CLED USER INSTRUCTION MANUAL

	Equipment	II2 G	II2 D
	Protection Level	EPL Gb Gc	EPL Db Dc
	Protection mode	Ex db eb IIC	Ex tb IIIC
	Ambient Temperature	-40°C to +55°C (For CLED03xxxxxxxx; CLED04xxxxxxxx; CLED05xxxxxxxx; CLED06xxxxxxxx; CLED07xxxxxxxx; CLED08xxxxxxxx; CLED14xxxxxxxx; CLED16xxxxxxxx) -40°C to +50°C (For CLED10xxxxxxxx; CLED12xxxxxxxx; CLED20xxxxxxxx; CLED24xxxxxxxx)	
	Temperature Class	T4	135°C
	ATEX Certificate	ITS18ATEX103084X	
	IECEx Certificate	IECEx ITS 18.0007X	
	IP Code	IP66	

1 CONDITION OF SAFE USE

- Products covered under this technical instruction leaflet shall only be used in Zone 1, 21 and Zone 2, 22 and conditions for which they have been certified, and the product meets the requirements of EN 60079-0:2018/IEC 60079-0:2017, EN/IEC 60079-1:2014 , EN/IEC 60079-7:2017, EN/ IEC 60079-31:2014(2013), IEC 60598-1:2014.
- Ex eb IIC Gb / Ex tb IIIC Db IP66 minimum rated cable glands and blanking elements to be used only. Each entry shall have no more than one thread adapter when an adapter is used. A blanking element shall not be used with an adapter.
- All the terminals wired or unwired need to be suitably tightened to the torque values as stated in installation documents. The wires with stripped length should be fully inserted into the Ex “eb” terminal block openings and screwed firmly with proposed torque of 0.6 – 0.8Nm for proper connections.
- The product covered by this certificate incorporate previously certified devices, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform the notified body of any modifications of the devices that may impinge upon the explosion safety design of their products.
- The drivers are factory programmed with required output current within the ‘settable output current’ range mentioned on the driver label. Programming the drivers on field is strictly prohibited.
- The distance of the lens from the light engine shall be identical to or greater than those shown in the scheduled drawings
- Use Cables suitable for operating temperature referring to marking as per recommendation of IEC/EN 60079-14.
- The temperature Tc (T case=90°C) point must not be exceeded of the LED drivers.
- Corrosion: End user should make sure that material of the equipment is compatible with the installation environment. (Metal Parts: Aluminum)

2 SPECIAL CONDITIONS

All the equipment shall be selected in compliance with the requirements stipulated in Directive 99/92/EC for users.
The product category shall match the installation zone.

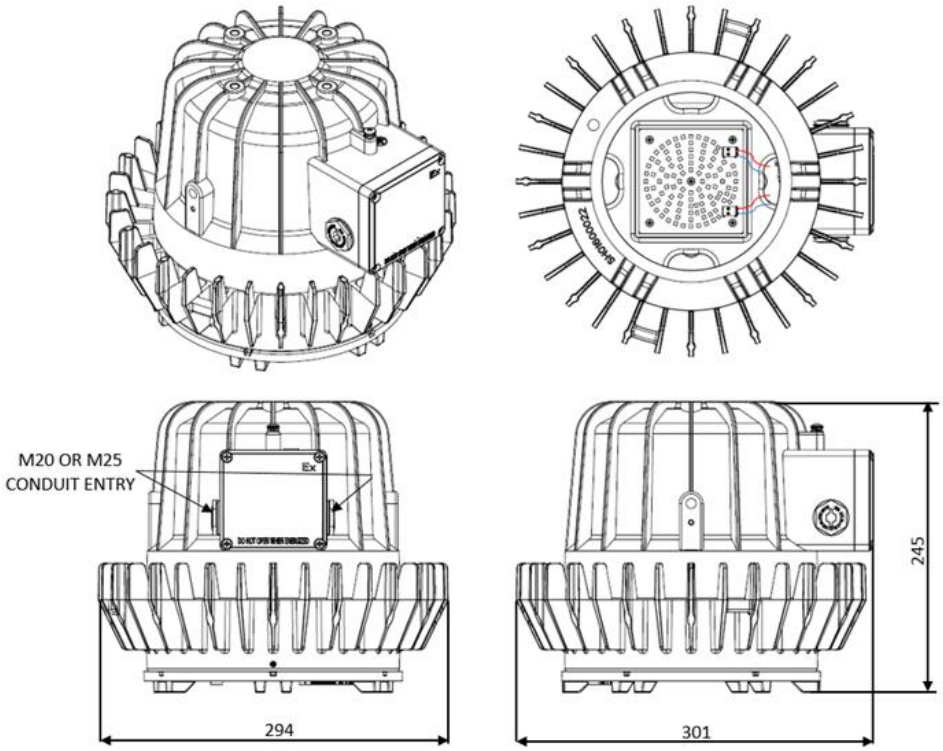
All hardware shall be installed as stipulated under electrical installations standard EN/IEC 60079-14.
All personal involved in the installation process shall be qualified for the roles performed (EN/IEC 60079-14 Annex A).
Equipment must be connected as stipulated by regulations in force in accordance with the maximum permissible current-carrying capacity.

