

NEW



CONTROLS FOR DALI DIMMABLE BALLASTS

- PIR OCCUPANCY SWITCHES WITH PRESENCE DETECTION
- PIR OCCUPANCY SWITCHES WITH ABSENCE DETECTION
- DAYLIGHT LINKED DIMMING
- SUITABLE FOR DALI BROADCAST
- HIGH BAY VERSIONS
- VERSIONS WITH MANUAL ADJUSTMENT
- VERSIONS WITH REMOTE ADJUSTMENT AND SCHEDULING



DANLERS
Controls for Lighting & HVAC

www.danlers.co.uk

DANLERS CONTROLS FOR DALI BALLASTS



This DANLERS range of passive infra-red (PIR) occupancy switches with daylight linked dimming (maintained lux level) is designed for lighting loads controlled by DALI broadcast dimmable ballasts.

The controls switch the lights on when the area is occupied, and dim or brighten the lights in response to changes in the ambient light - to maintain a chosen lux level.

Each control also has a switching relay, capable of switching 2 amps (500W) LED lamps and fittings or up to 6 amps (1500W) of most other types of load.

This range of DALI controls comes in four options, as detailed below. For the first two options the settings are adjusted manually via spindles on the product. The final two versions are remotely programmable via an app on an Android phone or tablet.



MANUALLY ADJUSTED VERSIONS

Presence Detection versions

These versions automatically switch the lights on when somebody enters the detection area, and automatically dim or brighten the lights to maintain a chosen lux level. They automatically switch the lights off when no further movement is detected.

Optionally the lights can also be set to return to a minimum light level when the area is not occupied. This can either be set as a permanent background light on non-occupancy, or can be set for between 1 and 30 minutes following a period of occupancy.

Absence Detection versions

These versions operate as the Presence Detection versions above, however they require a retractive (momentary) switch to be operated to initially switch the lights on. The lights can also be switched off manually, by pressing the retractive switch for 2 seconds.

REMOTELY PROGRAMMABLE VERSIONS

EasyZAPP versions

These versions are set up or adjusted remotely using a free app on an Android phone or tablet. These work as presence detector switches with daylight linked dimming, and can be adjusted for settings such as photocell and time lag. The phone or tablet can also be used as a remote control on/off override, or used to batch configure a number of EasyZAPP controls at the same time. The Android device communicates using Bluetooth Smart, with a signal range of up to 100m.

ControlZAPP versions

In addition to all the EasyZAPP functions, ControlZAPP products can be programmed to change state or change function according to a calendar schedule.

Both EasyZAPP and ControlZAPP include optional password protection, to avoid unwanted adjustment of the settings.

ADJUSTABLE TIME LAG

All DANLERS DALI controls have an adjustable time lag function. The time lag is the time that must elapse with no movement detected before the PIR occupancy switch will switch off. On manually configured products the time lag is adjustable from 10 seconds to 40 minutes in 9 steps. On remotely programmable EasyZAPP and ControlZAPP products the time lag is adjustable from 10 seconds to 24 hours in 1 second increments.

DALI POWER SUPPLIES

Versions with INTEGRAL DALI Power Supply

Some of the DANLERS DALI controls have an INTEGRAL power supply for controlling up to 12 DALI ballasts.

Versions with EXTERNAL DALI Power Supply

Other DANLERS DALI controls are provided with an external DALI power supply unit for controlling up to 20 DALI ballasts.

For controlling a greater number of DALI ballasts (up to a maximum of 64), extra external DALI power supply units can be added to the circuit (DANLERS Order Code: DBPSU).

DANLERS CONTROLS FOR DALI BALLASTS



DETECTION

DANLERS range of DALI controls are available in one of 4 detection patterns, each optimised for particular applications.

Standard Detection Ideal for offices, reception rooms, corridors etc where the mounting heights does not exceed 5m.

Narrow Detection These high bay versions are ideal for covering storage aisles where a narrow long detection is required.

