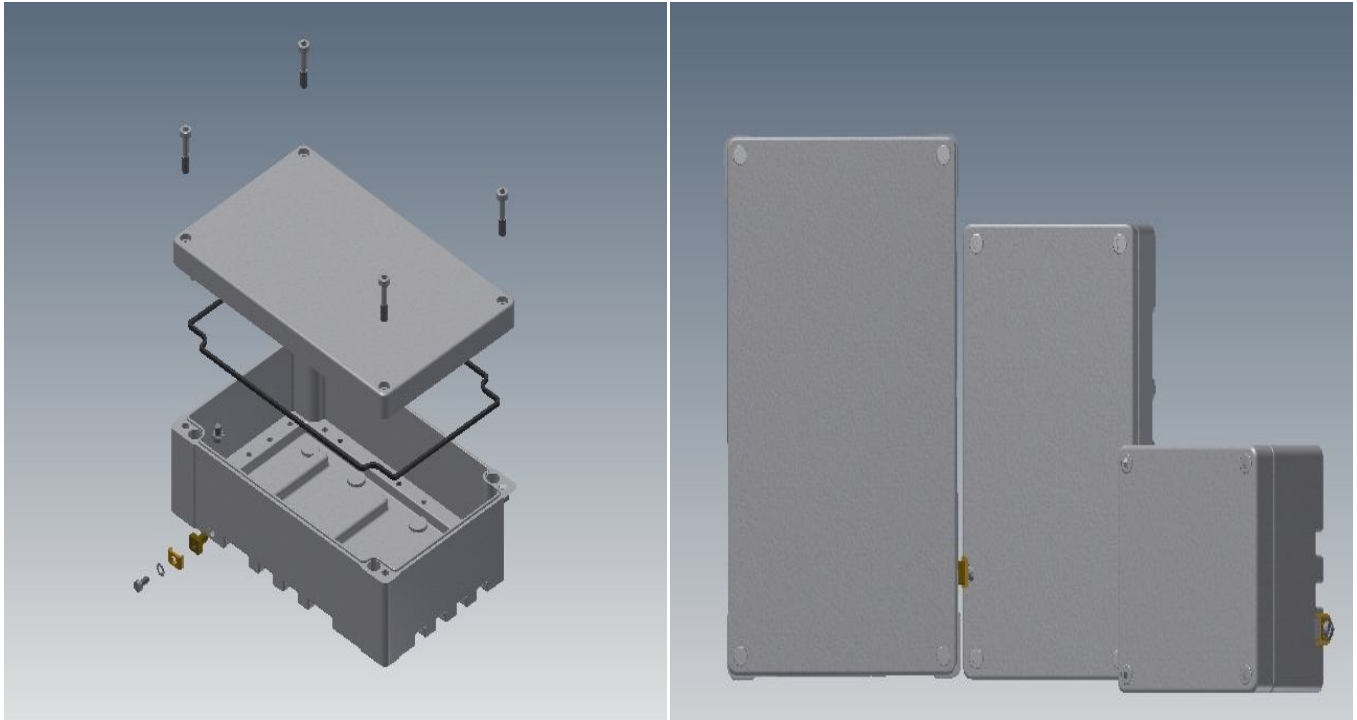




SHOMAL Engineering & Manufacturing Co.(PIROOZ)

OPERATING INSTRUCTIONS

LTB SERIES OF ALUMINIUM ENCLOSURES



LTB SERIES (120/220/260)

Component certified Enclosure Only

additional certification required when assembled with other electrical equipment

WI-16(PCD-P-01)/00



THIS GUIDE SHOULD BE READ CAREFULLY BEFORE INSTALLATION. INCORRECT
INSTALLATION AND USE OF THE ENCLOSURES CAN INVALIDATE THE GUARANTEE!

Marking:

The marking shown is for a component certified enclosure. The user must submit the complete unit for type examination if it is to be used in a hazardous area.