We shall be absolved from all responsibility for drilling operations performed on enclosures without our formal consent.

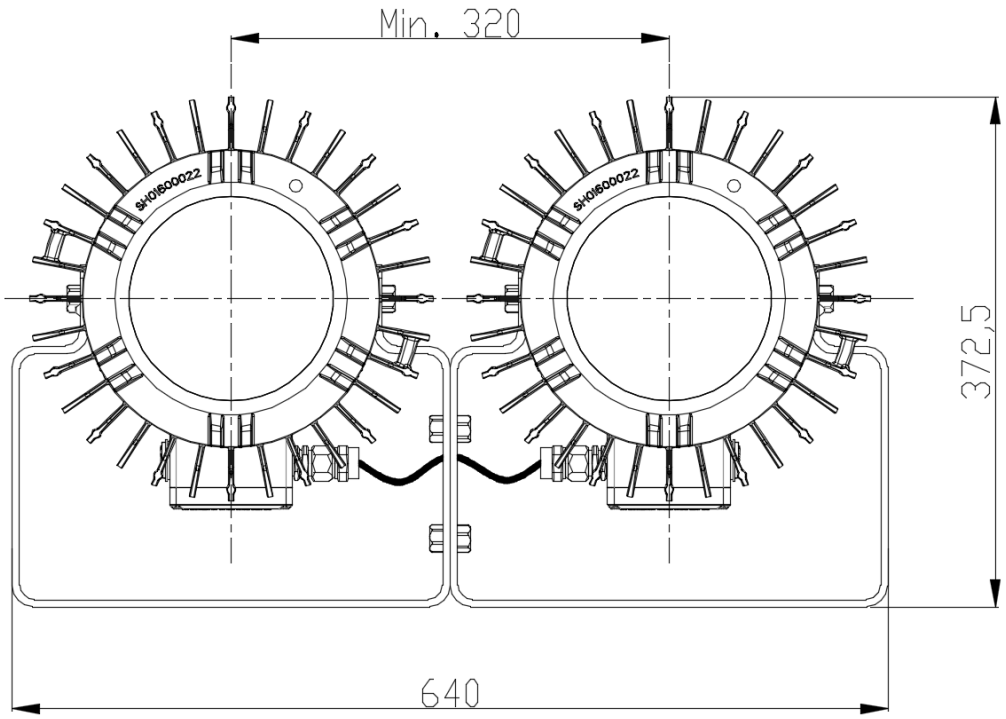
WARNING!!

-Electrical Power must be turned “OFF” during Field connections and Maintenance.

LUMINAIRE DIMENSIONS (mm)

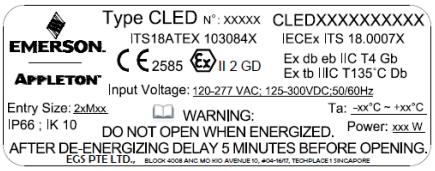


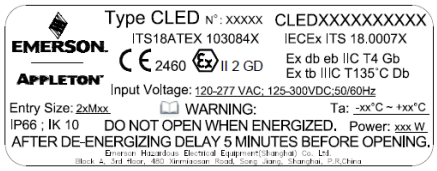
For CLED03xxxxxxxx; CLED04xxxxxxxx; CLED05xxxxxxxx; CLED06xxxxxxxx; CLED07xxxxxxxx; CLED08xxxxxxxx; CLED14xxxxxxxx; CLED16xxxxxxxx

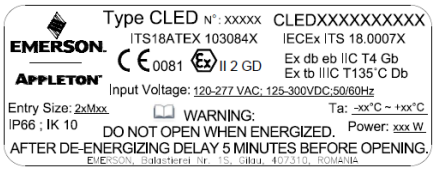


For CLED10xxxxxxxx; CLED12xxxxxxxx; CLED20xxxxxxxx; CLED24xxxxxxxx

Marking Details:







