



Instructions

EP-SEMC-20-01-02

Eighth Edition

April 13, 2024

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 handed 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 luminaire shall be kept clear of dust.
6. The technical data indicated on the luminaries are to be observed.
7. The equipment shall be operated as intended and only in undamaged and perfect condition.
8. 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.
9. Prior to putting protect light into operation, they shall be checked in accordance with the "putting into operation" section of this manual.
10. All foreign matter shall be removed from the equipment before the initial operation.
11. Remove these operating instruction before operation.
12. The purchaser should make the manufacturer aware of any External effects or Aggressive substances that the equipment may be exposed to.

observe the national safety rules and regulations for prevention of accidents as well as safety instruction included in this operating instructions.

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.
- Each entry shall have no more than one thread adaptor, and that thread adaptors shall not be used with blanking elements.

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

Field of application:

Equipment protection level of luminaire "Gb" for gas group IIC and "Db" for dust group IIIC, reference in IEC/EN60079-0 the light fitting FLB/FLB L is suitable for use in zone 1, 2 or 21,22 hazardous areas according to IEC/EN 60079-10-1 and IEC/EN60079-10-2.

Ambient temperature:

FLB L 220; FLB L 220-SS; FLB L 240; FLB L 240-SS FLB 220; FLB 220-SS; FLB 240; FLB 240-SS	-30°C ≤ Ta ≤ 55°C
FLB L NI 220; FLB L NI 220-SS; FLB L NI 240; FLB L NI 240-SS FLB NI 220; FLB NI 220-SS; FLB NI 240; FLB NI 240-SS	0°C ≤ Ta ≤ 45°C
FLB L NI 220-ptc; FLB L NI 220-SS-ptc; FLB L NI 240-ptc; FLB L NI 240-SS-ptc FLB NI 220-ptc; FLB NI 220-SS-ptc; FLB NI 240-ptc; FLB NI 240-SS-ptc	-30°C ≤ Ta ≤ 45°C

Cable entry:

Standard: 2x M25x1.5 mm or 3/4" NPT, one plugged.

Optional: 1x M25x1.5 mm or 3/4" NPT, one plugged.

NPT thread joints shall be made up Wrench tight.

Make sure that the cable is fitted properly through the inlet!

Follow the manufacture installation manual of cable glands!

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 4

(Section 2) screwed only cover and take off the cover as shown in figure 4

(Section 3) The two parts terminal to be separated as shown as in figure 4

(Section 4) unscrew nut back to tray with spanner aligned according to figure 4

(Section 5) Lighting tray is removed in figure 4

Change the battery in FLBL NI ...series:

(Section 6) open the screw with screw driver as shown in figure 5

(Section 7) remove cover of battery and disconnect the socket of battery as shown in figure 5

(Section 8) change battery and install the socket of new battery then close the cover as shown in figure 5

*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.

Note:

before opening the enclosure

“WARNING – DO NOT OPEN WHEN AN EXPLOSIVE GAS ATMOSPHERE IS PRESENT”

