INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS FOR ABTECH 'ZAG' Range Enclosures – IECEx SIR 12.0116U IECEx SIR 12.0116U - Sira 99ATEX3174U - FM ???????



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 standard IP rating is IP66 but may show IP67 or IP68.

Installation

These instructions assume that the enclosures are empty and that required cable entries have been predrilled. Cable entries may be threaded.

- 1) Using the mounting dimensions data provided, either in the product catalogue 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 M4 fixing studs (for size ZAG1 to ZAG8) or for M6 fixing studs (for size ZAG9 to ZAG16) 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 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 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) Where slotted trunking has been supplied (solid trunking is not permitted) ensure that it is suitable for the proposed T classification of the final certified product. Where the T6 is the proposed rating and no windows are fitted any polymeric or metallic slotted trunking may be used. For other T classifications and where a window is fitted metallic slotted trunking must be used. Trunking may be mounted in any orientation in the box, vertically, horizontally or diagonally.
- 7) Secure the lid by closing the lid and tightening the lid fixing screws.

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.

An earth connection between the lid and the box is provided. Care must be taken to ensure this is not damaged during installation or maintenance.

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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 ABTECH range enclosures are:

| Activity | | Frequency |
|----------|--|---|
| 1 | Check that the lid seal is in place and not damaged | Each time the enclosure is opened |
| 2 | Check that all lid fixing screws are in place and secured | Each time the enclosure is closed |
| 3 | Check that the lid earth strap is not frayed or damaged and is secure at both ends | Each time the enclosure is opened |
| 4 | Check lid earth strap continuity (hot work permit may be required) | Every 3 years |
| 5 | Check that the mounting bolts are tight and free of corrosion | Annually |
| 6 | Check the security of all cable glands | Annually |
| 7 | Check for corrosion of the enclosure | Annually, Every 3 months in corrosive atmospheres |

Chemical attack

The ABTECH ZAG range of enclosures are manufactured using the following materials:-

Aluminium - AlSi 12,

Neoprene or silicone rubber,

316 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 ZAG range enclosures do not present a hazard from static electricity.

Vibration

ZAG 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.