

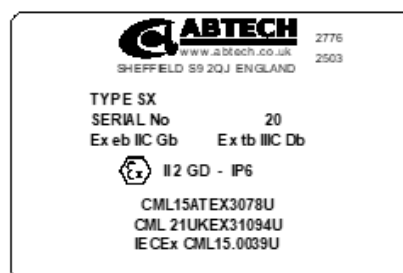
Installation, Operation, Maintenance:

SX RANGE (COMPONENT)



Certification Details

ATEX:	ABTECH Ltd.	Ex II 2 GD	CML 15ATEX3078U
UKEX:	ABTECH Ltd.	Ex II 2 GD	CML 21UKEX31094U
IECEx:	ABTECH Ltd.	Ex eb IIC Gb	IECEx CML 15.0039U



Marking

The marking shown is for a component certified enclosure. This label is fitted internally.

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 +175°C.

The marking:

Ex e 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.

For Ex ia the ATEX marking "II 1 G D" will apply

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

The gas group IIC marking may be replaced by IIB marking. When marked IIC the maximum coating thickness is 200 microns. When marked IIB the maximum coating thickness is 2.0mm. If the coating is conductive these thickness limitations do not apply.

Installation

NOTE: The temperature must be at least -60°C before any work is permitted on SX range enclosures.

- 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 either M8 or M9 fixing studs (for size S64 upwards) or for M6 fixing studs for size S45.
- 3) Insert the top two studs leaving 8 to 10mm protruding. Lift the enclosure into position using such assistance as may be necessary to avoid injury and hang the top fixing brackets of the box onto the studs.



NOTE:
If the weight of the box at this point of the installation process exceeds 18kg assistance must be sought.

Ensuring that the box is secure, insert and tighten the bottom two studs. Now complete tightening the top two studs.

- 4) Install and secure the cable glands in accordance with the manufacturer’s instructions.
- 5) Where slotted trunking has been supplied (solid trunking is not permitted) ensure that it is suitable for the proposed service temperature of the enclosure. 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.
- 6) Secure the lid by closing the lid and tightening the screws. Ensure that all gland plate securing screws are tightened. The lid must be secured using all of the fixing screws to the define torque rating. Threads for all fixing screws should be greased with EP2 Lithium Grease, or equivalent, to prevent galling.

Torque Ratings for Lid Fixings and Gland Plates	
1.5Nm Minimum	2.0Nm Maximum

Earthing/Grounding
All SX range enclosures are provided with an internal and external earthing/grounding facility. 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.

- Operation
- The lid must be secured using all the lid screws provided in order to maintain the IP rating.
 - No attempt must be made to remove the enclosure lid whilst electrical power is connected to the contents of the enclosure.
 - The earthing/grounding facility must be connected to the earth bonding circuit at all times when electrical 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.

NOTE:
The temperature must be -60°C or warmer before any work is permitted on SX range enclosures.

Additional checks that are advisable to ensure the efficiency of ABTECH ‘S’ range enclosures are:-

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

Chemical Attack
The ABTECH SX range enclosures are available in mild steel or 316 stainless steel. The following additional material are also used:
- Silicone rubber
- Brass

If the enclosure is of mild steel it may be zinc plated prior to painting. The standard paint finish is epoxy polyester grey hammer.

Stainless steel enclosures are not painted except to customer specifications.

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