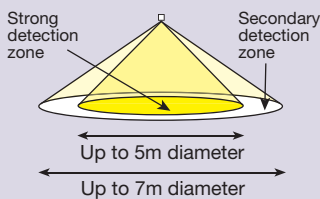
Spot Detection These high bay versions are ideal for smaller areas, such as the entrances to storage aisles.

Wide Detection These high bay versions are ideal for large open areas, such as factories, sports halls and entrance halls.

STANDARD DETECTION

Mounting height up to 5m

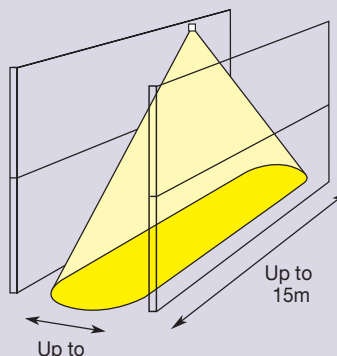
Perspective view - ceiling mounted



NARROW DETECTION

Mounting height up to 12m

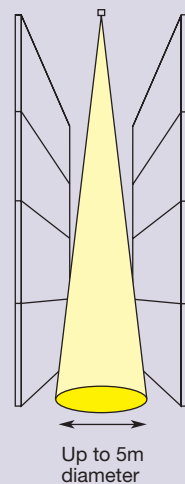
Perspective view - ceiling mounted



SPOT DETECTION

Mounting height up to 20m

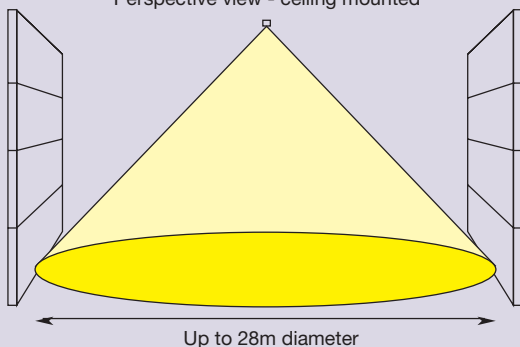
Perspective view - ceiling mounted



WIDE DETECTION

Mounting height up to 14m

Perspective view - ceiling mounted



Also available: BATTEN MOUNT VERSIONS

All of the High Bay and Surface Mounted controls are available as Batten Mount versions. Please contact us or visit the DANLERS website for a complete list of High Bay Batten Mount options and order codes.



Also available: SWITCH/ DIM VARIANTS

With these variants, when a person enters the room a momentary wall switch is pressed to switch the lights ON and enable the PIR switch to control the load.

The momentary wall switch can also be used to switch or dim the load.

The load will automatically be switched OFF when no further movement is detected.

Also available: VOLT FREE VARIANTS

The remotely programmable DALI controls are also available with volt free output contacts.

Switch/dim versions with volt free output contacts are also available.

Please contact us or visit the DANLERS website for complete list of options and order codes.

CEILING FLUSH MOUNTED DALI CONTROLS



CEILING FLUSH MOUNTED DALI CONTROLS WITH MANUAL ADJUSTMENT

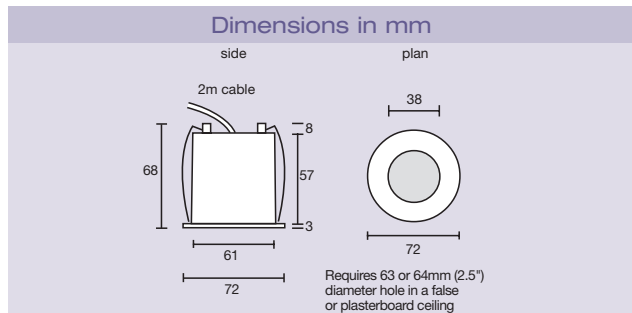
These controls will automatically switch the lights ON to a regulated (maintained) lux level when a person enters the area. Then they automatically switch the lights off when no further movement is detected.

