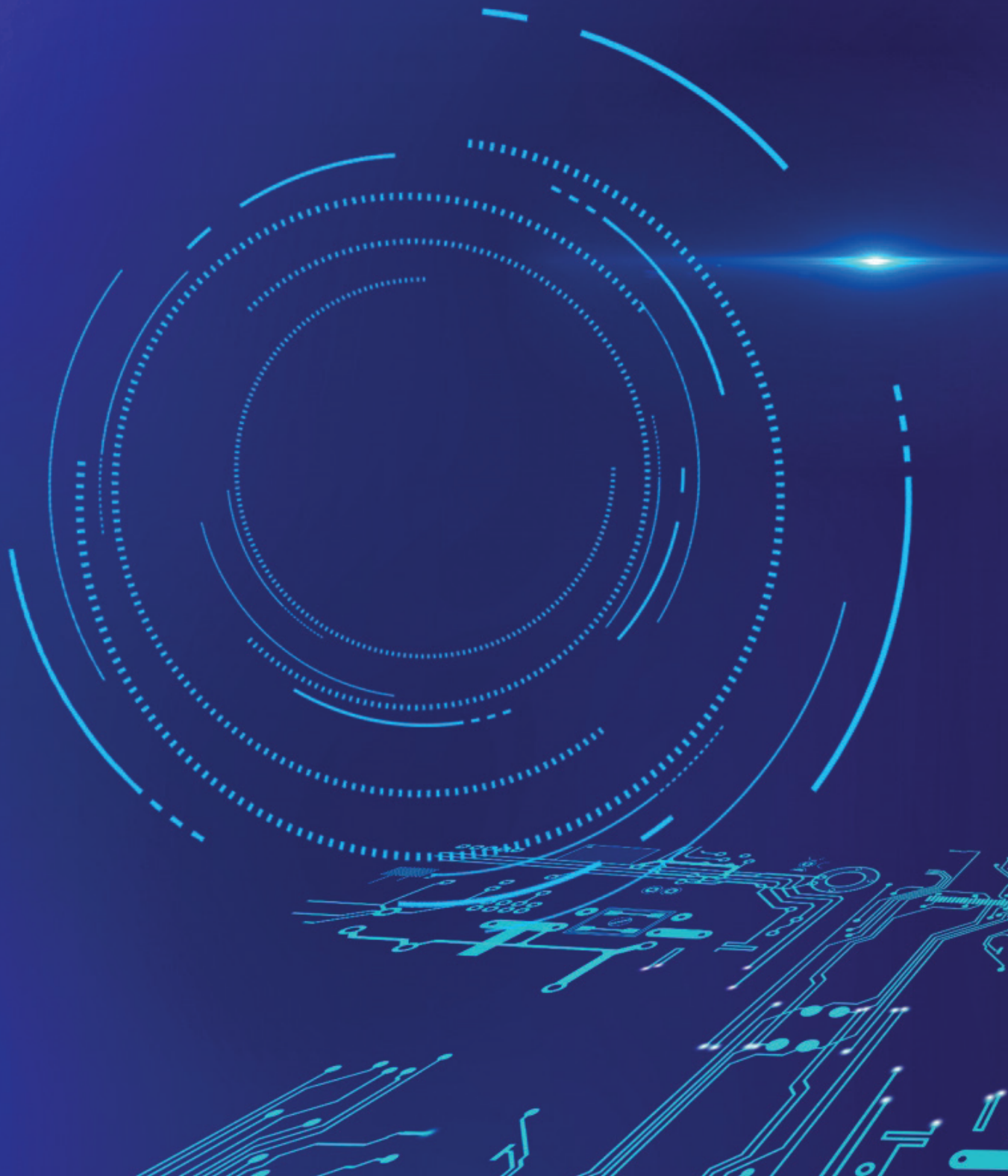


Dimmer and Controller

Lighting control Expert



Primotek s.r.l.s.
È vietata la riproduzione anche parziale di questo Catalogo.
It's forbidden to reproduce any part of this Catalogue.



ZigBee > DALI 6



BLUETOOTH > DALI 7



Bluetooth DIMMER 8



PUSH & RF 10



Easy DALI System 12



Alimentatori DALI 18



Alimentatori On-Off 20





Light management and control, goals to achieve

A light management and control system is defined by a set of devices able of receiving data and reprocess them into signals to modify the operating conditions of lighting systems. The data in question can come from the environment itself (availability of natural light, presence/absence of people) or be the result of a programming of control actions based for example on the timing of the light in the rooms. The conditions of operation of the lighting fixtures are modified since it is possible to adjust automatically or manually the switching on, off, the intensity, color and color temperature of the light sources.

The final goal for the use of control systems is to ensure adequate lighting conditions for any vision field by reducing the consumption of electricity coming from artificial lighting sources. The primary need for which the control systems were created is to provide lighting solutions with high energy savings in relation to the "function" of the environments in which these systems are installed. For this reason, a first goal of light management and control is to guarantee functional lighting, associating energy saving with the need to guarantee adequate visual comfort in relation to the activities to be carried out. The goal is therefore to illuminate where and when only is needed, rationalizing energy consumption and reducing waste.



Benefits from the use of light management and control systems

An ideal control system increases the quality of the lighting project by assuring optimal conditions of visual comfort, reducing energy waste, with positive results both in terms of user needs and in relation to the economic and environmental implications of the project.



Energy saving

A light management and control system positively affects the energy requirement of a building depending on artificial lighting in relation to the on/off life of the luminaires and the quantity of flux emitted. In this sense, for a more effective system design, it is necessary to analyze the building following the here below criteria:

- Mode of use of the environments: time programming of start and end of activity, in order to adjust automatically switching on and off the lighting fixtures. In case of environments characterized by a discontinuous occupation it is possible to use devices for automatic switching on and off of the lighting sources based on the presence or absence of people.
- Availability of natural light in the room: considering a room with windows, the potential reduction in energy consumption depends on the availability of natural light, on the seasons changing, in relation to the shape and orientation of the building, on the presence of obstructions and on the different external light conditions.

It is possible to use devices that automatically adjust the quantity of flux emitted by the light sources based on the real availability of natural light within the spaces/rooms.



Visual comfort

The correct use of a light management and control system helps to realize a high-quality lighting project in terms of visual comfort connected to the needs of the user according to the performance of a specific visual task, to the psychophysical characteristics of the user same, his visual abilities, the characteristics of the restricted space and the lighting system. Considering the complexity and changeability of the visual task, the needs of users increase and diversify more and more. The possible preferences of the user are due to the continuous changes of the luminous environment which may vary during the hours of the day.



Flexibility of overall dimensions and electrical systems.

PrimOlux control systems allow flexibility in the design and management of the lighting system as they allow to reset the settings without any intervention on the wiring.

- In domestic environments it is possible to adjust the light level based on the time of day, morning, and evening. Furthermore, once the desired intensity of light has been set, it will be possible to automatically maintain it without wasting consumption by brightness / presence sensors.
- In classrooms, automatic brightness management will significantly reduce energy waste.
- Workstations used from many people, each of them with different visual abilities and preferences. Therefore, different levels of lighting will be necessary to guarantee the performance of different activities.
- The age of workers is increasing more and more nowadays, consequently the visual ability decreases proportionally requiring a greater efficiency of the luminous environment.
- The lighting in the exhibitions, shops and shop- windows will have the possibility of dynamic settings.



Enhancement of the environment

A further benefit of the control systems is the enhancement of the spaces through the dimming of the light, the change of tone and color. In environments such as schools and offices that are busy throughout the day, the variation of the luminous flux and the color temperature of artificial light leads to a sensation of psychophysical benefit during the study and work activities.

