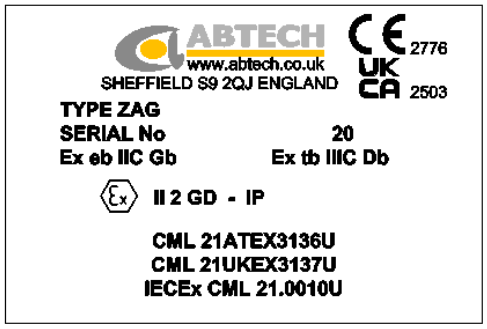
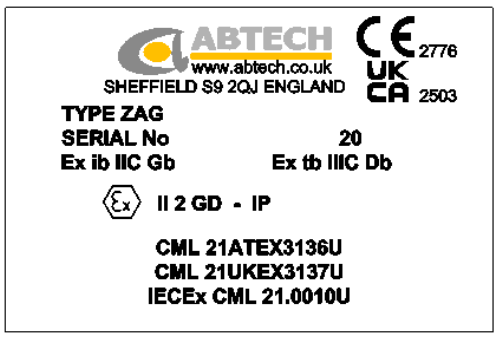
INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS FOR ABTECH 'ZAG' Range Enclosures CML 21ATEX3136U, CML 21UKEX3137U and IECEx CML 21.0010U





Marking

The marking shown is for a component certified enclosure and will be found on the inside of the enclosure.
The user must submit the completed unit for type examination if it is to be used in a hazardous area.

The ambient temperature range for which this product is suitable extends from -65°C to +150°C.

The marking:
Ex eb IIC Gb Ex tb IIIC Db may be replaced by

Ex ib IIC Gb Ex tb IIIC Db or

Ex ia IIC Ga Ex ta IIIC Da.

The standard coating finish is ≤0.2mm. If the client specified paint finish >0.2mm the IIC marking will be replaced by IIB.

Enclosures marked Ex ia or Ex ib may only be used for terminating intrinsically safe circuits.

This enclosure is aluminium and must not be used where the EPL is Ga or Da

Static hazard

The ZAG range do not normally present a hazard form static discharge. Ensure that the marking is appropriate to the gas group as this may be affected by a client specified coating thickness.

Installation

These instructions assume that the required cable entries have been pre-drilled. Cable entries may be threaded. All cable entry devices must be appropriately certified to the latest standards and match the certification of the box. i.e. ATEX certified devices are required for ATEX certified enclosures and IECEx certified devices are required for IECEx certified enclosures. If trunking is fitted, non-metallic slotted trunking may be used for T6 rated applications. If the box is rated other than T6 then metallic slotted trunking must be used.

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 M4 fixing studs (for size ZAG1 to ZAG8) or for M6 fixing studs (for larger sizes) 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.

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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 to a torque of 1.5Nm minimum, 2.0Nm maximum.

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

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, unless the enclosure marking shows Ex ib or Ex ia.
3. The enclosure earth/ground facility it must be connected to the earth bonding circuit at all times when power is connected to the enclosure contents.

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 mounting bolts are tight and free of corrosion	Annually
4	Check the security of all cable glands	Annually
5	Check enclosure for damage	Annually

Chemical attack

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

Aluminium Alloy,

Neoprene or Silicone rubber,

316 stainless steel,

Brass.

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.

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