There is also an adjustable “Run-on” timer, which allows the light to be returned to a minimum background level following a period of occupancy. This can either be for a chosen time period, or as a permanent background light.

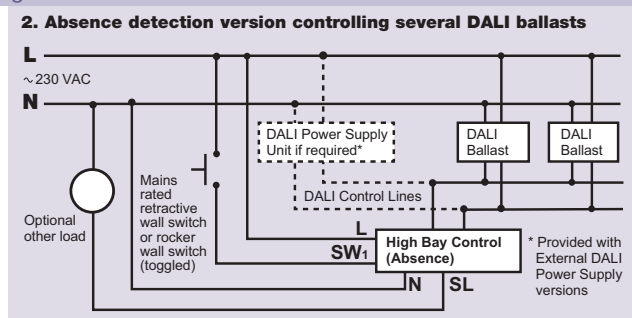
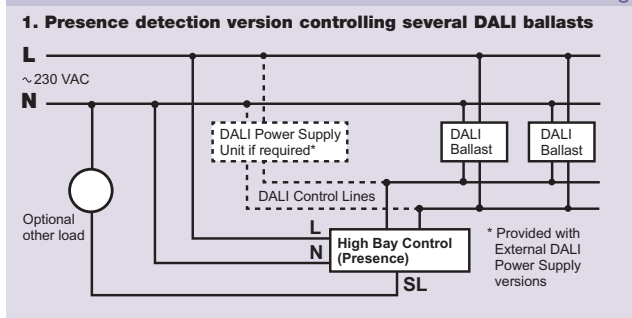
Specification

Detection range:	See page 3 (Standard detection)
Time lag range:	10 seconds to 40 minutes in 9 steps
Run-on time:	0, 1, 2, 5, 10, 15, 20, 30 mins and infinite (always ON at minimum)
Photocell range:	30 to 1000 lux and inactive
Loading:	Suitable for switching and dimming DALI ballasts (broadcast only).
‘DALIP’ range:	INTERNAL DALI POWER SUPPLY: The integral DALI power supply can control up to 24mA, eg. 12 ballasts at 2mA (varies according to make and model of ballasts).
‘DALI’ range:	EXTERNAL DALI POWER SUPPLY: The external DALI power supply provided can control up to 40mA, eg. 20 ballasts at 2mA (varies according to make and model of ballasts). For greater numbers of ballasts (64 max.) additional external DALI Power supplies can be purchased (DANLERS order code: DBPSU).

DANLERS PRODUCT ORDER CODE	Detection type	Detection pattern	Maximum number of Ballasts	Wiring diagram
VERSIONS WITH INTERNAL DALI POWER SUPPLY				
CEFL PIR DALIP	Presence	Standard	12	1
CEFLA PIR DALIP	Absence	Standard	12	2
VERSIONS WITH EXTERNAL DALI POWER SUPPLY UNIT				
CEFL PIR DALI	Presence	Standard	20	1
CEFLA PIR DALI	Absence	Standard	20	2



Wiring diagrams



CEILING SURFACE MOUNTED DALI CONTROLS



CEILING SURFACE MOUNTED DALI CONTROLS WITH MANUAL ADJUSTMENT

These controls will automatically switch the lights ON to a regulated (maintained) lux level when a person enters the area. Then they automatically switch the lights off when no further movement is detected.

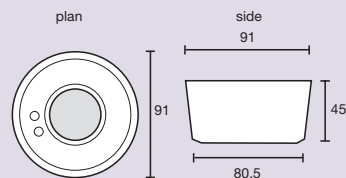
There is also an adjustable “Run-on” timer, which allows the light to be returned to a minimum background level following a period of occupancy. This can either be for a chosen time period, or as a permanent background light.

