

Instructions

EP-SEMC-19-04-02

First Edition

September 21, 2019



Safety instructions:

Note: for skilled electricians and instructed personnel in accordance with national regulations, including the relevant standards and where applicable, in accordance with IEC 60079-17 on electrical apparatus for explosive gas atmospheres.

1. The luminaries must not be operated in zone 0 and zone 20 hazardous areas.

2. Change hanged of design and modifications to the luminaries are not permitted.

3. The luminaries shall be operated as intended and only in undamaged and perfect conditions.

4. Only genuine shomal spare parts shall be used for repair and replacement.

5. The technical data indicated on the luminaries are to be observed.

6. The equipment shall be operated as intended and only in undamaged and perfect condition.

7. Repairs that effect the explosion protection may only be carried out by S.E.M.C or qualified electricians and will subsequently have to be checked by an expert in compliance with the respective national regulations.

8. Prior to putting protect light into operation, they shall be checked in accordance with the "putting into operation" section of this manual.

9. All foreign matter shall be removed from the equipment before the initial operation.

10. Remove these operating instruction before operation.

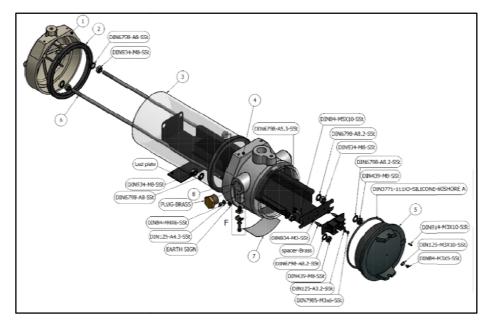


Figure 1: Scheme of the sequence of mounting of the equipment Special condition for safe use

WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD

In order to prevent the risk of electrostatic charge, the luminary shall only be cleaned with damp, non-fibrous (cotton) cloth, or sponge.



Putting into operation:

Prior to operation check the luminaries for its proper functioning and installation in compliance with these operating instruction and others applicable regulations, then the luminaries have to be tightly closed.

Incorrect installation and use of the equipment can invalidate the guarantee.

- The IP rating of the equipment must be maintained for the area of use, using the correct arrangement of Cable/gland/sealing arrangements and in accordance with the installation codes as detailed in IEC 60079-14, and these operating instructions.
- All unused entry holes must be sealed by a suitable certified stopping plug with the same protection level of the equipment.

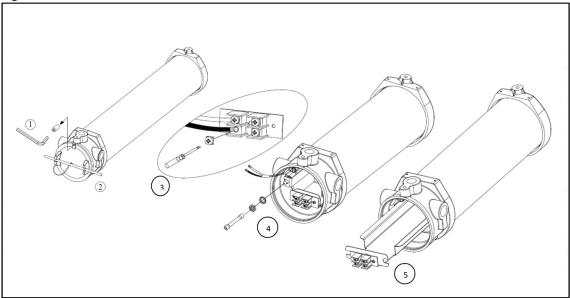
The apparatus must not be modified without reference to S.E.M.C. as this will invalidate certification.

Opening and closing the luminaire:

Opening: please follow up section 1 to 5 respectively. Closing: please follow up section 5 to 1 respectively, after the closing, please be attention the door front fits perfectly with the middle body. (Section 1) Open anti rotation screw with Allen wrench as shown in figure 1 (Section 2) screwed only cover and take off the cover as shown in figure 1 (Section 3) The two parts terminal to be separated as shown as in figure 1 (Section 4) unscrew nut back to tray with spanner aligned according to figure 1 (Section 5) Lighting tray is removed in figure 1

*The opening of luminaire always shall be without voltage.







* The respective national regulations as well as the general rules of engineering which apply to the installation and operation of explosion protected apparatus should be observed. Transport and storage of the luminaire is permitted in original packaging only.