Figure 1

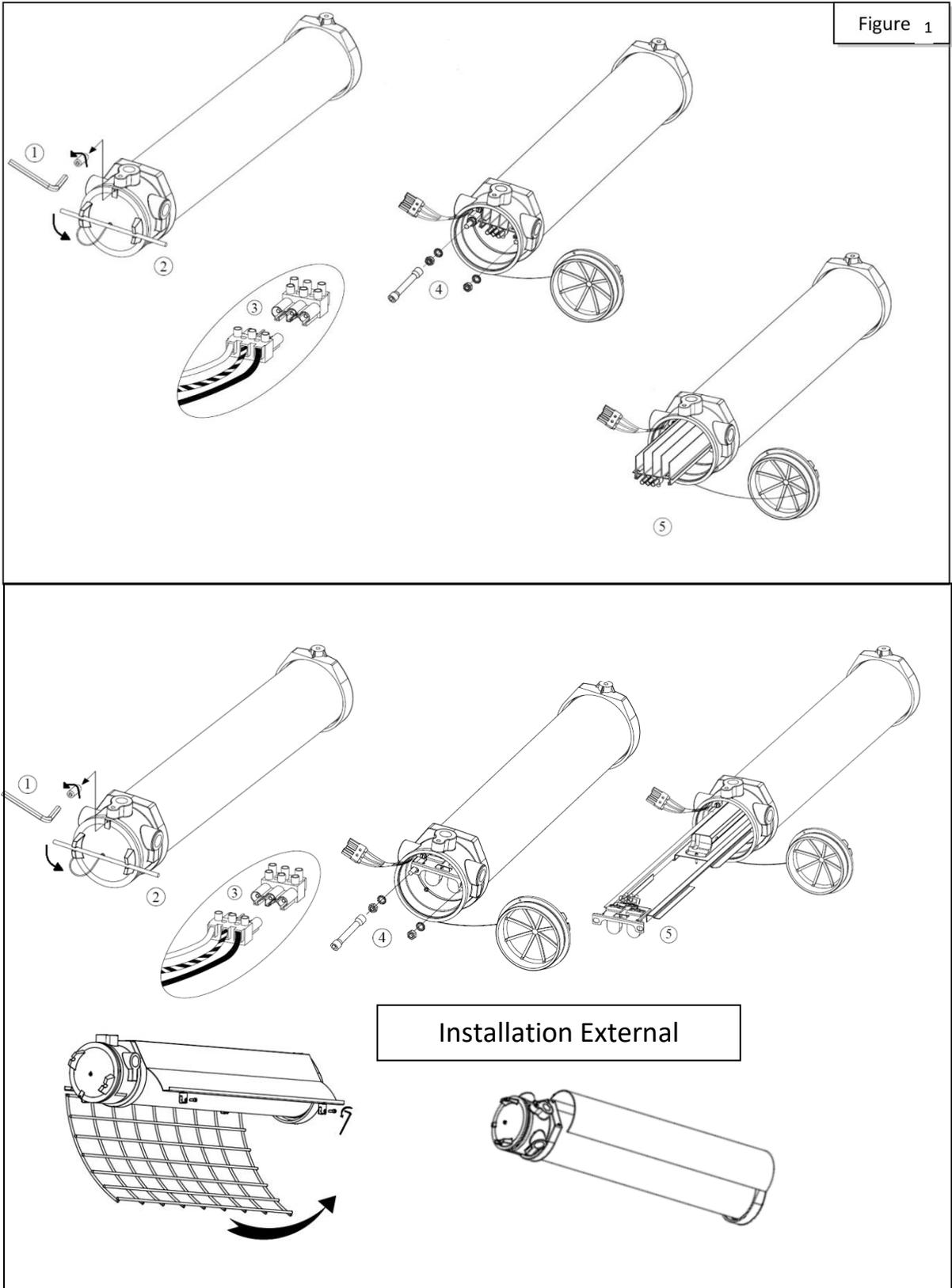
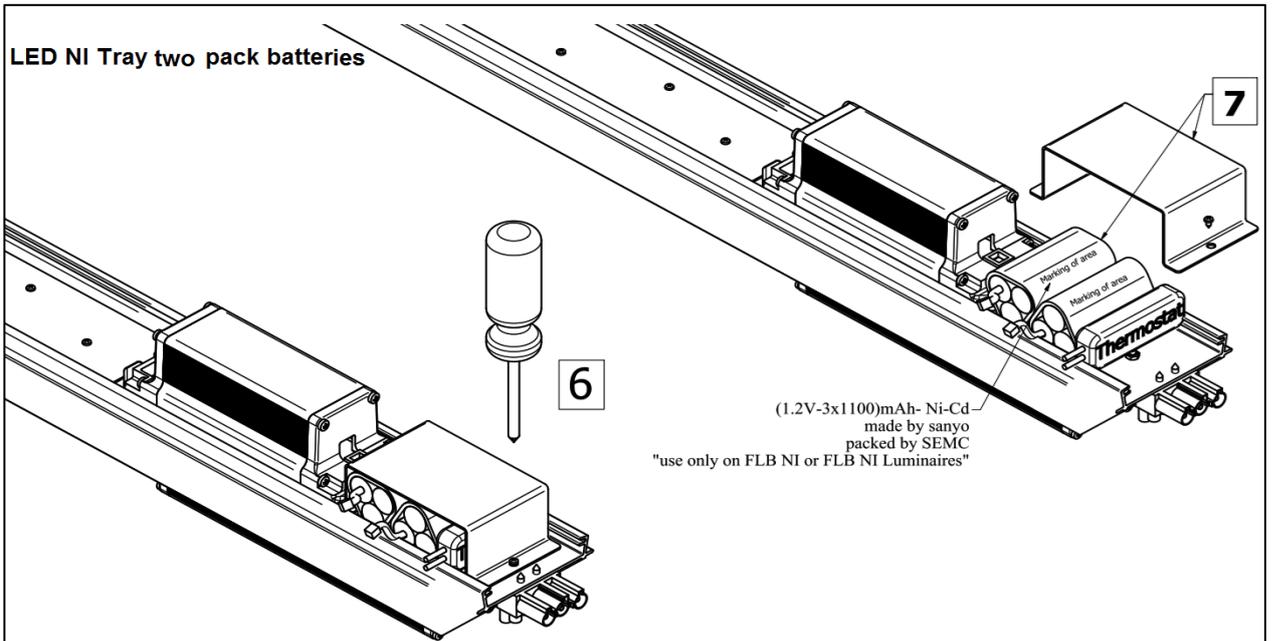