Specification

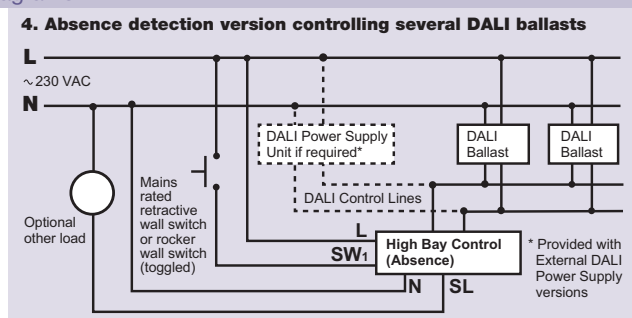
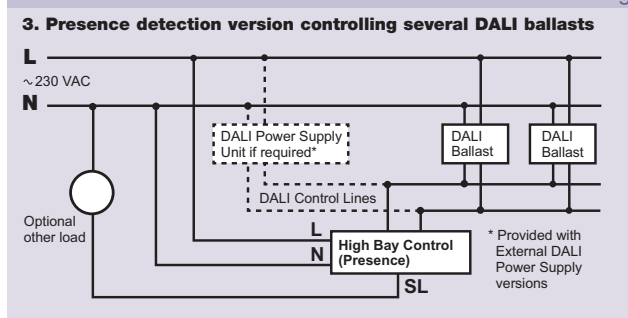
Detection range:	See page 3 (Standard detection)
Time lag range:	10 seconds to 40 minutes in 9 steps
Run-on time:	0, 1, 2, 5, 10, 15, 20, 30 mins and infinite (always ON at minimum)
Photocell range:	30 to 1000 lux and inactive
Loading:	Suitable for switching and dimming DALI ballasts (broadcast only).
‘DALIP’ range:	INTERNAL DALI POWER SUPPLY: The integral DALI power supply can control up to 24mA, eg. 12 ballasts at 2mA (varies according to make and model of ballasts).
‘DALI’ range:	EXTERNAL DALI POWER SUPPLY: The external DALI power supply provided can control up to 40mA, eg. 20 ballasts at 2mA (varies according to make and model of ballasts). For greater numbers of ballasts (64 max.) additional external DALI Power supplies can be purchased (DANLERS order code: DBPSU).

DANLERS PRODUCT ORDER CODE	Detection type	Detection pattern	Maximum number of Ballasts	Wiring diagram
VERSIONS WITH INTERNAL DALI POWER SUPPLY				
CESR PIR DALIP	Presence	Standard	12	3
CESRA PIR DALIP	Absence	Standard	12	4
VERSIONS WITH EXTERNAL DALI POWER SUPPLY UNIT				
CESR PIR DALI	Presence	Standard	20	3
CESRA PIR DALI	Absence	Standard	20	4

Dimensions in mm



Wiring diagrams



HIGH BAY MOUNTED DALI CONTROLS



HIGH BAY MOUNTED DALI CONTROLS WITH MANUAL ADJUSTMENT

These controls will automatically switch the lights ON to a regulated (maintained) lux level when a person enters the area. Then they automatically switch the lights off when no further movement is detected.

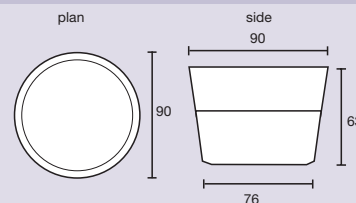
There is also an adjustable “Run-on” timer, which allows the light to be returned to a minimum background level following a period of occupancy. This can either be for a chosen time period, or as a permanent background light.