Catalog Numbering Guide

CLED	03	C	G5	1	S	BU	D
Series: CLED = CLED Series Ex-proof Lighting Fixture	Lumen(nominal): 03 = 2900 04 = 3900 05 = 5000 06 = 6200 07 = 7000 08 = 8000 10 = 10000 12 = 12000 14 = 14000 16 = 16000 20 = 20000 24 = 24000	CCT: C = Cool, 5000K N = Neutral, 4000K W = Warm, 3000K G = Green A = Amber Y = Yellow B = Blue R = Red	Light Distribution G5 = NEMA TypeV GM = Medium(55°) GN = Narrow(25°)	Conduit Entry: 1 = M20 2 = M25	Wiring: S = Standard T = Three Phase L = Dual Loop In/Out Through wired	Voltage: BU = 120V~277VAC, 50Hz/60Hz or 125~300VDC	Options: D = Diffuser 10 = Surge Protection 10 kV 20 = Surge Protection 20 kV

4 Assembly / Disassembly

To connect field wire's:

- Open the housing cover by unscrewing four screws as shown in *Fig-1*(Follow the pattern)
- Remove the cover to have access to terminal block. Screws are captive and will not fall off from the cover
- Remove the required pre-installed blanking plugs. Use certified cable glands (M20 or M25)
- Wiring to be done as per the wiring details shown in *Fig-2*. The catalog logic CLEDxxxxxx**S**xxx states the type of wiring (S-Standard I; T-Standard II (3 phase); L-Dual loop in/out)
- It is recommended to use insulated wire ferrules which comply to wire requirements for proper and safe connection. Terminal markings for each terminal (L, N, G) are provided for easy identification
- Wires to be stripped to a length of 9mm max and fixed in the terminal block by tightening the terminal block screws to a torque of 0.6 Nm to 0.8 Nm. The terminal can accept wire range of 0.2 mm^2 (24 AWG) to 6 mm^2 (10 AWG) but recommended to use 0.8 mm^2 (18 AWG) to 6 mm^2 (10 AWG)
- After fixing the wires ensure that the cover is placed as shown in *Fig-1* and the screws are tightened to a torque of 2 Nm to 2.5 Nm (Follow the pattern)
- "External Grounding (wire size to be 4mm2)" arrangement is provided with a M5 screw as shown in *Fig-3*. Tighten the screw after connection to a torque of 3 Nm to 3.5 Nm
- M4x10 mm long grub screws of SS 316 class A2-70 are used for anti-rotation of heatsink and glass holder. Need to check periodically and ensure that those are secured properly

