a further period the lighting can be reduced further, after the final time period the luminaires can be turned off or driven to a minimum value set during programming.

A		KLE/5/1-5W	19	KLR/5/1-5W	21	P64AXR/LSF/4.0	12
A1	9	KLG/10/1-5PX	18	KLT/1/0-75W	19	PCR2000	9
A1/R	9	KLG/3/1-5P	18	KLT/1/1-5W	19	PCR2000/1.0	10
		KLG/5/1-5P	18	KLT/1/1W	19	PCR2000/1.0LSF/2	10
C		KLH/10/1-5W	21	KLT/2/0-75W	19	PCR2000/1.0LSF/3	10
CR64AX	9	KLH/15/1-5W	21	KLT/2/1-5W	19	PCR2000/1.0LSF/4	10
CR64AX/1.0	10	KLH/5/1-5W	21	KLT/2/1W	19	PCR2000/1.0LSF/5	10
CR64AX/1.0LSF/2	10	KLJ/2/0-75W	19	KLT/3/0-75W	19	PCR2000/1.0PVC/2	10
CR64AX/1.0LSF/3	10	KLJ/2/1-5W	19	KLT/3/1-5W	19	PCR2000/1.0PVC/3	10
CR64AX/1.0LSF/4	10	KLJ/2/1W	19	KLT/3/1W	19	PCR2000/1.0PVC/4	10
CR64AX/1.0LSF/5	10	KLJ/3/0-75W	19	KLT/4/0-75W	19	PCR2000/1.0PVC/5	10
CR64AX/1.0PVC/2	10	KLJ/3/1-5W	19	KLT/4/1-5W	19	PCR2000/2.0	10
CR64AX/1.0PVC/3	10	KLJ/3/1W	19	KLT/4/1W	19	PCR2000/3.0	10
CR64AX/1.0PVC/4	10	KLJ/4/0-75W	19	KLT/5/0-75W	19	PCR2000/4.0	10
CR64AX/1.0PVC/5	10	KLJ/4/1-5W	19	KLT/5/1-5W	19	PCR2000/LSF/1.0	10
CR64AX/2.0	10	KLJ/4/1W	19	KLT/5/1W	19	PCR2000/LSF/2.0	10
CR64AX/3.0	10	KLJ/5/0-75W	19	KLV/10/1-5PX	18	PCR2000/LSF/3.0	10
CR64AX/4.0	10	KLJ/5/1-5W	19	KLV/3/1-5P	18	PCR2000/LSF/4.0	10
CR64AX/LSF/1.0	10	KLJ/5/1W	19	KLV/5/1-5P	18		
CR64AX/LSF/2.0	10	KLK/10/1-5PX	18	KLZ/10/1-5PX	18	S	
CR64AX/LSF/3.0	10	KLK/3/1-5P	18	KLZ/3/1-5P	18	S20/MOP	13
CR64AX/LSF/4.0	10	KLK/5/1-5P	18	KLZ/5/1-5P	18	S21	13
CR64AX/R	9	KLL/10/1-5W	21			S26	13
		KLL/15/1-5W	21	M		S26/TC	13
		KLL/5/1-5W	21	MB2	13	S27	13
		KLM/10/1-5W	21	MB3/E	13	S28	13
		KLM/15/1-5W	21			S60AX/MOP	13
		KLM/5/1-5W	21	P		S64AX	13
		KLMB10W	16	P22	11	S65AX	13
		KLMB11P	16	P22/1.0	12	T	
		KLMB12W	16	P22/1.0LSF/2	12	TCC510S	16
		KLMB244W	16	P22/1.0LSF/3	12	TKK513PE	16
		KLMB255DSP	16	P22/1.0LSF/4	12	TKK515PE	16
		KLMB255DSP/DL	16	P22/1.0LSF/5	12	TKK523PE	16
		KLMB255W	16	P22/1.0PVC/2	12	TKK525PE	16
		KLMB277DSP	16	P22/1.0PVC/3	12		
		KLMB277DSP/DL	16	P22/1.0PVC/4	12		
		KLMB266W	16	P22/1.0PVC/5	12		
		KLMB4W	16	P22/2.0	12		
		KLMB5P	16	P22/3.0	12		
		KLMB6W	16	P22/4.0	12		
		KLMB7P	16	P22/LSF/1.0	12		
		KLMB8W	16	P22/LSF/2.0	12		
		KLMB9P	16	P22/LSF/3.0	12		
		KLO10RJ45G	17	P22/LSF/4.0	12		
		KLO10RJ45R	17	P64AX	11		
		KLO15RJ45G	17	P64AX/1.0	12		
		KLO15RJ45R	17	P64AX/1.0LSF/2	12		
		KLO20RJ45G	17	P64AX/1.0LSF/3	12		
		KLO20RJ45R	17	P64AX/1.0LSF/4	12		
		KLO30RJ45G	17	P64AX/1.0LSF/5	12		
		KLO30RJ45R	17	P64AX/1.0LSF/2	12		
		KLO40RJ45G	17	P64AX/1.0LSF/3	12		
		KLO40RJ45R	17	P64AX/1.0LSF/4	12		
		KLO50RJ45G	17	P64AX/1.0LSF/5	12		
		KLO50RJ45R	17	P64AX/1.0PVC/2	12		
		KLO5RJ45G	17	P64AX/1.0PVC/3	12		
		KLO5RJ45R	17	P64AX/1.0PVC/4	12		
		KLORJ45CON	17	P64AX/1.0PVC/5	12		
		KLP/1/0-75W	19	P64AX/2.0	12		
		KLP/1/1-5W	19	P64AX/3.0	12		
		KLP/1/1W	19	P64AX/4.0	12		
		KLP/2/0-75W	19	P64AX/LSF/1.0	12		
		KLP/2/1-5W	19	P64AX/LSF/2.0	12		
		KLP/2/1W	19	P64AX/LSF/3.0	12		
		KLP/3/0-75W	19	P64AX/LSF/4.0	12		
		KLP/3/1-5W	19	P64AX/R	11		
		KLP/3/1W	19	P64AXR/1.0	12		
		KLP/4/0-75W	19	P64AXR/1.0LSF/2	12		
		KLP/4/1-5W	19	P64AXR/1.0LSF/3	12		
		KLP/4/1W	19	P64AXR/1.0LSF/4	12		
		KLP/5/0-75W	19	P64AXR/1.0LSF/5	12		
		KLP/5/1-5W	19	P64AXR/1.0PVC/2	12		
		KLP/5/1W	19	P64AXR/1.0PVC/3	12		
		KLPB/3	20	P64AXR/1.0PVC/4	12		
		KLPCR/7	20	P64AXR/1.0PVC/5	12		
		KLPJ/4	20	P64AXR/2.0	12		
		KLPP/5	20	P64AXR/3.0	12		
		KLPT/6	20	P64AXR/4.0	12		
		KLR/10/1-5W	21	P64AXR/LSF/1.0	12		
		KLR/15/1-5W	21	P64AXR/LSF/2.0	12		
				P64AXR/LSF/3.0	12		

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