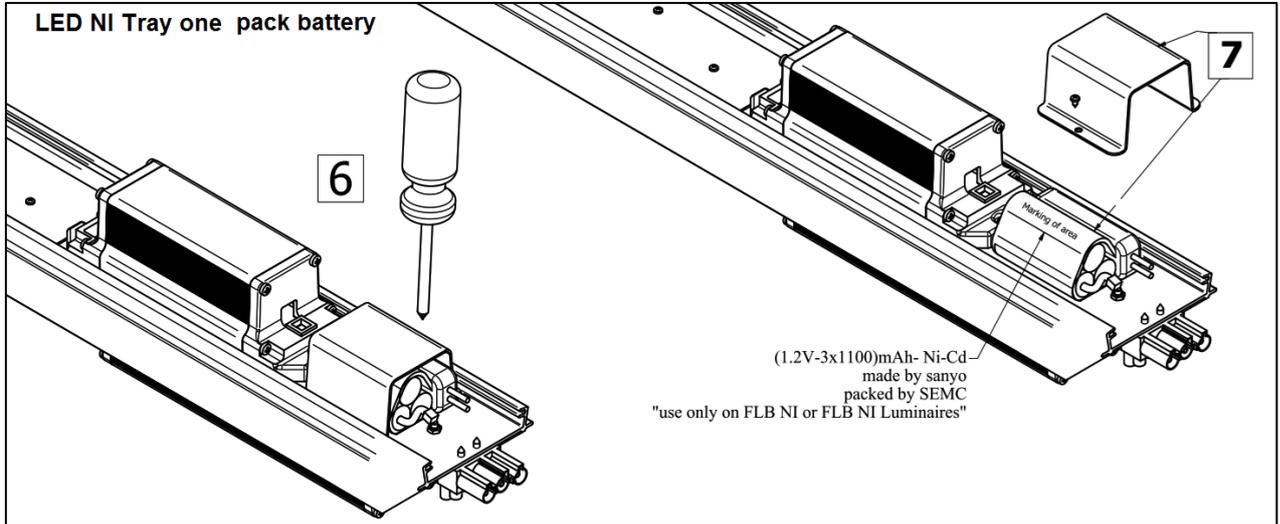