In shopping malls, shops and hotels, the addition and management of supplementary colored light helps the perception of the spaces to communicate advertising messages, to enhance the spaces themselves, the areas and the architectures in an elegant scenography way.

light management

PUSH

zigbee
certified
product

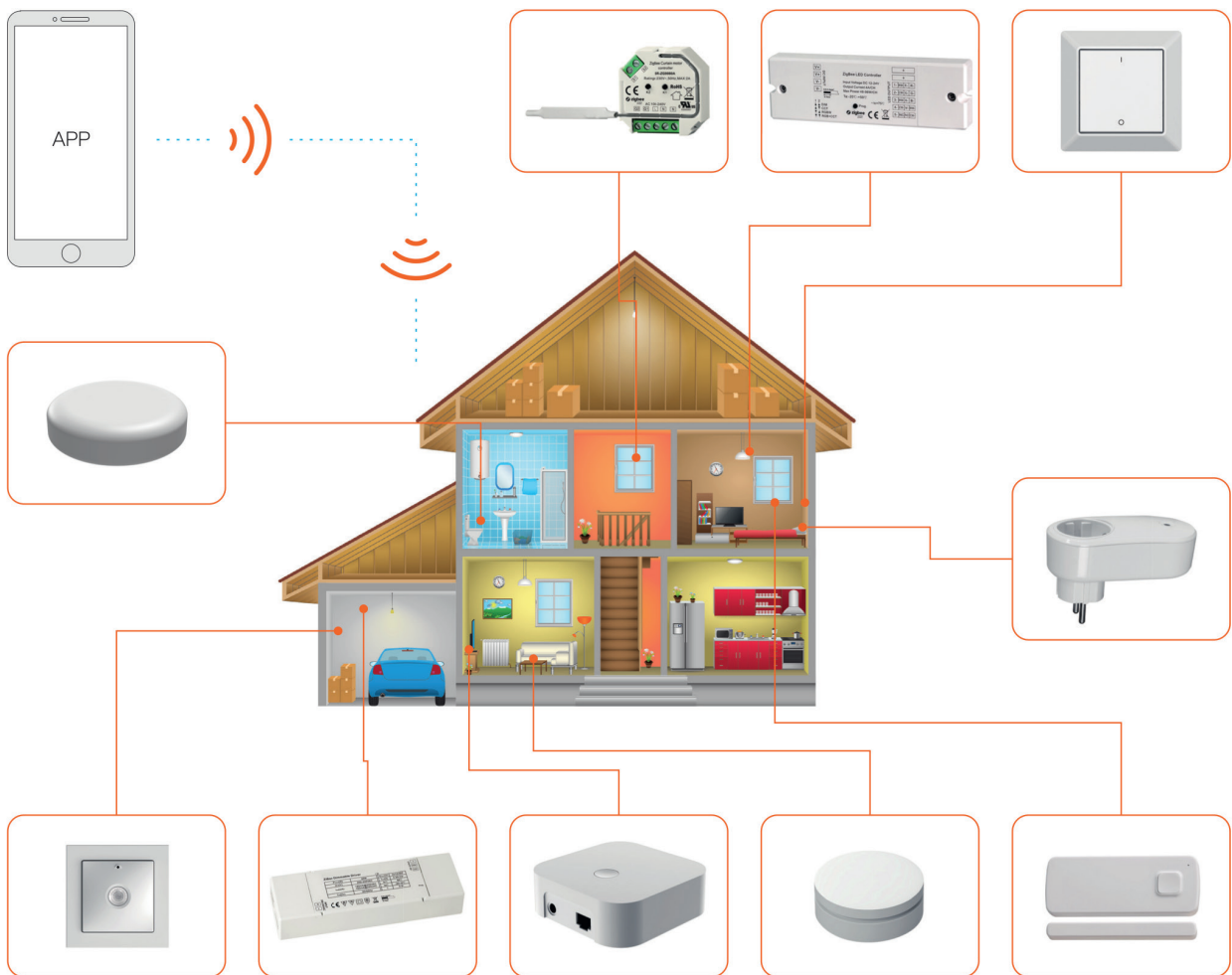
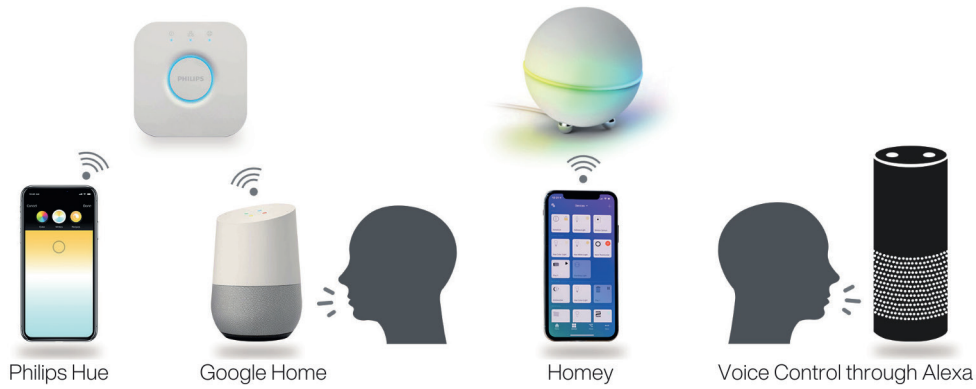
DALI

DALI

Bluetooth®

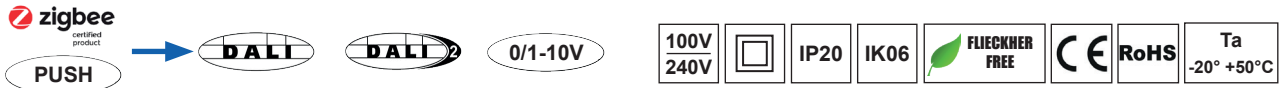
0/1-10V

CE RoHS



DIMMER DALI - ZigBee - PUSH

Push/ZigBee → DALI/1-10V signal converter



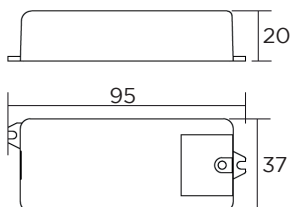
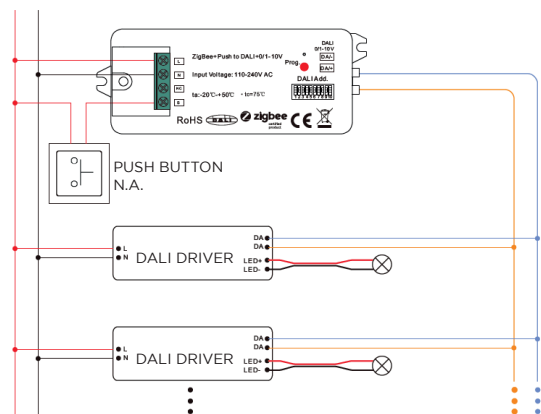
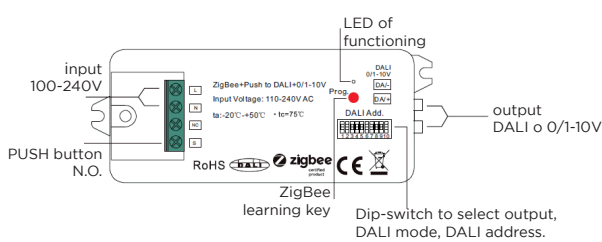
Push / WIFI (ZigBee) >> DALI / 0-10V / 1-10V



cod.	INPUT	CONTROL BY	POWER	OUTPUT CH
EL2421ZP-DA	100-240V	ZIGBEE / PUSH	25 DALI	1 CH DALI / 1-10V

System for dimmer controlling equipment that works with BUS DALI or with 0/1-10V signal, Dimming, switching on and off can be operated via a normally open button (NO) and also via a ZigBee WIFI signal. Furthermore, the device can be interfaced with SMART HOME systems and with voice assistants such as ALEXA, GOOGLE HOME, Apple HomePod and PHILIPS HUE system. It interfaces with white light, dynamic white, RGB, RGBW, RGBWA equipment.

- Power supply 110-240Vac.
- ZigBee+Push converter to DALI or 0/1-10V based on zigbee 3.0
- WIFI control (ZigBee) and normally open button (N.O.)
- Generates a DALI or 0/1-10V line.
- Compatible with universal Zigbee hub or gateway products.
- Can be paired directly to a compatible ZigBee remote via Touchlink.
- Compatible with universal Zigbee remote controls.
- Supports self-forming zigbee network without coordinator.
- Supports search and link mode to connect a ZigBee remote control.
- It supports zigbee green power and can bind max. 20 Green Zigbee Power Switches.
- DIP-SWITCH for selecting the output signal.
- Integrated DALI bus power supply, no additional DALI PS bus required.
- With max. DALI bus power supply current output 50mA
- Control of up to 25 DALI ballasts
- DALI device type DT6 or DT8 selectable via DIP switch in DALI mode
- Color control according to the DALI specifications of the Type 8 device.
- Color type: Tc, XY coordinates, RGBW selectable via DIP switch.



