



EU Type Examination Certificate CML 17ATEX3307X Issue 1

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **Command, Control and Signalling Units:
SA..., CTB..., CSTB... and CTBE... Series**
- 3 Manufacturer **Cortem S.p.A.**
- 4 Address **Via Aquileia 10,
34070 Villesse,
Gorizia, Italy**
- 5 The equipment 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 equipment 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 If an 'X' suffix appears after the certificate number, it indicates that the equipment 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 60079-31:2014
- 10 The equipment shall be marked with the following:



Ex tb IIIC T... °C Db

Ta = -20°C or -40°C* to +40°C, +55°C or +60°C**

* The minimum ambient depends on the parts fitted, as defined in the manufacturer's documentation and this certificate.

** The maximum ambient depends on the power dissipation limit assigned to the enclosure and the parts fitted, as defined in the manufacturer's documentation and this certificate.





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11 Description

The SA..., CTB..., CSTB... and CTBE... Series Command, Control and Signalling Units comprise a range of enclosures covered by type of protection 'Ex tb' and are manufactured from aluminium, polyester, or stainless steel.

The enclosures are manufactured in various sizes, with each size and material option having three assigned maximum power limits which correspond with each of the three maximum ambient temperature options; +40°C, +55°C and +60°C.

There are various IECEx/ATEX component certified devices which may be mounted externally, to the enclosure walls. A glass or polycarbonate window may also be fitted to the enclosure cover.

Internally, various electrical devices may be mounted, which have a total power dissipation within the power limits defined for each enclosure. Examples of parts which may be fitted within the enclosures are terminals, analogue and digital instruments, measuring and controlling devices, automatic switches, etc. IECEx/ATEX component certified battery packs may also be installed internally, and some of the electrical devices fitted may include 'button cell' type batteries.

There are several options of enclosure gasket/seal materials. The temperature and power limits for each enclosure type are defined in the manufacturer's documentation.

Variation 1:

This variation introduced the following changes:

- i. Update EN/IEC 60079-0:2012, 6th edition to EN IEC/IEC 60079-0:2018, 7th edition
- ii. Extended the maximum power consumptions for each enclosure by adding the T100°C and T135°C surface temperatures options.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	10 May 2018	R11428A/00	Prime certificate issue
1	02 June 2022	R15041A/00	Introduction of Variation 1

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 product incorporates previously certified parts and/or safety critical components. The manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate. This includes monitoring the status of the general-purpose junction box certification (certificate IECEx CES 13.0001 / CESI 03ATEX333).



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- ii. The total maximum power dissipation of any arrangement of parts fitted into the enclosures shall not exceed the maximum power figure assigned to the particular enclosure size and material, taking into account the maximum ambient temperature/surface temperature option assigned. The maximum power dissipation figures are as defined in the manufacturer's document 'A4-7849'.
- iii. The IECEx/ATEX certificate and instruction manual for each previously certified part used with the equipment shall be provided with the equipment to the end-user.
- iv. The minimum ambient temperature marked on the equipment shall be no lower than the minimum ambient or service temperature assigned to any of the previously certified parts fitted.
- v. Information shall be provided to the end-user which determines the supply ratings of each part installed within the enclosure, as well as the power dissipation limit defined for the enclosure.
- vi. The electrical supply ratings of the enclosure shall be marked on the equipment.
- vii. Regarding the externally mounted parts, sufficient space between any other power dissipating parts shall be allowed to allow heat dissipation such that their own temperature rise, in addition to the temperature rise of surrounding parts, is not capable of exceeding their rated service temperature or the assigned maximum surface temperature.
- viii. All previously certified parts shall be installed in accordance with their IECEx/ATEX certificate, their instruction manual and in accordance with IEC/EN 60079-14.
- ix. Information detailing the thread type and size of all threaded entries into the enclosures shall be provided to the end-user with the instruction manual.
- x. When ammeters and/or voltmeters are installed (certificates IECEx CES 12.0022U & CESI 04ATEX128U), the equipment enclosures shall be marked with a maximum ambient no higher than +40°C, and the maximum power dissipation, as defined in document 'A4-7849' for a +40°C ambient shall be reduced by a minimum of 31.25%, or higher to ensure the temperature limits are not exceeded.

14 Specific Conditions of Use

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

- i. The limits of the supply ratings of each previously certified part installed and the power limit defined for the enclosure shall be observed during installation and operation.
- ii. Cable glands and entry devices, whether selected by the equipment manufacturer or end user, shall be suitably IECEx/ATEX certified, suitable for the service temperature range and shall be installed in accordance with IEC/EN 60079-14. All wiring shall also be conducted in accordance with IEC/EN 60079-14.
- iii. When a polycarbonate window is fitted, and/or voltmeters/ammeters with windows are installed, these parts present a potential electrostatic charging hazard and shall therefore be cleaned only with a damp cloth.

Certificate Annex

Certificate Number CML 17ATEX3307X
Equipment Command, Control and Signalling Units:
SA..., CTB..., CSTB... and CTBE... Series
Manufacturer Cortem S.p.A.



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

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
A4-7081	1 to 8	0	10/05/2018	Technical Note
A3-7082	1 to 2	0	10/05/2018	Command and control units SA.. and CTB.. Series. Typical Assembly.

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Drawing No	Sheets	Rev	Approved date	Title
A3-7082	1 of 3	1	30 May 2022	Command and control units SA.. and CTB.. series Typical Assembly
A3-7082	2 of 3	1	30 May 2022	Command and control units SA.. and CTB.. series Typical Assembly
A3-7082	3 of 3	1	30 May 2022	Command and control units SA.. and CTB.. series Other Typical Assemblies
A4-7849	1 to 9	0	30 May 2022	Technical note