• All further installation design should be in compliance with EN 60079-14

Maintenance/Servicing:

Observe the national rules applicable to maintenance, servicing, inspection and repairing of apparatus for explosive atmospheres, as well as the general rules of engineering.

For dust explosive application, pay special attention don't have present dust layers above 5 mm on side of the apparatus.

NOTE: Before opening the equipment enclosure that the apparatus is disconnected from the supply voltage! Or take appropriate protective measures.

The required maintenance intervals depend on the respective application and will therefore have to be determined by the user depending on the conditions of use.

When servicing, in particular those components that affect the explosion protection, will have to check. e.g.:

• Housing and glass for any cracks or damage.

- The flameproof joints must be cleaned, undamaged, without corrosion and perfectly greased.
- Gaskets/O-rings must be examined for their perfect conditions.
- Cable entries must be without corrosion.
- Terminal and Blanking plugs must be examined for their firm fit.
- Pay attention when mounting or repairing the luminaire, don't damage the fire- finish of the glass acquired during molding that can weakling their mechanical functions.

• Only must be mounting appropriate lamps for the supplied luminaire, and types of lamps used in acc with the laminar specifications.

If during servicing it is discovered that repairs are necessary, the Repair/Overhaul/Modification section of this manual must be observed.

The flame paths of these apparatus must be permanently greased in order to ensure protection in front of the corrosion, water ingress and seize-up problems. The remaining grease and corrosion must be cleaned without using sharp metallic devices, which can damage the surface of the joint. Thermally and chemically stable grease with a drop point > 200°C must be used.

Storage Preservation Guide:

- The Products shall not be stored or left in a wet or damp environment.

- Do not store The Products under direct sun light.
- Permanent Storage Temperature in Original Package is: -40°C TO +60°C
- Transport and storage of equipment is permitted in original package only



Inspection/Repair/Overhaul/Modification:

• The national regulations must be observed. The tasks of repairing must be carried out by "qualified" personnel.

• Repairs may only be carried out using genuine SHOMAL spare parts.

• Repairs that affect the explosion protection may only be carried out by SHOMAL or a qualified electrician in compliance with the applicable rules.

*Modifications to the apparatus or design changes are strictly prohibited.

*For repair electrical equipments in protection mode is suggested follow the instructions indicated in IEC 60079-19.

Earth connection:

These apparatus are provided with external and internal earth facility suitable for the largest conductor size.

Disposal / Recycling:

S.E.M.C. is concerned about environmental protection and will therefore take appropriate action with due consideration of relevant respect to terms and regulations of the goods' destination to ensure the proper disposal of its goods' packing and wrapping. Diversified waste disposal is strongly recommended.

When the equipment is disposed, the relevant waste and disposal national regulations must be observed.

• All further inspection and maintenance should be in compliance with EN 60079-17



Nameplate

"WARNINGI - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT" POTENTIAL ELECTROSTATIC CHARGING HAZARD	
SEM.C	CE 0035
€x π2gd	FLBS (B)
Ex db op is IIC T6 Gb	IECEX Cert NO. XXXX
Ex op is to IIIC T85°C Db IP 66	ATEX Cert NO. XXXX
Tamb30 °C To +55 °C	YEAR / SERIL No.
shomal eng. & mfg.co.(pirooz) www.shomal.com Salmanshahr,Industrial Estate, Mazandaran, Iran.	

Please add which is the meaning per each "*" of the code FLBS(B) *(****) as like written into the marking document.

db	Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures "d"
tb	Part 31: Equipment dust ignition protection by enclosure "t"
Op is	Inherently safe optical radiation : visible or infrared radiation that is incapable of producing sufficient energy under normal or specified fault conditions to ignite a specific explosive atmosphere
IIC	Type of gas Group according to IEC 60079-0
IIIC	Type of dust Group according to IEC 60079-0
Т6	Surface temperature class maximum 85°C (Gas Group)
T85°C	Surface temperature class maximum 85°C (Dust Group)