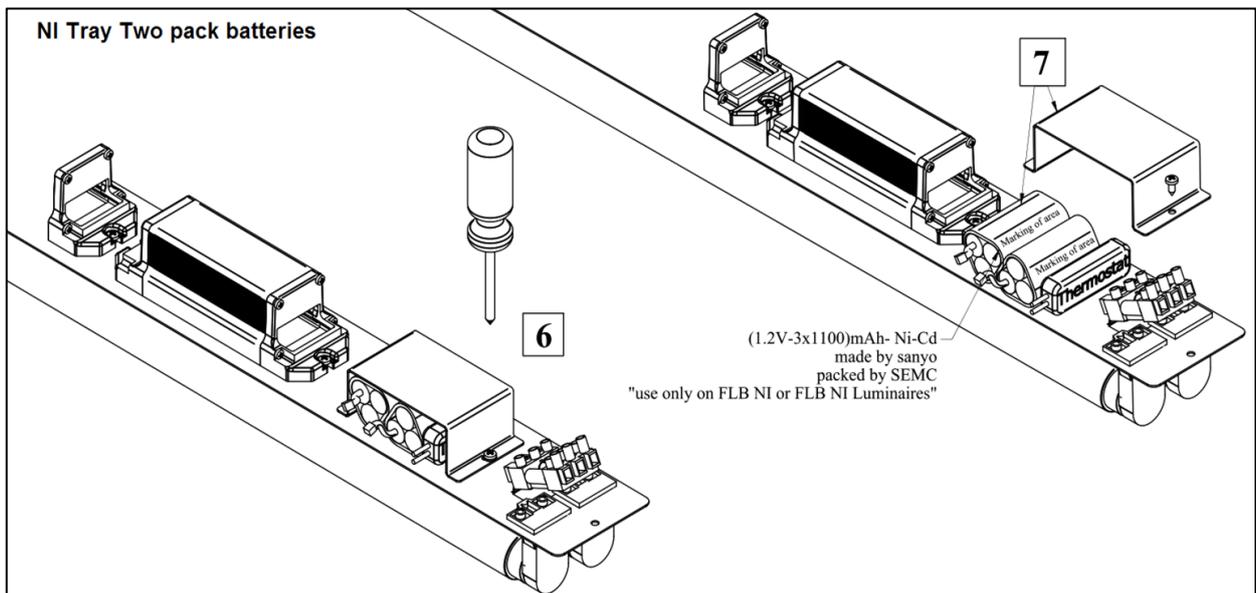
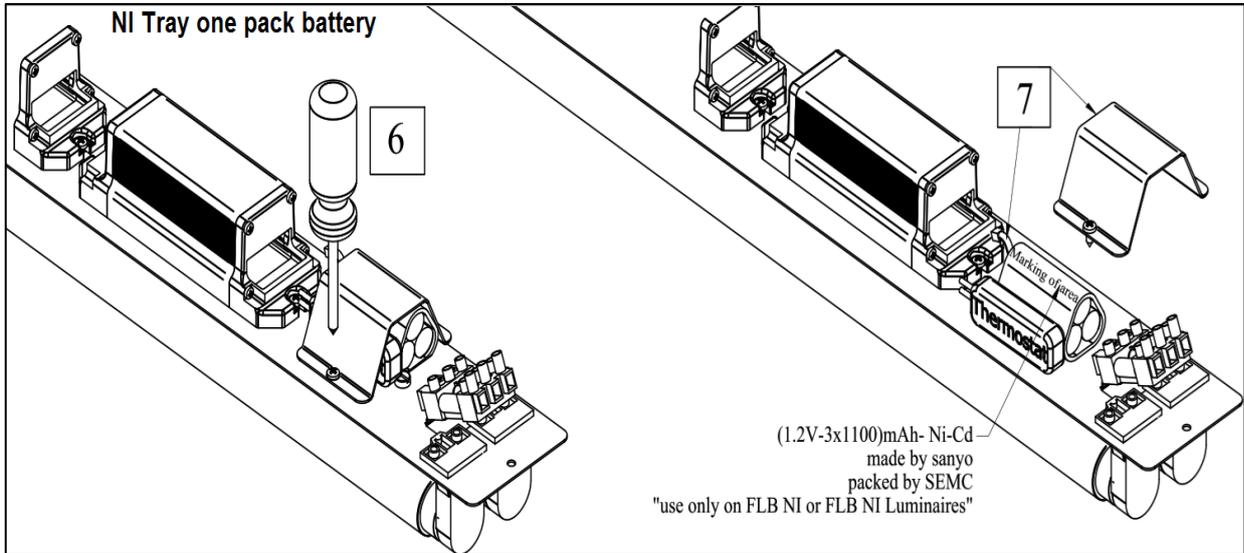