INPUT			OUT DALI		OUT 0/1-10
Volt	Signal	push button	DALI out	Power consumption	0/1-10
110-240V	ZigBee	N.O.	max 50 mA (25 DALI)	max. 4mA	max 20mA

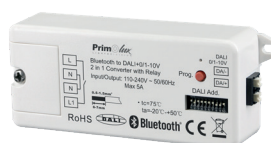
light management

DIMMER DALI - Bluetooth

convertitore di segnale Bluetooth → DALI/1-10V



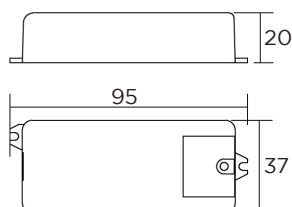
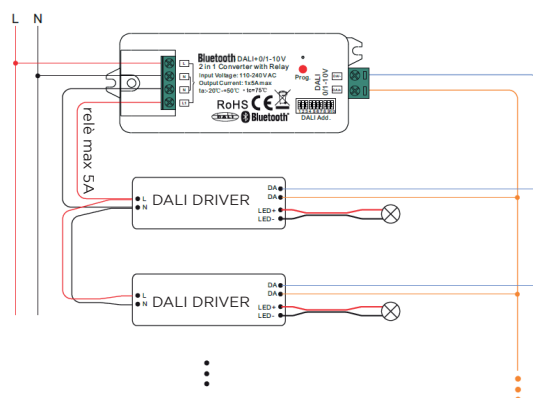
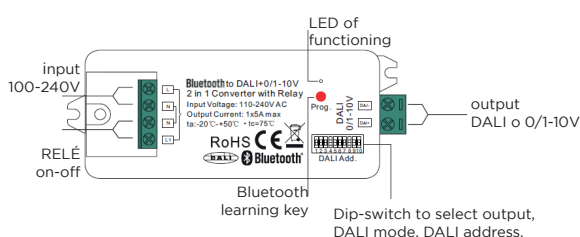
Bluetooth >> DALI / 0-10V / 1-10V con Relè on-off integrated



cod.	INPUT	CONTROL BY	POWER	OUTPUT CH
EL2421B-DA	100-240V	BLUETOOTH	25 DALI	1 CH DALI / 1-10V

System for dimmer controlling equipment that works with BUS DALI or with 0/1-10V signal, Dimming, switching on and off can be operated via BLUETOOTH signal. Furthermore, the device can be interfaced with SMART HOME systems and with voice assistants such as ALEXA, GOOGLE HOME, Apple HomePod and PHILIPS HUE system. It interfaces with white light, dynamic white, RGB, RGBW, RGBWA equipment.

- Power supply 110-240Vac.
- BLUETOOTH converter to DALI or 0/1-10V.
- BLUETOOTH control.
- Independently generated 1 CH DALI output or 1 CH 0/1-10V.
- Internal 5A relay to switch on the lighting fixtures.
- Generates a DALI or 0/1-10V line.
- Compatible any APP and Bluetooth control.
- Works with Amazon Alexa, Google Home and other voice assistants with BLUETOOTH transmission.
- DALI signal or 1-10V output signal selectable by DIP switch.
- With max. DALI bus power supply current output 50mA.
- Control of up to 25 DALI ballasts.
- DALI device type DT6 or DT8 selectable via DIP switch in DALI mode.
- Allows you to select different types of DALI devices: RGB, CCT, RGBW, RGBWA, RGB, CCT, DIM, ON/OFF.
- To control the different appliances it is recommended to use the appropriate APPs.
- Select DALI address (00-63) via DIP switch.
- DALI address control mode or group control mode selectable by DIP switch.
- Color control according to the DALI specifications of the Type 8 device.
- Color type: Tc, XY coordinates, RGBW selectable via DIP switch.



INPUT			OUT DALI		OUT 0/1-10
Volt	Signal	//	DALI out	Power consumption	0/1-10
110-240V	Bluetooth	//	max 50 mA (25 DALI)	max. 4mA	max 20mA

light management

PUSH & Bluetooth DIMMER

Dimmer / On-Off single color

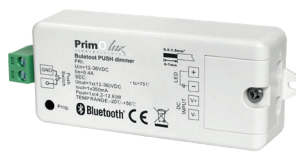
PUSH



RF



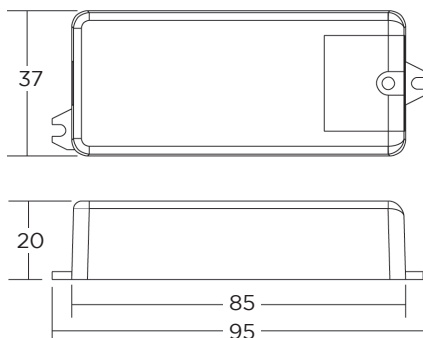
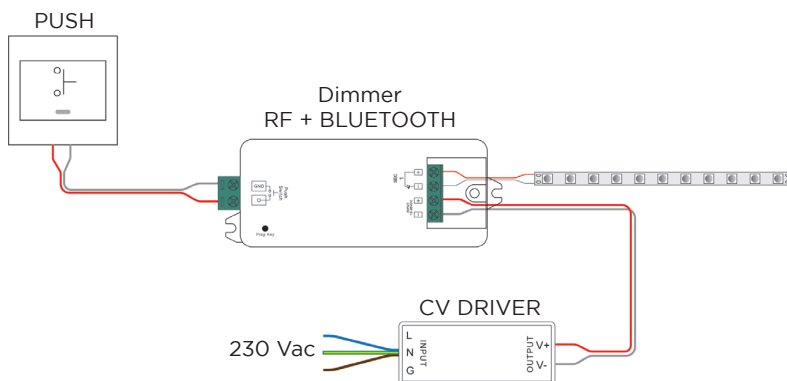
Push / Bluetooth dimmer



cod.	INPUT	CONTROL BY	POWER	OUTPUT
ELSB9101CS3-BT	12/24V	BLUETOOTH / PUSH / RF	8A	1 CH

Low Voltage PUSH e BLUETOOTH control

- Dimmer / On-OFF BLUETOOTH+RF, frequency: 2,4 GHz
- Input (Vdc) 12 / 24 / 36.
- Output dim. (Vdc) 12 / 24 / 36, 8 A.
- Controllable via BLUETOOTH, Normally open button (NO) and dedicated remote control
- The use of several devices of the same system generates itself a "Mesh" network, this allows through the bilateral transmission of the components that are part of it, a more solid and large coverage area.
- Mesh network, Up to 30m transmission distance between every two neighbor devices
- Compatible with universal RF+Bluetooth remotes, each LED controller can pair to max. 8 remotes