Fig-1

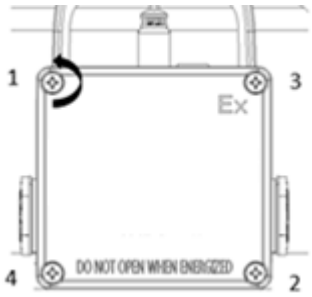


Fig-3

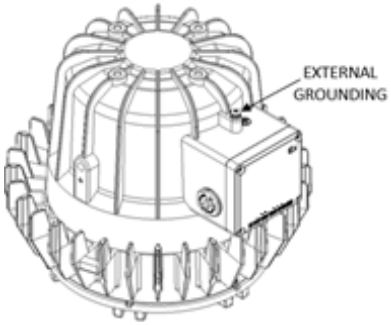
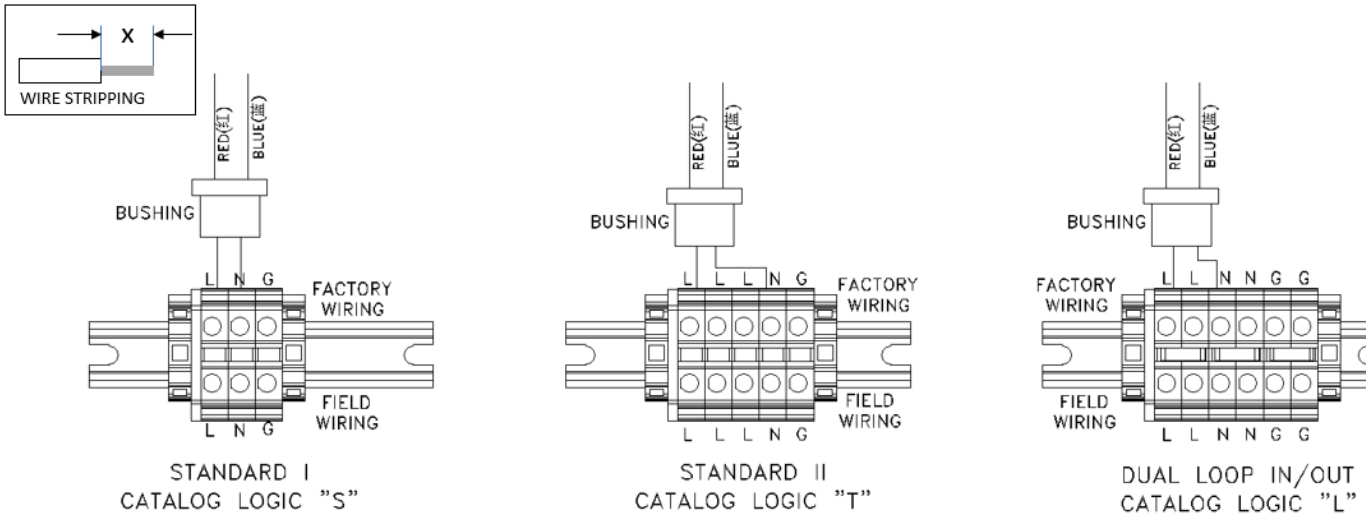
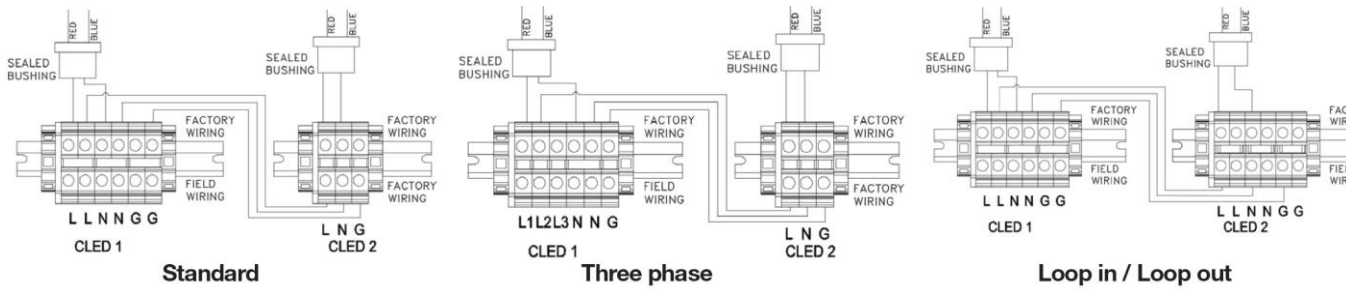
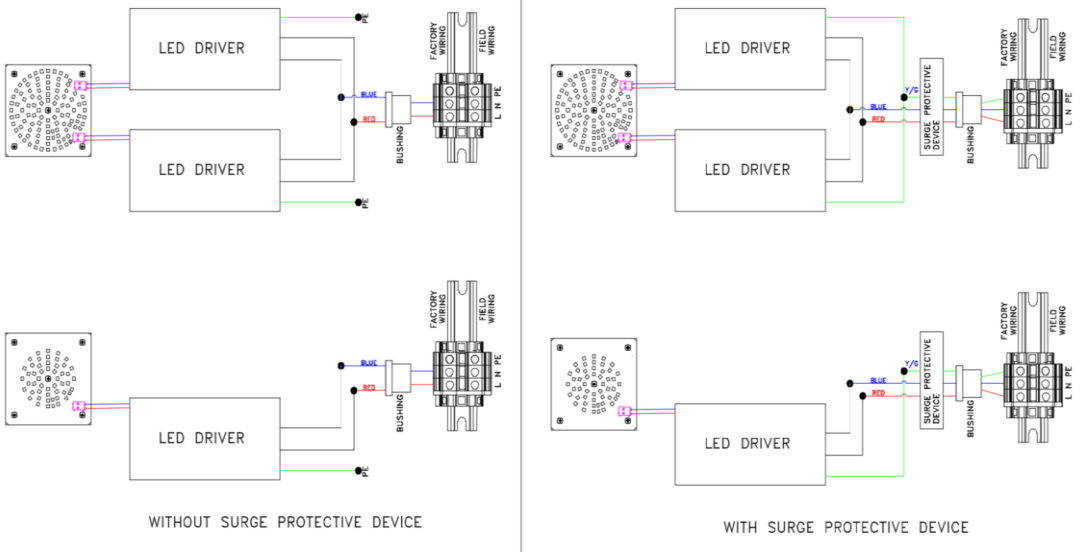


Fig- 2



CLED High Lumen:

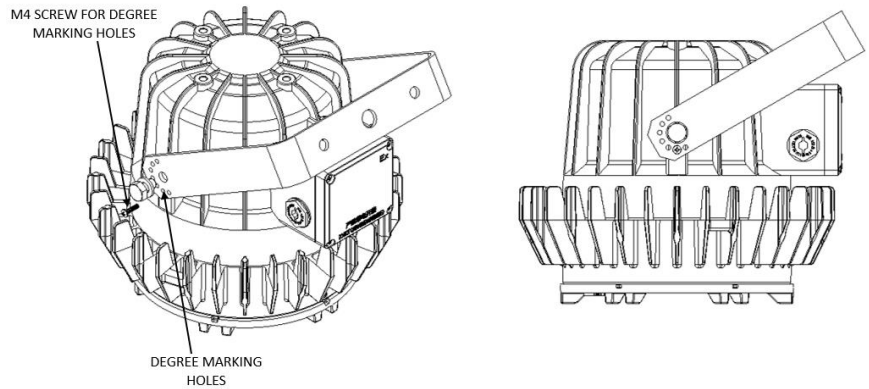




Instructions for Wall mounting accessory:

- Take the wall mounting bracket, place in on the luminaire as shown in *Fig-4*
- Align the holes of bracket and luminaire, make sure that the degree marking holes on bracket and small hole on luminaire are aligned as shown in *Fig-4*.
- Adjust the bracket to required angle (30° or 90°) by tightening the M4 screw.
- Tighten both the M10 screws to ensure

Fig-4



5 PUTTING INTO SERVICE

Before the product is first integrated into operational service, double-check that the instructions stipulated in sections (1 to 4) have been fully complied with.

6 MAINTAINANCE

- The protection index for the enclosure (IP) must be kept for the complete duration of the material. Therefore, the sealing fittings must be maintained in good condition. Unused cable-entries must be sealed with rated blanking plugs.
- Before carrying out any work on the equipment, the cited safety instructions must be very carefully observed (DO NOT OPEN WHEN ENERGIZED).
- The hardware installed shall be inspected on regular scheduled. Standard EN/IEC 60079-17 (close-up and in-depth visual inspection) specifies three inspection levels.

- It is the user's responsibility to ensure these inspections are implemented according to the protection modes of the equipment hardware installed.
- Any nationally-set requirements applicable on top of standard EN/IEC 60079-17 shall be complied with.
- Periodically glass lens should be cleaned with moist cloth.

7 REPAIRS

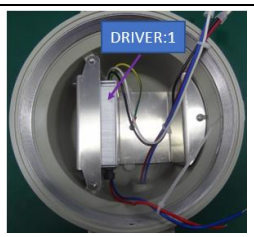
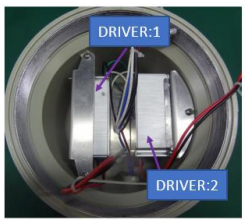
It is forbidden to perform repair work without first confirming with Appleton.

8 TRANSPORTATION, STORAGE

- Protective method should be used to keep the product safe from rain and snow when in transport or storage
- The product should be stored at an ambient temperature of -20°C to +60°C and air humidity not more than 90%

9 REPLACEMENT PARTS

- **LED DRIVER**

LUMINAIRE MODEL	CONSTANT CURRENT	LED DRIVER CATALOG NUMBER	QUANTITY OF DRIVERS	IDENTIFICATION	DRIVER LOCATION IMAGES
CLED03xxxxxxxx	510mA	APMS050C135UD51	01	48 LED ARRAY BOARD 18 LED ARRAY BOARD	
CLED04xxxxxxxx	690 mA	APMS050C135UD69			
CLED05xxxxxxxx	900 mA	APMS050C135UD90			
CLED06xxxxxxxx	510 mA	APMS050C135UD51	02	96 LED ARRAY BOARD 36 LED ARRAY BOARD	
CLED07xxxxxxxx	600 mA	APMS050C135UD60			
CLED08xxxxxxxx	690 mA	APMS050C135UD69			
CLED10xxxxxxxx	820 mA	APMS050C135UD82			
CLED12xxxxxxxx	950 mA	APMS050C135UD82			
CLED14xxxxxxxx	**2 x CLED07xxxxxxxx**				
CLED16xxxxxxxx	**2 x CLED08xxxxxxxx**				
CLED20xxxxxxxx	**2 x CLED10xxxxxxxx**				
CLED24xxxxxxxx	**2 x CLED12xxxxxxxx**				

- **GLASS HOLDER SUB-ASSEMBLY**
  - WITH CLEAR GLASS: **CLED CG**
  - WITH DIFFUSER : **CLED DCG**