The ambient temperature range for which this product is suitable is marked on the label and identified by Tamb____. (-20°C to +40°C or -30°C to +55°C)

ATEX marking:

 II 2 GD - IP66

Ex e IIC Gb

Ex tb IIIC Db

IECEx marking:

Ex e IIC Gb

Ex tb IIIC Db

IP66

Schedule of limitations:

1. Suitable certified cable glands or blanking elements, that sustain the type of protection and IP66, must be used.
2. If used with other devices, a temperature rise test has to be performed. The wiring must be considered in respect of the heat resistance of the insulation.

Safety instructions:

1. The enclosures are not suitable for zone 0 and zone 20 hazardous areas. The service temperature shall be observed.
2. The apparatus shall not be used in dust layers > 50mm according to IEC 60079-31.
3. Modifications or changes of their design are not permitted. They shall be used for intended purpose and in perfect and clean condition.
4. For replacement and repair, only genuine SEMC spare parts shall be used.
5. Repairs that affect the explosion protection may only be carried out by SEMC or qualified electrician in compliance with the respective national regulations.
6. Observe the national safety rules and regulations for prevention of accidents as well as Safety instructions included in this operating instruction.

Field of application:

CAT II 2G for use in zone 1 or zone 2 area as defined in IEC/EN 60079-14.

CAT II 2D for use in zone 21 or zone 22 area as defined in IEC/EN 60079-14.

Installation:

These instructions assume that the required cable entries have been pre-drilled. Certified
1. Using the mounting dimensions data provided, either in the product catalogue data

sheets or on the drawings supplied, (as part of the project documentation), mark out the positions for the mounting holes on the surface where installation is required.

2. Drill the mounting holes for M6 fixing studs as applicable.

3. Tap thread into mounting holes if required.

4. Place a mounting screw through one mounting hole in the box so that the thread of the screw protrudes from the back of the box. Lift the enclosure into position using such assistance as may be necessary to avoid injury and:-

- a. If clearance mounting holes are used, insert the protruding thread through the appropriate clearance hole and secure with a nut and suitable flat or spring washers if required on the other side of the mounting surface.

Or

- b. If threaded holes are used, locate the end of the mounting screw over the thread hole and, using an appropriate screwdriver and or tool, tighten the screw.

5. Rotate the box to line up the remaining mountings and repeat (4) above until all mounting screws have been fitted.

6. Secure the lid by closing the lid and tightening the lid fixing screws firmly.

Earthing /Grounding:

The enclosure is provided with an external earth/ground connection. This must be connected to the appropriate earth bonding circuit before electrical power is connected to the contents of the enclosure.

Operation:

1. The lid must be secured using all of the lid screws provided in order to maintain the IP rating.

2. No attempt must be made to remove the enclosure lid whilst electrical power is connected to the contents of the enclosure.

3. The enclosure earth/ground facility must be connected to the earth bonding circuit at all times when power is connected to the enclosure.

Maintenance:

Routine maintenance is likely to be a requirement of local Health and Safety legislation. The laws of the applicable country must be considered and maintenance checks carried out accordingly.

Additional periodic checks that are advisable to ensure the efficiency of SEMC "LTB" range enclosures are:

Activity		Frequency
1	Check that the lid seal is in place and not damaged	Each time the enclosure is opened
2	that all lid fixing screws are in place and secured	Each time the enclosure is closed
3	Check that the mounting bolts are tight and free of corrosion	Annually
4	Check the security of all cable glands	Annually
5	Check for damage of the enclosure	Annually
6	Check for corrosion of the enclosure	Annually Every 3 months in corrosive Atmospheres (recommended)

Chemical attack:

The SEMC LTB range of enclosures are manufactured using the following materials:-
Aluminum alloy — LM2, LM6 or equivalent,

silicone rubber,

316 and 304 stainless steel.

Consideration should be given to the environment in which these enclosures are to be used to determine the suitability of these materials to withstand any corrosive agents that may be present.

Static hazard:

The LTB range enclosures do not present a hazard from static electricity.

Vibration:

LTB range terminal boxes are designed for use in areas subject to normal industrial levels of vibration. They are not designed for use in areas subject to intentional or extreme conditions of vibration.