ACCESSORIES



Remote control, 4 groups
Bluetooth + RF
Transmission range between every two neighbor devices up to 30m
cod.ELSB2819SDIM

light management

DIMMER Bluetooth RGBW

Dimmer / On-Off - RGBW, RGBCCT, CCT, DIM 5CH



RF

PUSH



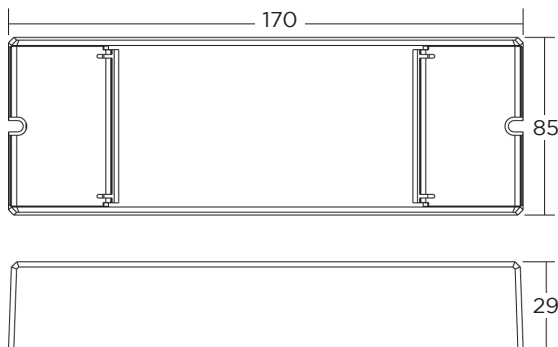
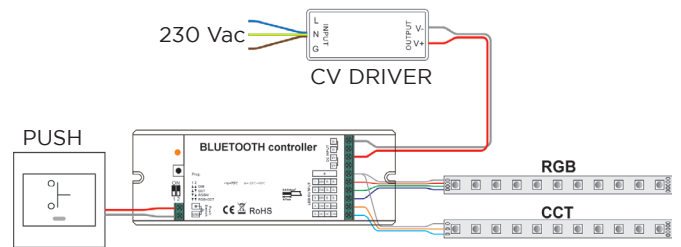
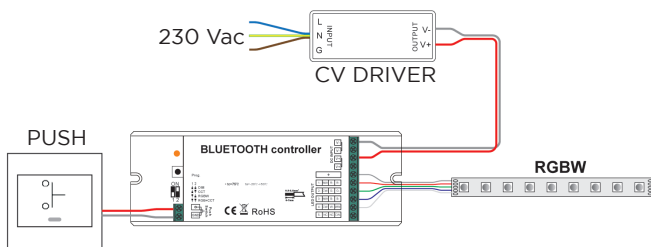
Bluetooth + RF multi function device



cod.	INPUT	CONTROL BY	POWER	OUTPUT
ELSB9101FA-RGBW	12/24V	BLUETOOTH / RF	8A	5 CH

Dimmer for low voltage equipment, controllable via BLUETOOTH signal, RF radio control. Dimming and On-Off controlled by normally open button (NO)

- 4 in 1 universal 2.4G mesh LED controller, radio frequency: 2.4GHz
- 4 different device modes DIM, CCT, RGBW and RGB+CCT in 1 controller, and selectable by dial switch
- Enables to control ON/OFF, light intensity, color temperature, RGB color of connected LED lights
- Ultra powerful to control Single Color, CCT, RGBW, RGB+CCT LED strips
- Can be configured as six different light types: RGB+CCT, RGBW, RGB, CCT, DIM, ON/OFF through the APP
- Mesh network, much longer control distance, transmits received signal to neighbor devices
- Up to 30m transmission distance between every two neighbor devices
- Compatible with universal 2.4G mesh remotes, each LED controller can pair to max. 8 remotes
- Selectable functions: RGBW, RGBCCT, CCT, DIM 5CH



ACCESSORIES



Remote control, 3 groups
RGBW, RGBCCT, CCT
Bluetooth + RF
Transmission range between every two neighbor devices up to 30m
cod.ELSB2858A-RGBWW

light management

PUSH DIMMER

Dimmer / On-Off single color

PUSH

RF



Dimmer Push / ON-OFF - RF controller



cod.
EL2501NS

INPUT
12/24V

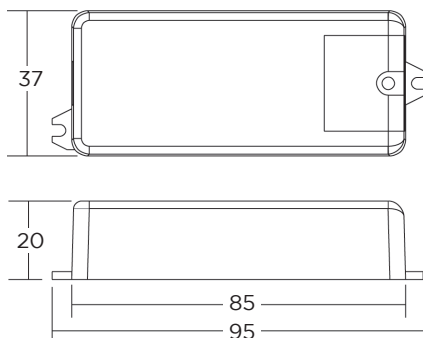
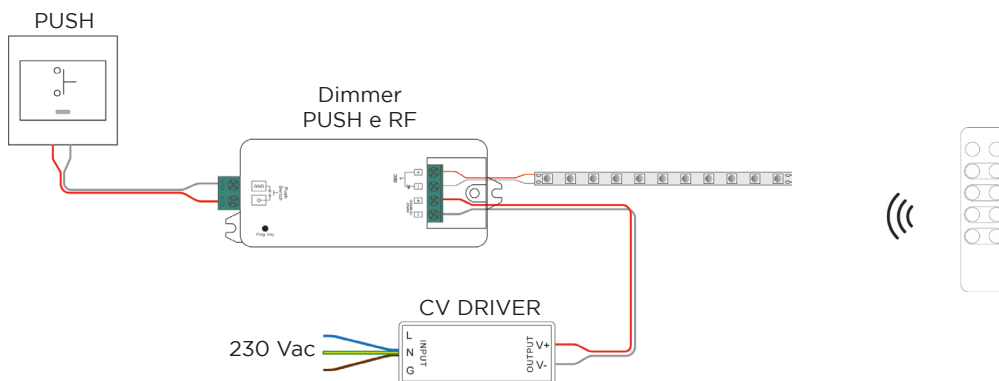
CONTROL BY
Push / RF

POWER
8A

OUTPUT
1 CH

Low Voltage PUSH e RF dimmer

- Dimmer / On-OFF PUSH e RF, frequency: 868/915/434mhz
- Input (Vdc) 12 / 24 / 36.
- UOutput dim. (Vdc) 12 / 24 / 36, 8 A.
- Control by Normally open push button (NO) and FR remote control.
- Transmission distance up to 30 meters.



ACCESSORIES



RF remote control 4 zone + master
868/869.5/916.5/434MHz
Transmission up to 30 meters.
cod.EL2801F

light management

EASY DIMMER RGB

Dimmer / On-Off - RGB

RF



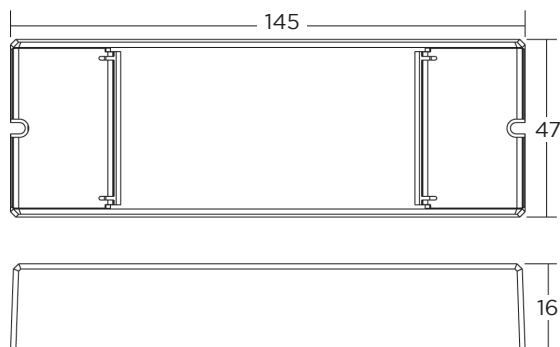
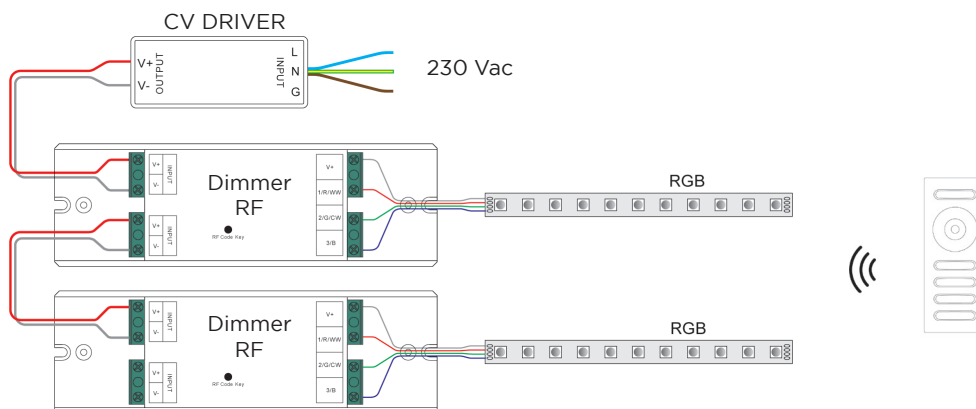
Controllo Dimmer RGB a radiocomando RF



cod.	INPUT	CONTROL BY	POWER	OUTPUT
EL1029-RGB	12/24V	RF	5A x 3	3 CH

Low voltage RGB equipment Dimmer, control by RF remote control.
Dimming / On-Off and color mixing

- Dimmer / On-OFF frequency: 868/915/434mhz
- Input (Vdc) 12 / 24
- Output dim. (Vdc) 12 / 24 per 3 CH x 5 A.
- Control by RF remote control.
- Transmission distance up to 30 meters.
- Function RGB control.