Specification

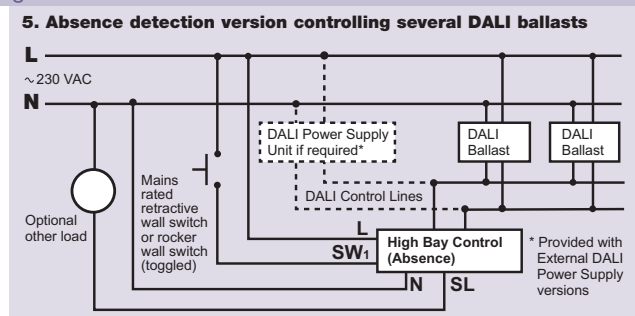
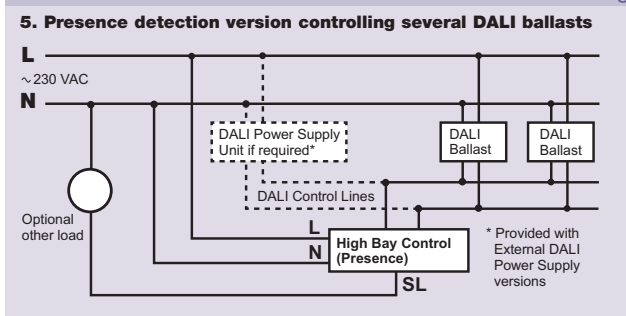
Detection ranges:	See page 3.
Time lag range:	10 seconds to 40 minutes in 9 steps
Run-on time:	0, 1, 2, 5, 10, 15, 20, 30 mins and infinite (always ON at minimum)
Photocell range:	30 to 1000 lux and inactive
Loading:	Suitable for switching and dimming DALI ballasts (broadcast only).
‘DALIP’ range:	INTERNAL DALI POWER SUPPLY: The integral DALI power supply can control up to 24mA, eg. 12 ballasts at 2mA (varies according to make and model of ballasts).
‘DALI’ range:	EXTERNAL DALI POWER SUPPLY UNIT: The external DALI power supply provided can control up to 40mA, eg. 20 ballasts at 2mA (varies according to make and model of ballasts). For greater numbers of ballasts (64 max.) additional external DALI Power supplies can be purchased (DANLERS order code: DBPSU).

DANLERS PRODUCT ORDER CODE	Detection type	Detection pattern	Maximum number of Ballasts	Wiring diagram
VERSIONS WITH INTERNAL DALI POWER SUPPLY				
HB PIR ND DALIP	Presence	Narrow	12	5
HB PIR SP DALIP	Presence	Spot	12	5
HB PIR WD DALIP	Presence	Wide	12	5
HBA PIR ND DALIP	Absence	Narrow	12	6
HBA PIR SP DALIP	Absence	Spot	12	6
HBA PIR WD DALIP	Absence	Wide	12	6
VERSIONS WITH EXTERNAL DALI POWER SUPPLY UNIT				
HB PIR ND DALI	Presence	Narrow	20	5
HB PIR SP DALI	Presence	Spot	20	5
HB PIR WD DALI	Presence	Wide	20	5
HBA PIR ND DALI	Absence	Narrow	20	6
HBA PIR SP DALI	Absence	Spot	20	6
HBA PIR WD DALI	Absence	Wide	20	6

Dimensions in mm



Wiring diagrams



REMOTELY PROGRAMMABLE DALI CONTROLS



DALI CONTROLS WITH REMOTELY PROGRAMMABLE ADJUSTMENT

EasyZAPP (EZ): These controls will automatically switch the lights ON to a regulated (maintained) lux level when a person enters the area. They include an adjustable time lag and an adjustable photocell. The time lag and photocell settings can be adjusted and programmed remotely using the free to download EasyZAPP app on an Android phone or tablet.

ControlZAPP (CZ): In addition to the EasyZAPP features, these controls also benefit from “to the second” calendar scheduling, enabling changes of state or function in real time. For example, regulating a higher maintained light level at peak work times but reducing the maintained level (or changing to occupancy switching only) at non peak times. Special exceptions can also be scheduled such as holidays. The ControlZAPP app is also free to download.

Both EasyZAPP and ControlZAPP include optional password protection, to avoid unwanted adjustment of the settings.

Programmable by Android (4.3 or later) phone or tablet via Bluetooth Smart.

