

# IECEx Certificate of Conformity

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx CML 17.0162X Issue No: 0 Certificate history:

Issue No. 0 (2018-05-10)

Status: Current

Date of Issue: 2018-05-10

Applicant: Cortem S.p.A.

Via Aquileia 10 34070 Villesse Gorizia Italy

Equipment: Command, Control and Signalling Units: SA..., CTB..., CSTB... and CTBE... Series

Optional accessory:

Type of Protection: Ex tb

Marking:

Ex tb IIIC T80°C Db

Tamb =  $-20^{\circ}$ C or  $-40^{\circ}$ C to  $+40^{\circ}$ C,  $+55^{\circ}$ C or  $+60^{\circ}$ C\*

 $^{\star}$  Refer to Annex for additional information regarding ambient temperature options.

Approved for issue on behalf of the IECEx A C Smith

Certification Body:

Position: Technical Operations Director

Signature:

Date:

(for printed version)

2018-05-10

- 1. This certificate and schedule may only be reproduced in full.
- 2. This certificate is not transferable and remains the property of the issuing body.
- 3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Certification Management Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom





# IECEx Certificate of Conformity

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Certificate No: IECEx CML 17.0162X Issue No: 0

Date of Issue: 2018-05-10

Manufacturer: Cortem S.p.A.

Via Aquileia 10 34070 Villesse Gorizia Italy

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-31: 2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

#### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/CML/ExTR17.0204/00

**Quality Assessment Report:** 

GB/CML/QAR16.0013/01 IT/CES/QAR06.0002/12



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Schedule

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

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.

Refer to Annex for full Description and Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to Annex for Specific Conditions of Use.

Annex:

Annex to IECEx CML 17.0162X Iss. 0.pdf

Annexe to: IECEx CML 17.0162X, Issue 0

**Applicant:** Cortem S.p.A.

**Apparatus:** Command, Control and Signalling Units:

SA..., CTB..., CSTB... and CTBE...

Series



### **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.

### **Marking**

The equipment shall be marked with the following:

Ex tb IIIC T80°C Db

 $Ta = -20^{\circ}C \text{ or } -40^{\circ}C^{*} \text{ to } +40^{\circ}C, +55^{\circ}C \text{ or } +60^{\circ}C^{**}$ 

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Unit 1, Newport Business Park New Port Road Ellesmere Port CH65 4LZ

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

<sup>\*\*</sup> 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.



#### **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).
- 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 option assigned. The maximum power dissipation figures are as defined in the manufacturer's document 'A4-7081'.
- 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 'A4-7081' for a +40°C ambient shall be reduced by 31.25 %.



### **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.