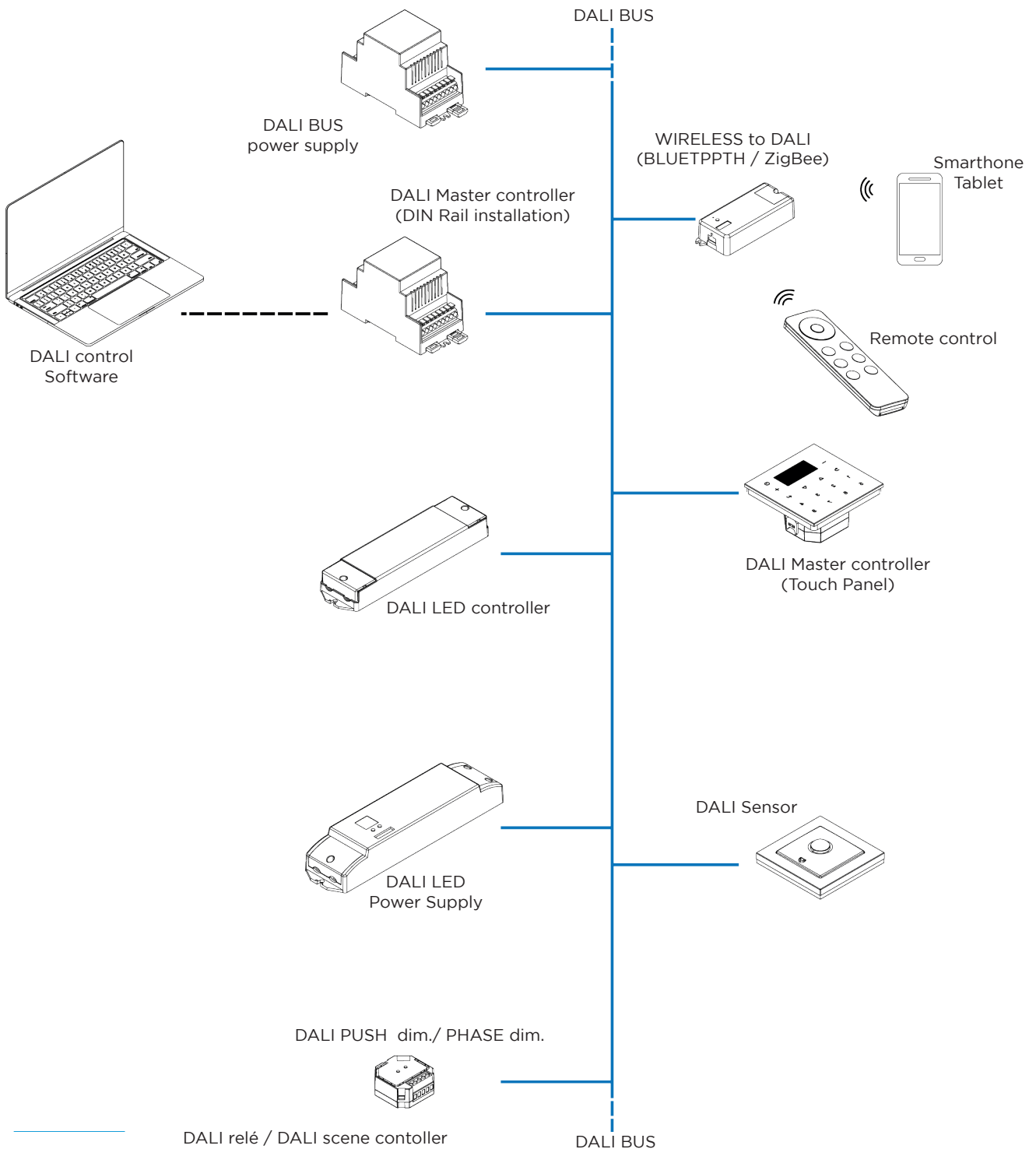
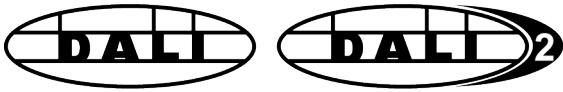
ACCESSORIES



RGB remote control
Frequency RF 868/915/434MHz
Transmission up to 30 meters.
cod.EL2839-RGB

light management

PRIMO DALI System



light management

Easy DALI System

Master DALI (Human Centric Lighting).

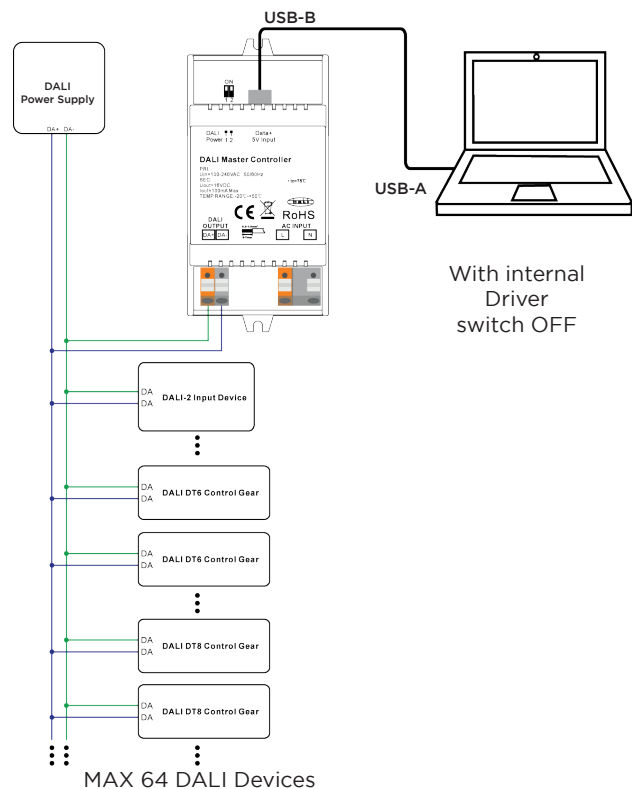
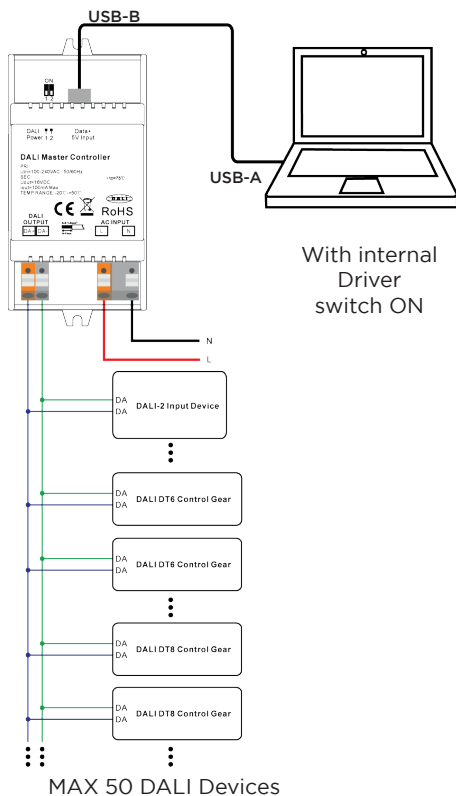


cod.	INPUT	SIGNAL OUT	OUT	OUTPUT
EL2300-USB	100-240V	DALI	16Vdc / 100 mA	1
			max 50 DALI device	

MAIN FEATURES

System configuration via DALI master PC software.

- Supports DALI devices of the type: DT6, DT8 Tc, DT8 XY, DT8 RGBWA.
- Addressing, grouping and scene configuration for up to 64 devices.
- Integrated 100 mA DALI line power supply (can be deactivated).
- Easy connection to a Windows PC via USB cable.
- Supports DALI dimmers, input devices (DALI/DALI 2 pushbuttons, DALI/DALI2 sensors).
- Built-in battery, built-in RTC, support timer activity configuration.
- Configuration of the planning of the operating cycles.
- Bionic program configuration (Human Centric Lighting).
- Quick and easy configuration via PC configuration software.