Specification

Detection ranges: See page 3

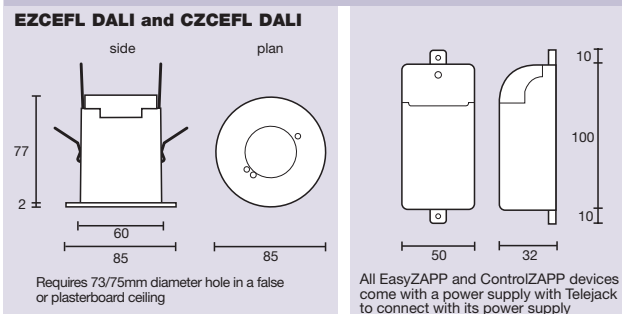
Time lag range: 10 seconds - 24 hours.

Photocell range: 30 to 1000 lux and inactive

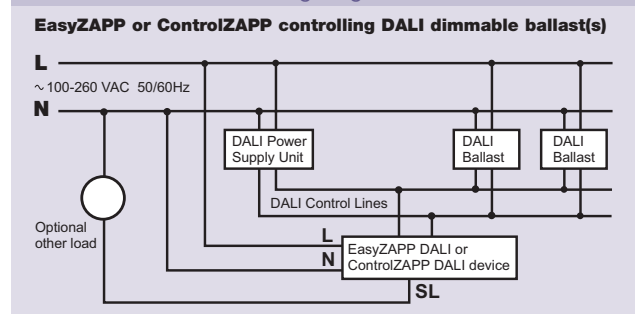
Loading: Suitable for switching and dimming DALI ballasts (broadcast only).
Can control up to 40mA,
eg. 20 ballasts at 2mA (varies according to make and model of ballasts).
DALI Power Supply Unit included.

DANLERS PRODUCT ORDER CODE	DETECTION PATTERN	MOUNTING STYLE	DIMENSIONS (See page number indicated)	PIR OCCUPANCY SWITCHING: (PRESENCE) AND ADJUSTABLE PHOTOCELL	ADJUSTABLE TIME LAG SETTINGS: From 10 seconds to 24 hours	ADJUSTABLE SHORT VISIT TIME LAG: From 10 seconds to 24 hours	SCHEDULING: Day/Week/Year	SENSITIVITY ADJUSTMENT: Reduces height of detection zone	LOAD ON / LOAD OFF OVERRIDE	LOCATION BASED SUNSET SUNRISE PREDICTION	SUMMER/WINTER TIME DAYLIGHT SAVINGS ADJUSTMENT
EasyZAPP											
EZCEFL DALI	Standard	Flush	7	✓	✓	X	X	X	✓	X	X
EZCESR DALI	Standard	Surface	5	✓	✓	X	X	X	✓	X	X
EZHB ND DALI	Narrow	High bay	6	✓	✓	X	X	X	✓	X	X
EZHB SP DALI	Spot	High bay	6	✓	✓	X	X	X	✓	X	X
EZHB WD DALI	Wide	High bay	6	✓	✓	X	X	X	✓	X	X
ControlZAPP											
CZCEFL DALI	Standard	Flush	7	✓	✓	✓	✓	✓	✓	✓	✓
CZCESR DALI	Standard	Surface	5	✓	✓	✓	✓	✓	✓	✓	✓
CZHB ND DALI	Narrow	High bay	6	✓	✓	✓	✓	✓	✓	✓	✓
CZHB SP DALI	Spot	High bay	6	✓	✓	✓	✓	✓	✓	✓	✓
CZHB WD DALI	Wide	High bay	6	✓	✓	✓	✓	✓	✓	✓	✓