Figure 5





Maintenance/Serviceing:

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 according with the luminaire 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: -30°C TO +50°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:

This apparatus is provided with external and internal earth facility suitable for the minimum 2.5mm² up to 4mm² for internal earth connection and up to 16 mm² for external earth connection conductor size.

Disposal / Recycling:

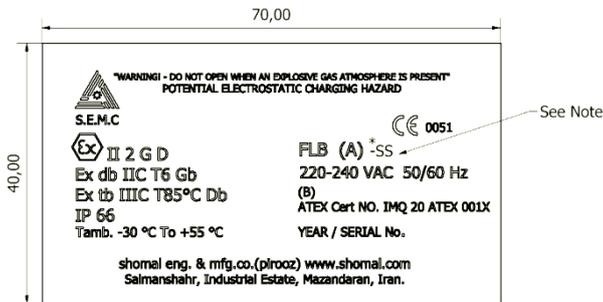
S.E.M.C. is concerned about environmental protection and will therefore take appropriate action with due consideration of relevant respect to terms and regulations of the goods' destination to ensure the proper disposal of its goods' packing and wrapping. Diversified waste disposal is strongly recommended.

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

	Specific marking of explosion protection
db	Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures “d”
tb	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure “t”
IIC	Type of gas Group according to IEC 60079-0
Gb	Equipment Protection level: Equipment for explosive gas atmospheres, having a "high" Level of Protection, which is not a source of ignition in normal operation or during expected malfunctions
IIIC	Type of dust Group according to IEC 60079-0
Db	Equipment Protection level: Equipment for explosive dust atmospheres, having a "high" Level of Protection, which is not a source of ignition in normal operation or during expected malfunctions
T6	Classification of maximum surface temperatures for Group II electrical equipment
T85°C	Maximum surface temperature for Group III electrical equipment
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

Nameplate

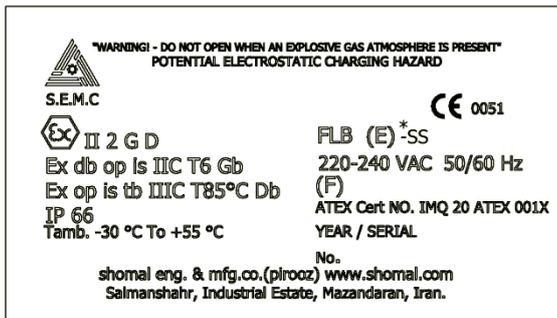
Marking label for fluorescent light source



marking label for fluorescent light source

(Table 1) FLB ...series		
(A)	220	240
(B)	2x18W	2x36W
Description	Electronic ballast	Electronic ballast

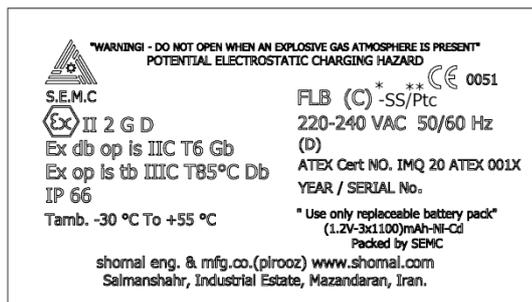
Marking label for LED light source



marking label for LED light source

(Table 2) FLB...series		
(E)	L 220	L 240
(F)	34 W	69W
Description	Drive	Drive

Marking label for NI light source



marking label for NI light source

(Table 3) FLB...series				
(C)	L NI220	L NI240	NI220	NI240
(D)	34 W	69W	2x18W	2x36W
Description	+4W	+4W	+4W	+4W

* If the material used in the product is Stainless steel, letters SS are placed in product code.

**If the material used in the product is Stainless steel, letters SS are placed in product code, in the Emergency versions(NI) ,where internal heater is fitted, letters Ptc are placed in product code.

***-30°C to +45°C for models fitted with heater (letters Ptc in product code); 0 °C to +45°C for models not fitted with heater.

***FLB220 & FLB240 don't have "op is" marking.