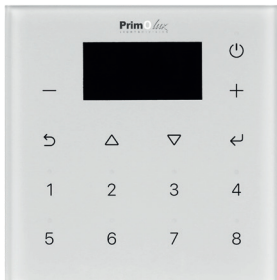


ACCESSORIES



DALI Power Supply
250mA - 16Vdc
cod.EL2400P

PRIMO DALI Master Touch Panel Controller

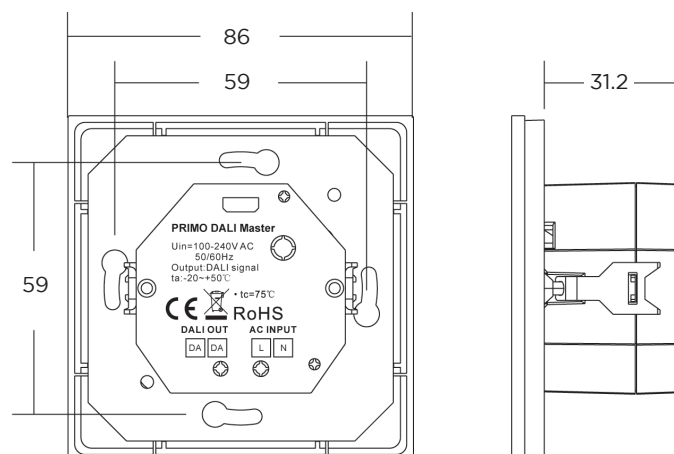


cod.	INPUT	SIGNAL OUT	CONSUMPTION	OUTPUT
EL2300-OLED	22-240V	DALI	<15 mA	64 CH

MAIN FEATURES

The EASY DALI Master control panel is a central controller of a DALI system that controls all the DALI devices connected to the DALI line. Its main features are the following:

- (1) Allows to automatically assign and manage addresses to up to 64 devices.
- (2) Allows to control up to 64 devices with 64 addresses.
- (3) Supports 5 DALI devices types: DT6, DT8 Tc, DT8 XY coordinate, DT8 RGBWA, DT7 Switching actuator.
- (4) Allows to set up to 16 DALI scenes for each device.
- (5) Allows to assign up to 16 DALI groups for each device.
- (6) Allows to set up to 256 timer tasks. Each timer task can be configured as follows:
 - a.to recall a DALI scene for all the devices together, divided in groups or individually.
 - b.to start and stop a brightness fade and color fade cycle schedule. The operation is possible for a single illuminator, for a group or for all devices connected simultaneously,
 - c.to start and stop a 24-hour Bionic schedule , for 24-hour white variation for CCT devices.
 Modes can be for single device, group of devices and for connected equipments.
- (7) Allows you to set up to 4 types of programs: cycle of brightness fading, fading of the color of the different DALI devices connected to the line.
- (8) Allows to set up to 4 Bionic schedules, white light tone change for CCT lighting fixtures. Each curve of the color temperature program can set the brightness and color temperature from 00.00 to 23.00, the total cycle time range is 24 hours. The Bionic program is the fading control of brightness and color temperature which change according to the change of natural light throughout the day.
- (9)The touch panel is backlit with adjustable intensity and tone, display safety lock, display light off, DALI Bus status, ETC..
- (10) The configuration software for PC allows to configure and read the operating parameters of the control touch panel itself and of all the devices connected in line; it is also possible to customize the functions of the panel and of the devices.



light management

Easy DALI Power

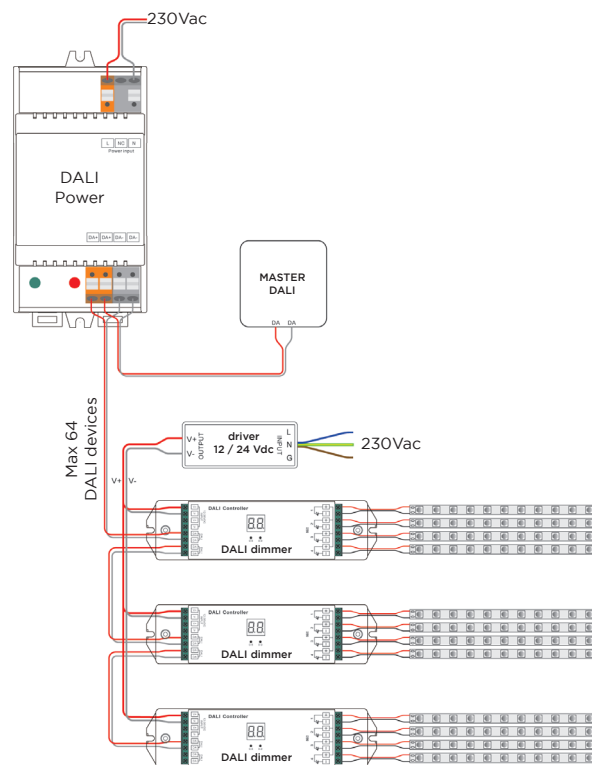
Power Supply for DALI line



cod.	INPUT	V-OUT	I-OUT	LINE OUTPUT
EL2400P	100-240V	16 V _{DC}	250 mA	1
			max 64 devices	

MAIN FEATURES

- DALI line power supply.
- Compatible with all DALI systems on the market.
- Compliant with EN 55015:2013 standard (Radio frequency interference).
- Immunity standard according to EN 61547:2009.
- Compatible with the EN 61000-3-2:2014 standard (mains conducted harmonics).
- Compatible with EN 61000-3-3:2013 standard (limits for voltage fluctuations and flicker).
- General and safety requirements EN 61347-1:2015.



light management

DALI DIMMER

SINGLE COLOR DALI- push Dimmer / On-Off



DALI / DALI2



cod.
EL2303S

INPUT
12/24/36V

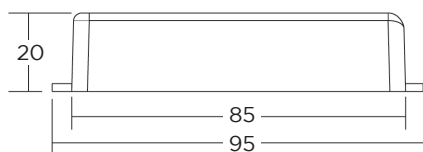
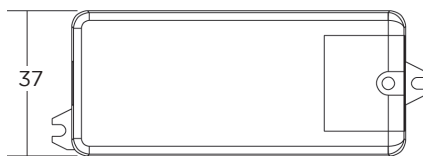
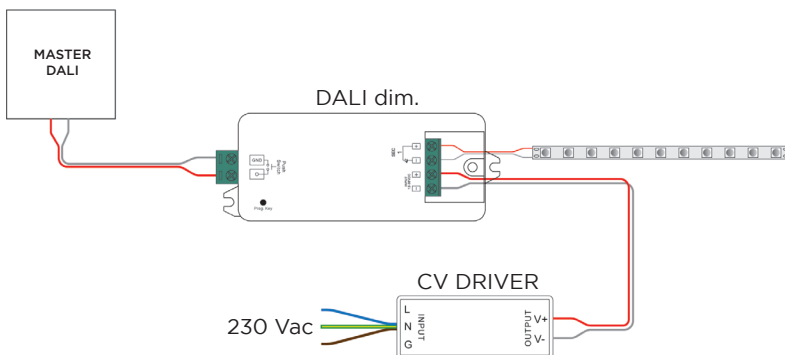
CONTROL BY
DALI / DALI2

POWER
8A

OUTPUT DIM.
1 CH

Low Voltage DALI / DALI2 dimmer

- Dimmer / On-OFF
- Input (Vdc) 12 / 24 / 36.
- Output dim. (Vdc) 12 / 24 / 36, 8 A.
- Control by DALI BUS.
- Automaticaly DALI Address setting.
- Flicker free



ACCESSORIES



BLUETOOTH > DALI Converter
(see pag.7)
cod. EL2421B-DA



PUSH ZigBee > DALI Converter
(see pag.6)
cod. EL2421ZP-DA



light management

DALI DIMMER

Dimmer / On-Off / RGBW / RGB+CCT



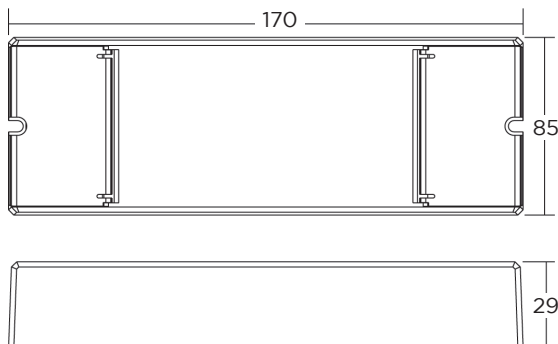
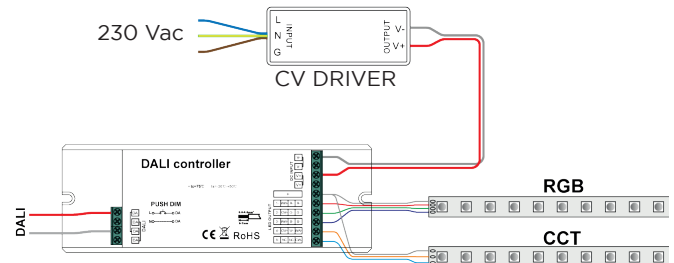
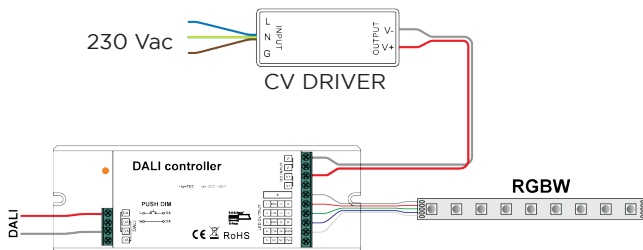
DALI / DALI2 multi function device



cod.	INPUT	CONTROL BY	POWER	OUTPUT
EL2309PRO-5C	12/24/36V	DALI / DALI2	5Ax 5CH	5 CH

Dimmer for low voltage equipment, controllable via DALI / DALI2 signal.

