

ECLATEC CONTROL BOX FOR LED FLOODLIGHTS



- ✓ User-friendly
- ✓ Customisable
- ✓ Secure

The ECLATEC DALI control box is designed by ECLATEC and manufactured in France. It uses the DALI communication protocol and is used to simply control lighting installations, in particular in sports facilities, that use high power LED DALI floodlights such as KERIS 5 and 6.

This control system provides different lighting management and customisation features depending on needs:

- Full or half-stadium lighting
- Four pre-selections to adjust power levels, including two customisable and two factory pre-set levels of 0%, P1%, P2% and 100%
- Forced mode or timed operation using a customisable timer
- Configuration selection secured using a key

The DALI control box can manage up to 50 power supplies (in excess of 50 floodlights, contact ECLATEC). It must be located at not more than 300 m from the power supplies.

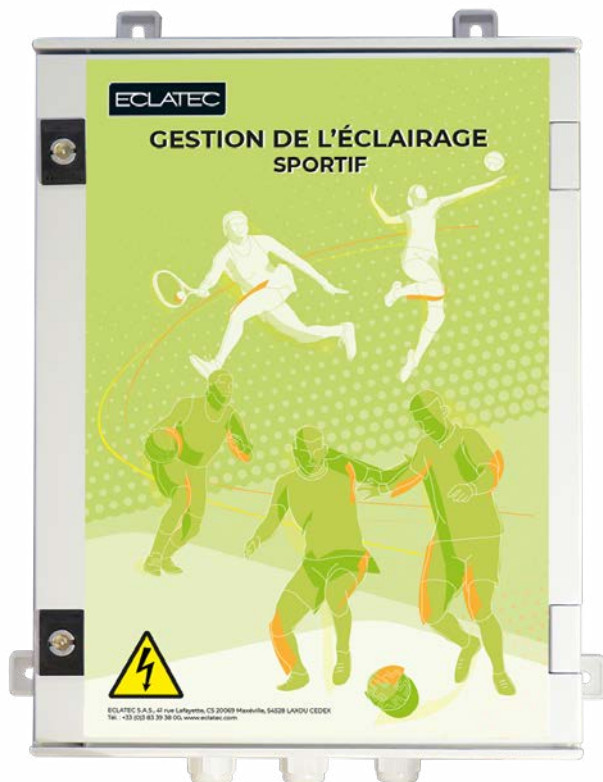
Description

This solution is available in two control box versions:

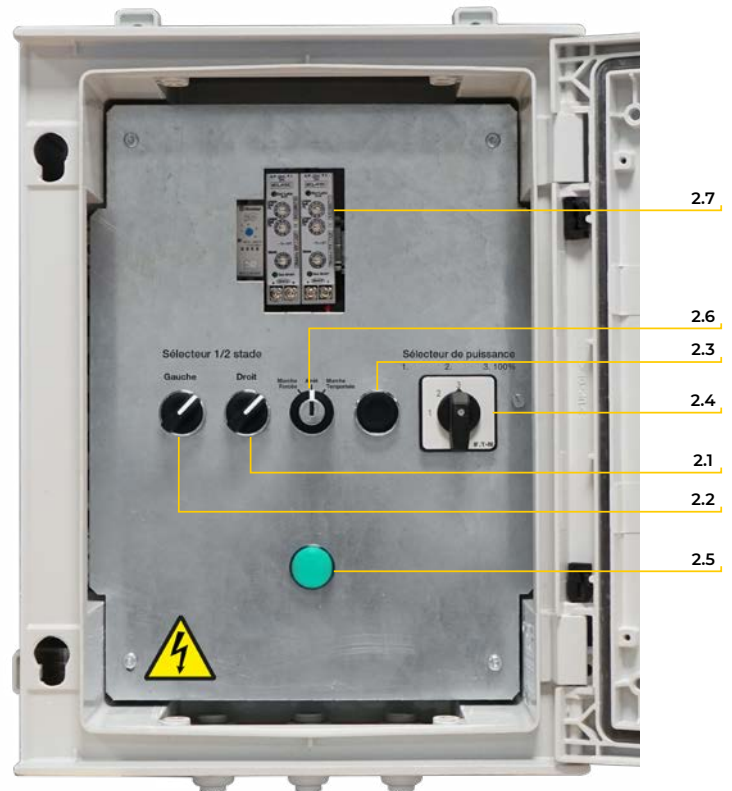


For **indoor installation**, a version with the switches and selectors on the outside

For **outdoor installation**, to maintain watertightness, the switches and selectors can be accessed after opening a door on the front face using a key.



