



EU Type Examination Certificate CML 15ATEX3078U Issue 4

- 1 Components intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Component **SX Range of Empty Enclosures**
- 3 Manufacturer **Abtech Limited**
- 4 Address 199 Newhall Road,
Lower Don Valley, Sheffield,
S9 2QJ, UK
- 5 The component is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Koopvaardijweg 32, 4906CV Oosterhout The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in the confidential reports listed in Section 12.
- 7 The 'U' suffix after the certificate number indicates that the component is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

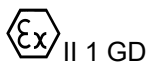
EN IEC 60079-0:2018

EN IEC 60079-7:2015+A1:2018

EN 60079-11:2012

EN 60079-31:2014

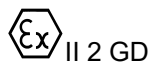
- 10 The equipment shall be marked with the following:



II 1 GD

Ex ia IIB/IIC Ga

Ex ta IIIC Da



II 2 GD

Ex eb IIB/IIC Gb

Ex ib IIB/IIC Gb

Ex tb IIIC Gb

Refer to Schedule of Limitations for Service Temperature Range



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11 Description

The SX Range of Empty Enclosures are manufactured from steel, stainless steel or brass, other alloys of steel or other alloys of copper, and are manufactured in the following standard sizes:

SX Ref.	EPL	Length (mm)	Width (mm)	Depth (mm)	
				Min.	Max.
SX0	Ga, Gb, Da, Db	229	152	140	2000
SX0.5	Ga, Gb, Da, Db	274	184	140	2000
SX1	Ga, Gb, Da, Db	324	234	140	2000
SX1.5	Ga, Gb, Da, Db	306	306	140	2000
SX2	Ga, Gb, Da, Db	324	372	140	2000
SX3	Ga, Gb, Da, Db	448	372	140	2000
SX4	Ga, Gb, Da, Db	510	372	140	2000
SX5	Ga, Gb, Da, Db	510	510	140	2000
SX6	Ga, Gb, Da, Db	780	510	140	2000
SX7	Ga, Gb, Da, Db	950	650	140	2000
SX8	Ga, Gb, Da, Db	1250	800	140	2000
SX225	Ga, Gb	2000	2000	140	2000
SX45	Ga, Gb, Da, Db	114	114	51 (Nominal)	
SX64	Ga, Gb, Da, Db	152	102	63 (Nominal)	
SX66	Ga, Gb, Da, Db	152	152	102 (Nominal)	

Enclosures may also be manufactured to sizes not specified in the above table. This assumes that any given dimension is not larger than the respective dimension of the largest enclosure or smaller than the respective dimension of the smallest enclosure.

The lid may be hinged and gland plates may be provided on the base, top, sides or back of the enclosure. Cable entries may be provided either through the gland plates or in the enclosure walls. Additionally, threaded bosses may be provided, welded, brazed or soldered into position.

An external and optional internal earth stud is provided on all enclosures (Min. size M6) and gaskets are manufactured from a closed cell silicone rubber strip or solid silicone rubber.

Optionally, the enclosures may be provided with a glass window or painted.

Variation 1

This variation introduces the following changes:

- i. The introduction of an alternative flange gasket and lid sealing arrangement option.
- ii. To allow units with shared gland plate options to be bolted together.
- iii. The introduction of a hank bushing fixing arrangement option for the gland plates.
- iv. The update of the certificate reference to Directive 2014/34/EU.



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Variation 2

This variation introduces the following changes:

- i. To correct typographic errors on drawings, including number drawing references listed in earlier certificate issues.
- ii. To update EN 60079-7:2007 standard to the latest edition EN 60079-7:2015
- iii. To update the marking to reflect latest edition of EN/IEC 60079-7:2015
- iv. To include an option to allowed the enclosure to be painted with a coating thickness up to 2mm for 'IIB' applications. The description and marking has been modified accordingly.

Variation 3

This variation introduces the following changes:

- i. To transfer the CML UK ATEX Certificate to CML BV
- ii. Correction of typographical errors.