Dimensions in mm



Wiring diagram



DALI CONTROLS SELECTOR GUIDE

DANLERS PRODUCT ORDER CODE	DETECTION TYPE	DETECTION PATTERN	ADDITIONAL PRODUCT DESCRIPTION	DALI POWER SUPPLY	MANUAL OR REMOTE ADJUSTMENT	PAGE
CEFL PIR DALIP	Presence	Standard	Ceiling flush mounted. Exit run-on function.	Integral	Manual	4
CEFLA PIR DALIP	Absence	Standard	As CEFL PIR DALIP, but with absence detection.	Integral	Manual	4
CEFL PIR DALI	Presence	Standard	Ceiling flush mounted. Exit run-on function.	External	Manual	4
CEFLA PIR DALI	Absence	Standard	As CEFL PIR DALI, but with absence detection.	External	Manual	4
CESR PIR DALIP	Presence	Standard	Ceiling surface mounted. Exit run-on function.	Integral	Manual	5
CESRA PIR DALIP	Absence	Standard	As CESR PIR DALIP, but with absence detection.	Integral	Manual	5
CESR PIR DALI	Presence	Standard	Ceiling surface mounted. Exit run-on function.	External	Manual	5
CESRA PIR DALI	Absence	Standard	As CESR PIR DALI, but with absence detection.	External	Manual	5
HB PIR ND DALIP	Presence	Narrow	High Bay mounting. Exit run-on function.	Integral	Manual	6
HBA PIR ND DALIP	Absence	Narrow	As HB PIR ND DALIP, but with absence detection.	Integral	Manual	6
HB PIR SP DALIP	Presence	Spot	High Bay mounting. Exit run-on function.	Integral	Manual	6
HBA PIR SP DALIP	Absence	Spot	As HB PIR SP DALIP, but with absence detection.	Integral	Manual	6
HB PIR WD DALIP	Presence	Wide	High Bay mounting. Exit run-on function.	Integral	Manual	6
HBA PIR WD DALIP	Absence	Wide	As HB PIR WD DALIP, but with absence detection.	Integral	Manual	6
HB PIR ND DALI	Presence	Narrow	High Bay mounting. Exit run-on function.	External	Manual	6
HBA PIR ND DALI	Absence	Narrow	As HB PIR ND DALI, but with absence detection.	External	Manual	6
HB PIR SP DALI	Presence	Spot	High Bay mounting. Exit run-on function.	External	Manual	6
HBA PIR SP DALI	Absence	Spot	As HB PIR SP DALI, but with absence detection.	External	Manual	6
HB PIR WD DALI	Presence	Wide	High Bay mounting. Exit run-on function.	External	Manual	6
HBA PIR WD DALI	Absence	Wide	As HB PIR WD DALI, but with absence detection.	External	Manual	6
EZ CEFL DALI	Presence	Standard	EasyZAPP functionality. Ceiling flush mounted.	External	Remote	7
EZ CESR DALI	Presence	Standard	EasyZAPP functionality. Ceiling surface mounted.	External	Remote	7
EZHB ND DALI	Presence	Narrow	EasyZAPP functionality. High Bay mounting.	External	Remote	7
EZHB SP DALI	Presence	Spot	EasyZAPP functionality. High Bay mounting.	External	Remote	7
EZHB WD DALI	Presence	Wide	EasyZAPP functionality. High Bay mounting.	External	Remote	7
CZ CEFL DALI	Presence	Standard	ControlZAPP functionality. Ceiling flush mounted.	External	Remote	7
CZ CESR DALI	Presence	Standard	ControlZAPP functionality. Ceiling surface mounted.	External	Remote	7
CZHB ND DALI	Presence	Narrow	ControlZAPP functionality. High Bay mounting.	External	Remote	7
CZHB SP DALI	Presence	Spot	ControlZAPP functionality. High Bay mounting.	External	Remote	7
CZHB WD DALI	Presence	Wide	ControlZAPP functionality. High Bay mounting.	External	Remote	7
DBPSU	For use with DANLERS controls for controlling additional DALI or DSI ballasts or for controlling third party DALI or DSI controls. Suitable for up to 20 DALI / DSI ballasts (or an additional 20 ballasts).					