

INSTRUCTIONS MANUAL

LED MODULE FOR OPERATION IN CONSTANT CURRENT

Types: eLED LINE, SQUARE and OCTO

The eLED modules use sensitive electronic components and should be handled carefully as any other electronic equipment. In order to achieve a long life and correct functioning, it is necessary to follow these manufacturer recommendations.

INSTALATION



The module must be fixed into dry and clean surfaces that are free from dust, oil, silicone or other soiling.

eLED products are sensitive to mechanical efforts, avoid applying mechanical tensions, bending stresses, millings, pressure, or any other form of mechanical stress on them.

Handle eLED products in protected zones against static electricity. (ESD Electro Static Discharge).

eLED modules should be taken by the edges of the printed circuit board, never by the top side where the LED components are. Handling should be done with dissipative and dirt-free gloves, avoiding direct contact with the surface of the LEDs.

A gap between consecutive modules is recommended to facilitate the thermal expansion.



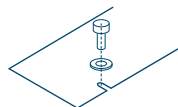
The luminaire must be built in such a way that the eLED cannot be touched by an end-user.

FIXATION BY SCREWS



To ensure optimum thermal contact with the luminaire, fixing the module to the luminaire by screws is recommend.

Each eLED fixation hole accepts M4, the diameter of the screw head must not exceed 8mm. If washers are used they must be isolated and non-metallic, to avoid damaging the surface of the PCB during assembly.



Don't apply a higher torque than 0,5Nm to the screw.

In the case that a quick fastening by screw is desired, clips P2F (Push to fix) BJB be used.

FIXATION BY ADHESIVE TAPE



In case a fixation of the eLED LINE is required by means of adhesive tape, we recommend the use of the tape 3M™ VHB™ Covers RP25 (F).

The VHB™ tapes have been put under accelerated aging tests in a climatic chamber, including high and low temperature exposures, humidity and UV radiation, keeping well their adhesion properties.

MAINTENANCE



Maintenance and parts changing must be carried out by qualified people having mains disconnected. Instructions and current regulations must be strictly followed.

It is recommended that Isopropyl Alcohol (IPA) must be used as a solution for cleaning the eLED.

Do not use other chemical substances as they may damage the product. These chemical reactions can lead to a change in colour, luminous flux decrease or total failure of the module caused by the electrical connections and the phosphor coating corrosion.



ELECTRIC POWER SUPPLY

eLED modules are not protected against overcurrent and electrostatic discharges.

Any operation at module connection must be made without electrical supply.

Do not apply mains power to the eLED module directly.

The safe and reliable operation of eLED modules can only be guaranteed if the control gear is used in suitable constant current. Operation with a constant voltage LED control gear leads to irreversible damage of the modules

The suitable constant current control gear must be able to supply the same current or smaller than the maximum current of the module, and the voltage of the assembly formed by these eLED modules is within its range of output voltage.

The supply current value of the module will influence both the module lifetime and its photometric values.



OPERATING TEMPERATURE

Under no circumstances must the Tc temperature marked on the eLED module be exceeded, due to the fact that continued operation at higher temperatures produces a progressive reduction in life expectancy and a deviation of the photometric values.



TERMINAL BLOCK AND WIRE PREPARATION

The use of only one wire with a section between 0,2 and 0,75 mm² and a stripped length 6-7 mm is mandatory.

Inserting and removing the wire is achieved by lightly pressing on the connector's push-button.

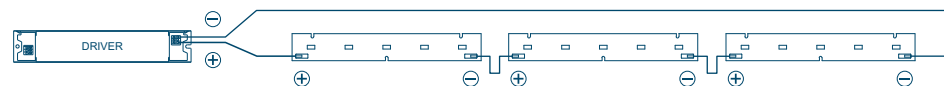
LED MODULES AND PROTECTION SYSTEM RESPONSE

eLED are protected against reverse polarity. The eLED module will not turn on during this condition.

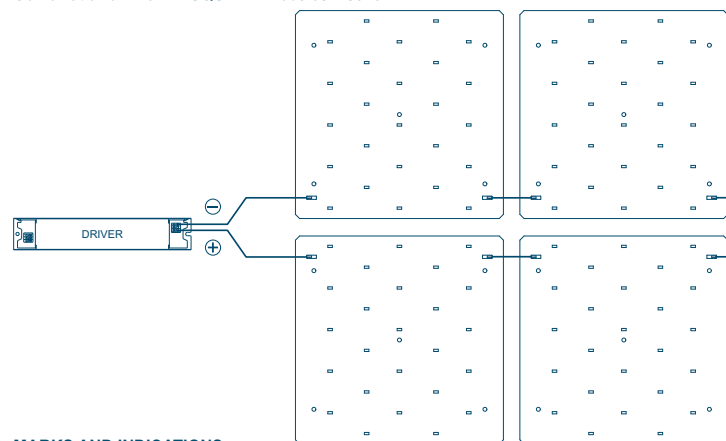
WIRING DIAGRAMS

In the case of a system with several modules connected, they must always be connected in series and respecting their polarity (positive, negative).

Combination of 3 eLED LINE modules in series:



Combination of 4 eLED SQUARE modules in serie:



MARKS AND INDICATIONS

CE Mark that declares product conformity with the applicable European directives.

UL Mark that declares the recognition of components according to U.S. Requirements.

T_c Maximum temperature allowed at the measuring point to ensure proper operation mode.

CCT:	3000K	4000K	5700K	Colour temperature indication of the LED module.
	Warm	Neutral	Cool	