- 4 different device modes DIM, CCT, RGBW and RGB+CCT in 1 controller, and selectable by dial switch
- Enables to control ON/OFF, light intensity, color temperature, RGB color of connected LED lights
- Ultra powerful to control Single Color, CCT, RGBW, RGB+CCT LED strips
- Can be configured as six different light types: RGB+CCT, RGBW, RGB, CCT, DIM, ON/OFF.
- Selectable functions: RGBW, RGB+CCT, CCT, DIM 5CH



ACCESSORIES



BLUETOOTH > DALI Converter
(see pag.7)

cod. **EL2421B-DA**



PUSH ZigBee > DALI Converter
(see pag.6)

cod. **EL2421ZP-DA**



light management

IP67 LED Power Supply CV

DALI series



IP67 75W DALI Driver

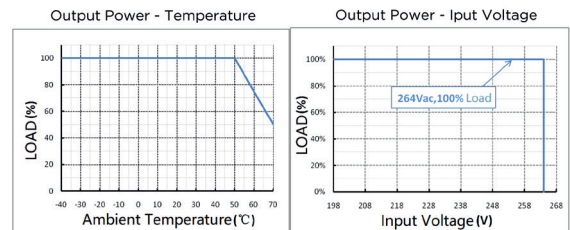
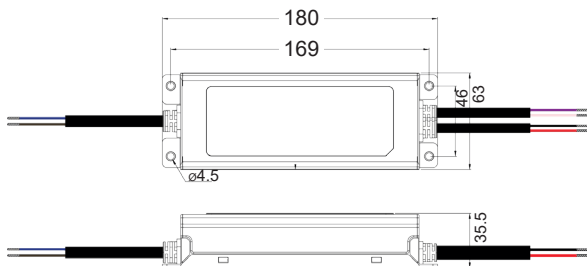


Constant Voltage DALI Driver / IP67 / Plastic case / Tip. THD 10% / MTBF 250000 hr / EN61347-1, EN61347



cod.	INPUT	V-OUT	I-OUT	OUTPUT	PF	EFFICIENCY
PELG-75-24-DA	100-277Vac	24Vdc	0~3.15A	75W	0.95	88%

Protection Functions: Over Load, Short Circuit, Over Voltage, Over Temperature



IP67 150W DALI Driver

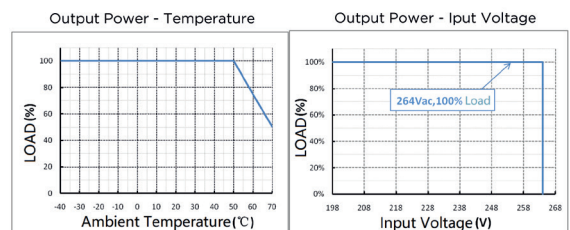
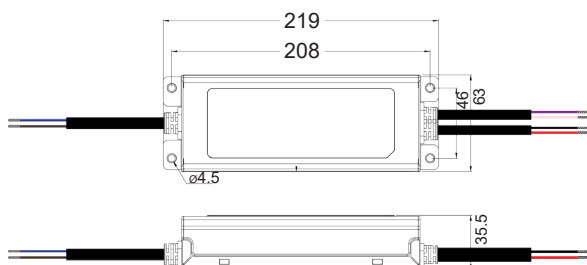


Constant Voltage DALI Driver / IP67 / Plastic case / Tip. THD 10% / MTBF 250000 hr / EN61347-1, EN61347



cod.	INPUT	V-OUT	I-OUT	OUTPUT	PF	EFFICIENCY
PELG-150-24-DA	100-277Vac	24Vdc	0~5.6A	150W	0.95	89%

Protection Functions: Over Load, Short Circuit, Over Voltage, Over Temperature



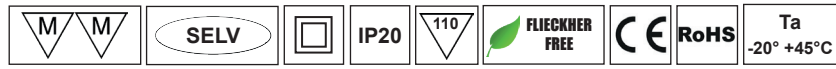
light management

IP20 LED Power Supply CV

DALI series



IP20 80W Driver

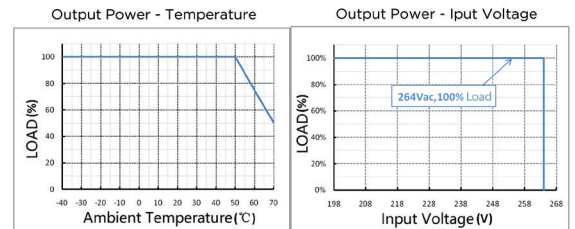
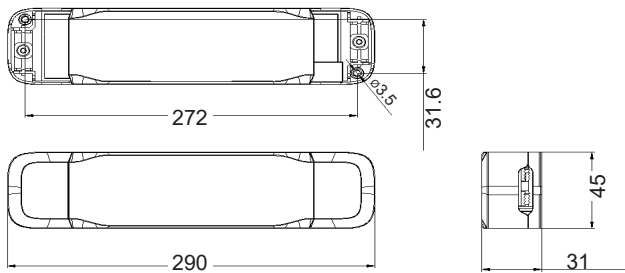


Constant Voltage DALI Driver / IP20 / Plastic case / Tip. THD <10% / MTBF 250000 hr



cod.	INPUT	V-OUT	I-OUT	OUTPUT	PF	EFFICIENCY
PLS-80-24 DALI2LI	176-264Vac	24Vdc	0~3.33A	80W	0.95	87%

Protection Functions: Over Load, Short Circuit, Over Voltage, Over Temperature



IP20 120W Driver

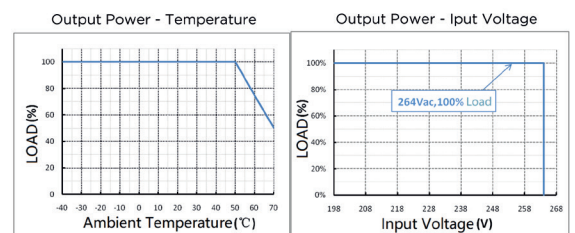
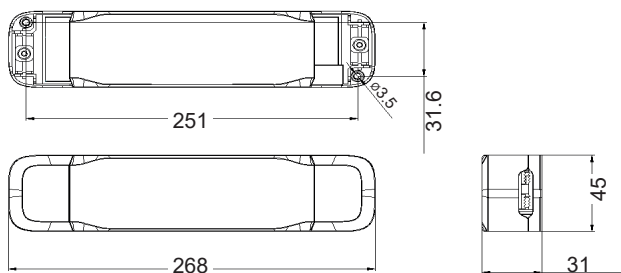