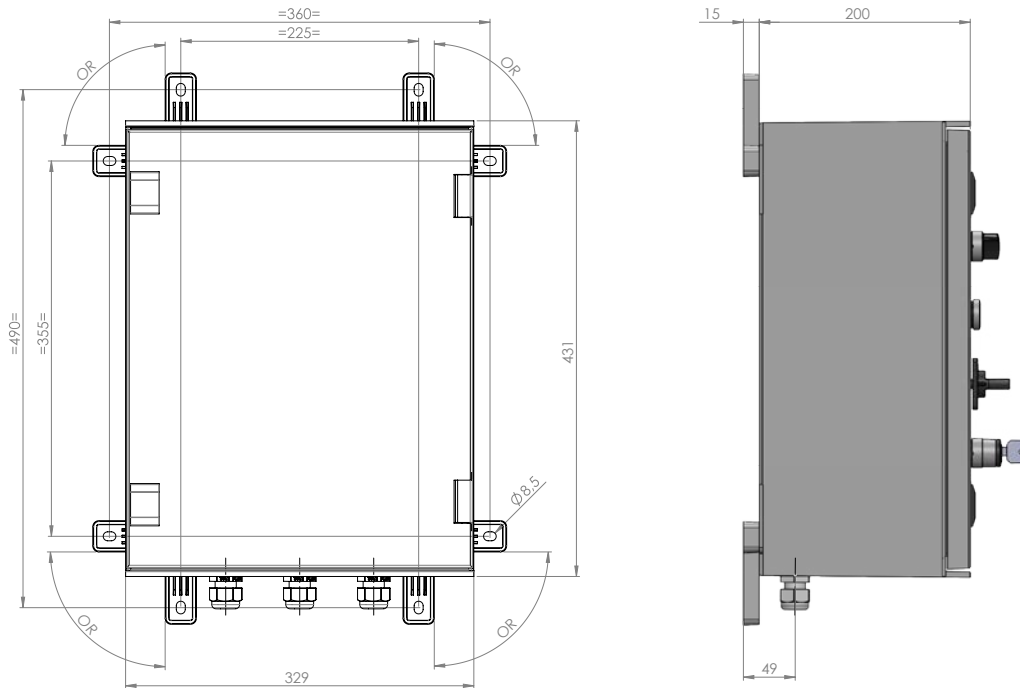
2) Functions



- 2.1 • Right half-stadium selector
Left position 0: off (0%)
Right position 1: on
- 2.2 • Left half-stadium selector
Left position 0: off (0%)
Right position 1: on
- 2.3 • Timed operation start
- 2.4 • Power selector
Centre position: P1 defined with the purchase order
Right position: P2 defined with the purchase order
Left position: 100%
- 2.5 • Power on indicator
Indicator on: powered on
Indicator off: powered off
- 2.6 • Key-operated power on switch
Left position: forced mode
Centre position: powered off
Right position: timed mode
- 2.7 • Customisable settings. P1, P2 power and timer.

Control box mechanical specifications

Dimensions (h x w x l)	430 x 330 x 200
Protection rating	IP 66 for the indoor control version
Assembly type	4 fixing brackets
Operating indicator	1 green LED
Material	Glass fibre-reinforced polyester



The four wall mount brackets can be placed horizontally or vertically, or using a horizontal/vertical combination.

Main specifications

Input specifications	
Rated voltage	230 V single-phased
Frequency	50 Hz
Operating range	200 V to 250 V
Consumption	10 W
Temperature range	From 0°C to +50°C
Electric classes	Class I
Grid connection	Brown wire for phase/live Blue wire for neutral Green wire for earth
Output specifications	
Signal type	DALI and Pilot Phases
Signal voltage	DALI Between -1 and 22 V for DC Pilot-wire: 230 V for AC
DALI control module compliance with standards	
61347-2-11	Special instructions for various electric circuits used with luminaires

