

## INSTRUCTIONS MANUAL

### CONSTANT CURRENT CONTROL GEAR FOR LED MODULES IP67

Types: LC ...-EN and DLC ...-EN

The constant current control gear for LED modules use sensitive electronic components and should be handled with the same care as any other electronic equipment. In order to achieve a long life and correct functioning, both in the control gear and in the LED module, it is necessary to follow these manufacturer's recommendations.

#### SECURITY

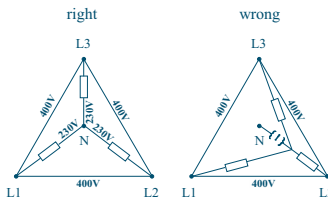


A very low voltage installation (LVI) must be carried out whilst taking the necessary precautions in order to respect the safety of all its parts. The contact or crossing between the mains supply conductors and the very low voltage installation conductors must be avoided and the insulation between the conductors must be > 4kV. Maintenance and the changing of parts must be carried out by a qualified person with the mains disconnected and the instructions and current regulations must be strictly followed.

#### ELECTRIC POWER SUPPLY



The voltage and frequency of the mains supply must be within the normal operating range. In 400V triphase installations, the neutral must always be connected, if it is interrupted the 400V could reach the equipment and there would be a risk of damage. When the installation is carried out the charge between the phases must be as equally balanced as possible.



**Any procedure at LED lamp connection must be made without electrical supply.**

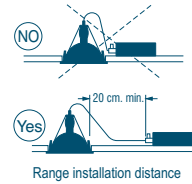
#### PROTECTION SWITCHES

Each group of control gear for LED modules must be protected by a magnetothermal circuit breaker and a differential dedicated circuit breaker. Equipments are resistant to transient overvoltages specified in regulations, and **must be installed on different circuits separated from each other inductive loads (inductive ballasts, motors, fans etc. ....)**

#### OPERATING TEMPERATURE



It must be ensured that the maximum atmospheric temperature in the installation does not exceed the  $t_a$  marked on the equipment, and an adequate degree of protection against humidity must be provided. Under no circumstances must the  $t_c$  temperature marked on the driver's casing be exceeded due to the fact that continued operation at higher temperatures produces a progressive reduction in life expectancy.



#### INSTALLATION



Placing a switch in the output of the control gear is not allowed. May cause damages in control gear and LED module.



#### RADIO FREQUENCY INTERFERENCES ( RFI )

ELT ensures IEC/EN 55015 (EMC) compliance in a standard luminaire, considering the supplied connection in the power supply. For other configurations or lengths, consult the Technical Department first.

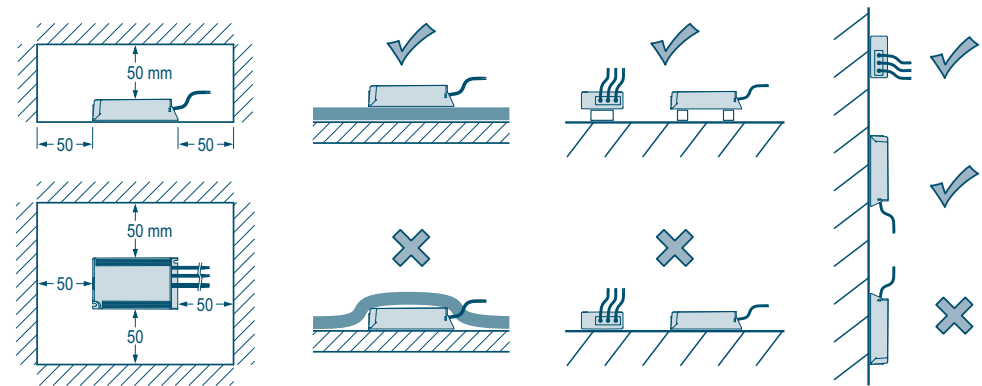
CONSTANT CURRENT CONTROL GEAR FOR LED MODULES AND PROTECTION SYSTEM RESPONSE				
Type	Absence of lamp. Open circuit	Overload	Overtemperature	Short-circuit in output to lamps
LC ...-EN	Blocks: Waits for a lamp replacement	Limited output power	No protection	Blocks: It reconnects when problem is solved.
DLC ...-EN				

Block: Stand-by or rest situation



For DLC ...-EN we recommend to use dimmers specifically made for LED lamps.

#### ALLOWED OPERATION POSITIONS TO ENSURE IP67



#### WIRING DIAGRAMS