Variation 4

This variation introduced the following changes:

- i. To update the following standards to the latest editions, EN 60079-0:2012+A11:2013 and EN 60079-7:2015.
- ii. To reduce the lower service temperature to -65°C, the Schedule of Limitations have been updated in accordance with this modification.
- iii. A typographical error was corrected with regards to the service temperature range for the window option.
- iv. To align the relevant construction options and drawings between the empty enclosure and the SX junction box enclosure.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	27 July 2015	R406A/00	Issue of Prime Certificate
1	20 Mar 2017	R1759A/00	Introduction of Variation 1
2	23 Jun 2017	R976A/00 R2310A/00	Introduction of Variation 2
3	13 Sep 2019	R12424A/00	Introduction of Variation 3
4	23 Feb 2022	R14591A/00	Introduction of Variation 4

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. The manufacturer shall take all reasonable steps to ensure the items used in the construction of the enclosure are used within the minimum and maximum service temperatures stated in the 'schedule of limitations/conditions of safe use'. When supplied, the manufacturer shall the



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installer/user with a copy of the certificate(s) associated with any blanking plugs, adapters, reducers or breather drains.

- ii. If the enclosures are supplied with blanking plugs, reducers, adapters or breather drains, then the manufacturer shall ensure that:
 - The fitted items do not affect the installation of the enclosure, e.g. any conditions of safe use that would alter the allowable specification of the enclosure, such as reduced levels of mechanical protection.
 - The fitted items do not adversely affect the minimum IP rating of the enclosure.
 - That when fitted, the enclosure marking reflects the “worst case” item fitted.
- iii. When trunking is fitted, it may be sited as required, provided the minimum creepage and clearance distances are met.
- iv. When the optional earth bar is provided, it shall allow for a conductor size that is in accordance with EN IEC 60079-0, clause 15.3.
- v. The earth bar connection washers, screws and nuts, shall not be constructed of light metals.
- vi. When the earth connection to the earth bar is secured via thread sealant alone, it shall be ensured that the sealant used has a suitable operating temperature range to account for the lowest ambient range and the T-class to be applied.
- vii. The window option stated on the construction specification document is not permitted on the flanged lid enclosure arrangements.

14 Schedule of Limitations

The following conditions relate to safe installation and/or use of the component.

- i. The following parts used in the construction have the maximum service temperature ranges listed below and shall not be exceeded:

Item	Service Temperature Range	
	Minimum	Maximum
Closed cell silicone strip gasket	-65°C	180°C
Solid silicone rubber gasket	-65°C	180°C
Glass window	-65°C	80°C
Blanking plugs, reducers, adapters and breather drains	Refer to individual certificate(s)	Refer to individual certificate(s)

Note: Where components will be utilised at ambient/service temperatures lower than -60°C, a Specific Condition of Use shall be applied to prevent the enclosure being opened or worked on.

Certificate Annex

Certificate Number CML 15ATEX3078U
Equipment SX Range of Empty Enclosures
Manufacturer Abtech Limited



The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
ABT28780	1 of 1	A	27 July 2015	SX Manufacturing Specification
ABT28781	1 of 1	A	27 July 2015	SX Range of Enclosures
ABT28782	1 of 1	A	27 July 2015	SX Range Large Window
ABT29300	1 of 1	A	27 July 2015	External ATEX Label SX Range
ABT29307	1 of 1	A	27 July 2015	External IECEx Label SX Range

Issue 1

Drawing No	Sheets	Rev	Approved date	Title
ABT28781	1 of 1	B	20 Mar 2017	SX Range of Enclosures

Issue 2

Drawing No	Sheets	Rev	Approved date	Title
ABT28780	1 of 1	B	23 Jun 2015	SX Manufacturing Specification
ABT28781	1 of 1	C	23 Jun 2015	SX Range of Enclosures
ABT29300	1 of 1	B	23 Jun 2015	External ATEX Label SX Range
ABT29307	1 of 1	B	23 Jun 2015	External IECEx Label SX Range

Issue 3

None.

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Drawing No	Sheets	Rev	Approved date	Title
ABT28780	1 of 1	D	23 Feb 2022	SX Manufacturing Specification
ABT39133	1 of 1	A	23 Feb 2022	SX Component Certification Labels
ABT31039	1 of 1	A	23 Feb 2022	GA Drawing S Range with FX Style Seal