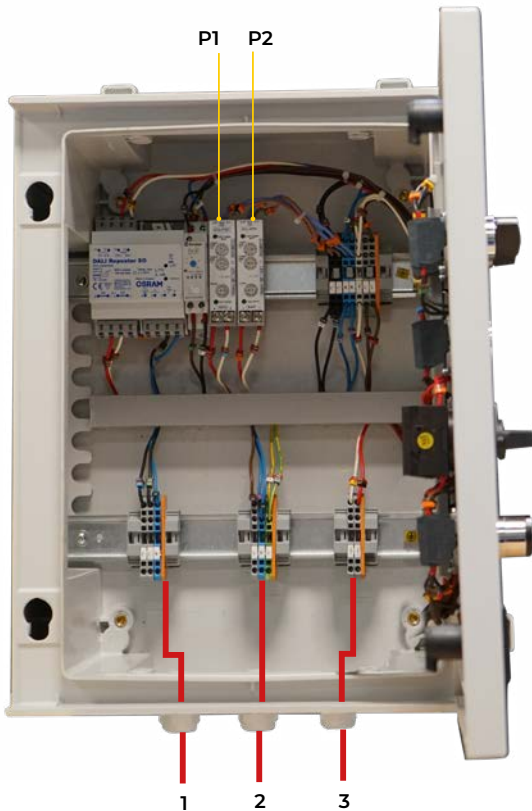
5 Installation

Installation operations must be carried out by a person with the applicable required qualifications and clearances.

5.1 • Installation recommendations

- The overload protection must be suitable for the installed electric duct sizing and the hypothetical circuit currents at the different points on the installation (suitable circuit-breaker power and rating). The maximum intensity the low voltage distributor can support should be checked.
- The overload protection for the neutral conductor in an IT configuration must be provided by an omipolar triggered circuit breaker.
- Protection from indirect contact (in particular using the TT neutral configuration) on the control box general low voltage supply must be properly installed. We recommend the installation of a 300mA RCCB.
- The emergency cut-off and main switch for the control box must be clearly identified on the low voltage distribution panel and/or the panel.

5.2 • Wiring diagram



- 1 • 2x2.5mm² or 2x1.5mm² cable. Connection of the 2 pilot wires (L' and L'') (right ½ stadium & left ½ stadium)

ISO 20 cable gland:
Max cable Ø: 14 mm
Min cable Ø: 7 mm
Cross section: 2.5 mm² max

- 2 • 3x2.5 mm² or 3x1.5 mm² cable. Mains connection 230V ~ (L / N / Earth)

ISO 20 cable gland:
Max cable Ø: 14 mm
Min cable Ø: 7 mm
Cross section: 2.5mm² max

- 3 • 2x.5mm² or 2x1.5mm². DALI wire connection Max length 300 metres

ISO 20 cable gland:
Max cable Ø: 14 mm
Min cable Ø: 7 mm
Cross section: 2 x 2.5 mm² max

6 Settings

Setting operations must be carried out by a person with the applicable required qualifications and clearances.

6.1 • Timer duration setting

First, set the time range scale using the grey rotating selector on the timed relay.

time scale: rotating selector position

Then, using the blue rotating selector, define the timer duration on a scale of 1 to 20

Example:
 Grey rotating selector: Placed on the 1 to 20 second time scale range
 Blue rotating selector: Placed on the 15 second position

For the timing to operate, the white rotating selector must be on BE mode

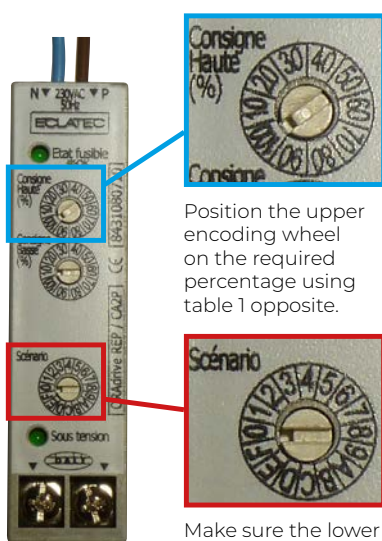
6.2 • P1 and P2 power level modification

The power levels are factory pre-set according to the purchase order specifications: the levels are a percentage of the maximum floodlight power and can be set in 10% steps.

The power can be modified on-site after the floodlights have been installed. This is done by an operator with electricity clearance adjusting the upper rotating switch on the control box. (according to the wiring diagram in section 5.2)

The lighting power supply current programming is pre-set in the factory. The top encoding wheel position corresponds to the factory pre-set power supply current which will supply the LED lighting.

The button has a notch pointing to the selected set point to be able to identify the rotating switch position.



Encoding wheel position	Current percentage (%)	Factory-programmed intensities (mA)				
		350	500	700	1000	1050
10	100	350	500	700	1000	1050
9	90	315	450	630	900	945
8	80	280	400	560	800	840
7	70	245	350	490	700	735
6	60	210	300	420	600	630
5	50	175	250	350	500	525
4	40	140	200	280	400	420
3	30	105	150	210	300	315
2	20	90	100	140	200	210
1	10	90	90	90	100	105

Table 1: Luminaire controlling intensity depending on the selected percentage and the factory-programmed intensity