Constant Voltage ON-OFF Driver / IP20 / Plastic case / Tip. THD <10% / MTBF 250000 hr / EN61347-1, EN61347



cod.	INPUT	V-OUT	I-OUT	OUTPUT	PF	EFFICIENCY
PLS-80-24 DALI2LI	198-264Vac	24Vdc	0~6.25A	150W	0.90	89%

Protection Functions: Over Load, Short Circuit, Over Voltage, Over Temperature



light management

IP67 LED Power Supply CV

On-Off series

IP67 24W Driver

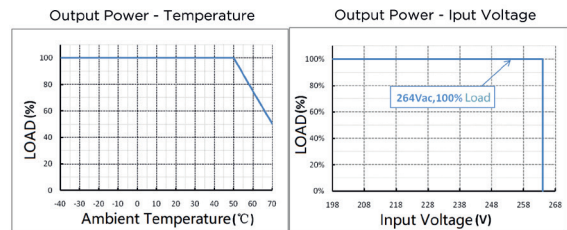
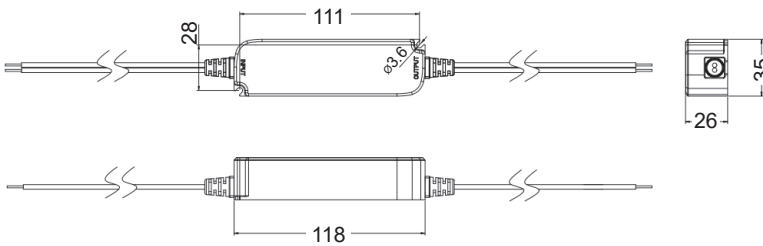


Constant Voltage ON-OFF Driver / IP67 / Plastic case / Tip. THD 10% / MTBF 250000 hr / EN61347-1, EN61347



cod.	INPUT	V-OUT	I-OUT	OUTPUT	PF	EFFICIENCY
PVTS-24-24-IP67LI	198-264Vac	24Vdc	0~1A	24W	0.95	86%

Protection Functions: Over Load, Short Circuit, Over Voltage, Over Temperature



IP67 60W Driver

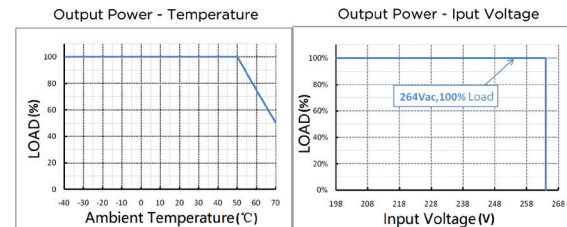
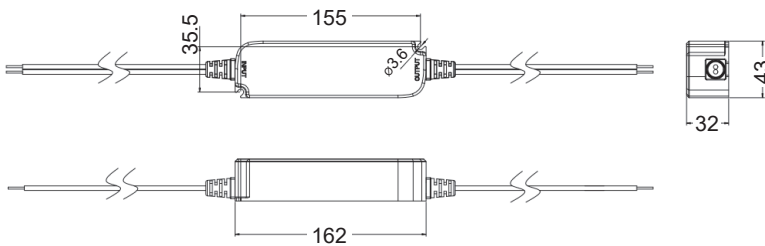


Constant Voltage ON-OFF Driver / IP67 / Plastic case / Tip. THD 5% / MTBF 250000 hr / EN61347-1, EN61347



cod.	INPUT	V-OUT	I-OUT	OUTPUT	PF	EFFICIENCY
PVTS-60-24-IP67LI	198-264Vac	24Vdc	0~2.5A	60W	0.95	89%

Protection Functions: Over Load, Short Circuit, Over Voltage, Over Temperature



IP67 100W Driver

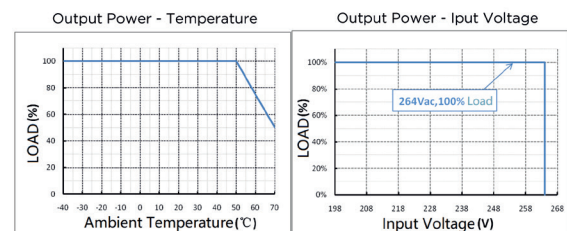
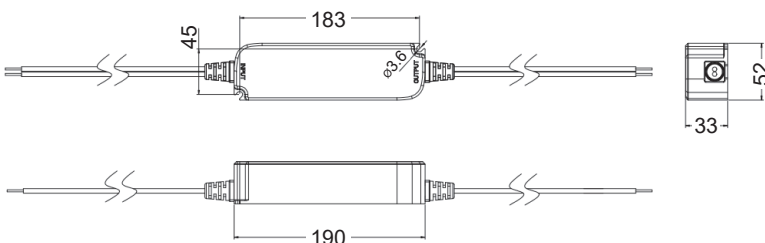


Constant Voltage ON-OFF Driver / IP67 / Plastic case / Tip. THD 5% / MTBF 250000 hr / EN61347-1, EN61347



cod.	INPUT	V-OUT	I-OUT	OUTPUT	PF	EFFICIENCY
PVTS-100-24-IP67LI	176-264Vac	24Vdc	0~4.17A	100W	0.95	89%

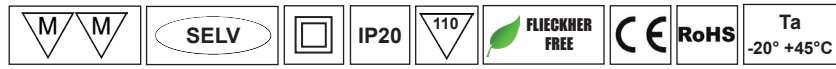
Protection Functions: Over Load, Short Circuit, Over Voltage, Over Temperature



light management

IP20 LED Power Supply CV On-Off

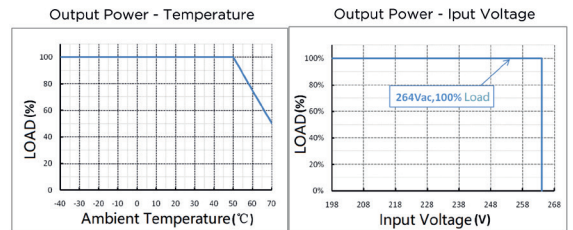
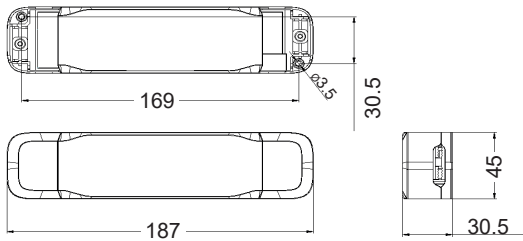
IP20 60W Driver



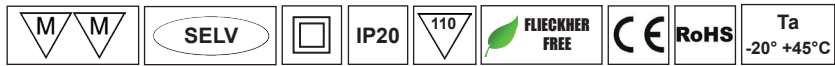
Constant Voltage ON-OFF Driver / IP20 / Plastic case / Tip. THD <10% / MTBF 250000 hr



cod.	INPUT	V-OUT	I-OUT	OUTPUT	PF	EFFICIENCY
PLS-60-24LI1	176-264Vac	24Vdc	0~2.5A	60W	0.95	89%
Protection Functions: Over Load, Short Circuit, Over Voltage, Over Temperature						



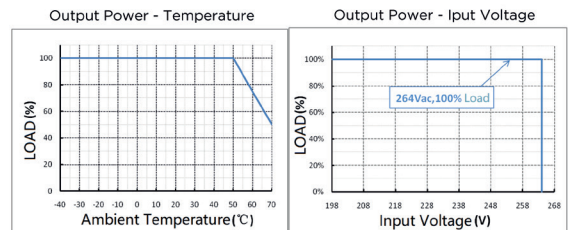
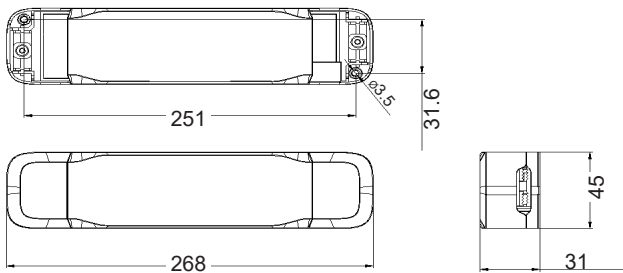
IP20 120W Driver



Constant Voltage ON-OFF Driver / IP20 / Plastic case / Tip. THD <10% / MTBF 250000 hr / EN61347-1, EN61347



cod.	INPUT	V-OUT	I-OUT	OUTPUT	PF	EFFICIENCY
PLS-120-24LI1	198-264Vac	24Vdc	0~5A	120W	0.90	91%
Protection Functions: Over Load, Short Circuit, Over Voltage, Over Temperature						





PrimOtek s.r.l.s.
via Primo Maggio, 19
25013 Carpenedolo (BS) Italy Ph +39 0302389856
www.primotek.it - info@primotek.it