IECEx Certificate of Conformity

4108

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

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

Certificate No.:	**IECEx CML 23.0003X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 1	Issue 0 (2023-02-17)
Date of Issue:	2025-05-22		
Applicant:	**CORTEM S.p.A** Via Aquileia 10 34070 Villesse Gorizia **Italy**		
Equipment:	**Series SA..., CTB..., CSTB..., and CTBE... enclosures with equipment for zone 2**		
Optional accessory:			
Type of Protection:	**Increased Safety Ex "ec"**		
Marking:	Ex ec mc nA nC op is [ib Gb] IIC T4/T5** Gc IP66 / IP65 (Where HMI panel is used) 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 and Tclass depends on the power dissipation limit assigned to the enclosure and the parts fitted, as defined in the manufacturer's documentation and this certificate.*		

Approved for issue on behalf of the IECEx Certification Body: **Stelios Roumbedakis**

Position: **Certification Manager**

Signature: (for printed version) S. Roumbedakis

Date: (for printed version) 2025-05-22

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 www.iecex.com or use of this QR Code.

Certificate issued by:

Eurofins E&E CML Limited
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New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom

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Certificate No.: **IECEx CML 23.0003X**

Date of issue: 2025-05-22

Issue No: 1

Manufacturer: **CORTEM S.p.A**
Via Aquileia 10
34070 Villesse
Gorizia
Italy

Manufacturing locations:

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 equipment 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 60079-0:2017 Edition:7.0 — Explosive atmospheres - Part 0: Equipment - General requirements

IEC 60079-11:2011 Edition:6.0 — Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

IEC 60079-15:2017 Edition:5.0 — Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

IEC 60079-18:2017 Edition:4.1 — Explosive atmospheres - Part 18: Protection by encapsulation "m"

IEC 60079-28:2015 Edition:2 — Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation

IEC 60079-7:2017 Edition:5.1 — Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

This Certificate **does not** indicate compliance with 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 Reports:

GB/CML/ExTR23.0001/00 GB/CML/ExTR24.0225/00

Quality Assessment Report:

IT/CES/QAR06.0002/19

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The series SA..., CTB..., CSTB..., and CTBE... control stations are used in control, monitoring and signalling systems and are constructed with various combination of previously certified Ex Equipment / Ex Components.

Refer to Certificate Annex for full Product Description and Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below:
Refer to Certificate Annex.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Issue 1

This issue introduced the following changes:

1. To permit the addition of previously certified parts for use with the equipment. As a result, the conditions of manufacture and specific conditions of use were amended.
2. Addition of an option for T5 marking, depending on the power used.

Annex:

Certificate Annex IECEx CML 23.0003X Issue 1_1.pdf

Annexe to: **IECEx CML 23.0003X Issue 1**

Apparatus: **Series SA..., CTB..., CSTB..., and CTBE... enclosures with equipment for zone 2**

Applicant: **CORTEM S.p.A**

Description

The series SA..., CTB..., CSTB... and CTBE... control stations are used in control, monitoring and signalling systems and are constructed with various combination of previously certified Ex Equipment / Ex Components such as listed below.

The control stations are increased safety enclosures populated with various control equipment. The enclosures are previously certified (IECEx CES 13.0001 and CESI 03 ATEX 333) with a range of sizes and may be constructed in cast or sheet steel, aluminium alloy, stainless steel sheet, mild steel (CTB only), or polyester resin.

The ambient temperature range and the temperature class is dependent on the components installed on the system. Refer to Technical Note A4-8197, for specific temperature ranges.

The following Ex Equipment / Ex Components may be used in the construction of the control stations:

Component Description	Manufacturer	IECEx Certificate
HMI Assembly Genesis Touch Screen Interface Assembly	Thermon	IECEx ETL 20.0041U
IOM Assembly Genesis, Interface Board, System Alarm Outputs DTM6 Assembly Genesis, Interface Board, Six RTD Inputs DCM Control Board	Thermon	IECEx CSA 18.0018U
Heatsink Assembly w/ 1-Pole SSRs Genesis Heatsink Assembly with Mounting Hardware and 1-Pole SSRs.	Thermon	IECEx ETL 21.0057U
23854: Genesis Bridge Assembly Genesis Bridge – Panel Mount Kit	Thermon	IECEx ETL 20.0047U
Power Supply PS1000-A6-24.5	Pepperl+Fuchs	IECEx EPS 20.0058X
Power Supply QUINT-PS/1AC/24DC/ 5/CO	Phoenix contact	IECEx TUN 11.0002X
Relay module type PLC	Phoenix contact	IECEx IBE 16.0029X
FL Switch SFNT Series	Phoenix contact	IECEx UL 16.0093X
SA... CTB CORTEM enclosures (junction box application)	CORTEM S.p.A	IECEx CES 13.0001
SA.. CTB.. enclosures series (for equipment, such us fieldbus, proximitor, heater etc...)	CORTEM S.p.A	IECEx CML 16.0074X
SA.. CTB.. enclosures series (control, monitoring and signalling application)	CORTEM S.p.A	IECEx CES 11.0032X
Siemens HMI panel 6AV.. series	Siemens	IECEx DEK 19.0071X
Beijer HMI panel X2 Extreme Panels series	Beijer Electronics Corp	IECEx UL 17.0058X
Series 3300XL Proximitor	Bently Nevada Inc	IECEx CSA 16.0042X
Series proTIM-C & proTIM-R interface modules	Bently Nevada Inc	IECEx CSA 17.0007X

Component Description	Manufacturer	IECEx Certificate
Programmable Controller Communication Interface Units Models IE-SW-BL05, IE-SW-BL05T, IE-SW-BL08 and IE-SW-BL08T	Weidmüller Interface GmbH & Co. KG	No IECEx certificate
Programmable Logic Controller Systems SIMATIC NET Scalance-X-M Type 6GK	SIEMENS AG	IECEx DEK 18.0017X
Open type programmable controllers Models: FL SWITCH & FL MGUARD	PHOENIX CONTACT GmbH & Co. KG	IECEx ULD 16.0018X
Open Type, Industrial Network equipment (Unmanaged narrow Ethernet Switches), Models : FL SWITCH	PHOENIX CONTACT GmbH & Co. KG	IECEx UL 21.0120X
Segment Protector R2-SP-IC***	Pepperl+Fuchs SE	IECEx TUN 12.0015X
Active Barrier RN22 and RN42	Endress+Hauser Wetzer GmbH + Co. KG	IECEx EPS 21.0016U

Conditions of Manufacture

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

i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.

ii. The ambient temperature range of the previously certified parts fitted into the enclosure shall not exceed the designated ambient temperature range marked on the overall equipment.

iii. All terminals shall be installed in accordance with their Specific Conditions of Use/Schedule of Limitations/Conditions of Certification and the relevant codes of practice/wiring regulations, specifically to the minimum creepage and clearance requirements and to any limitations to ratings that may be observed due to method of installation.

All terminals fitted shall be suitable for the lower operating temperature marked on the certification label.

iv. The Ex marking code on the equipment, shall be according to the previously certified parts. Installed equipment shall be suitably IECEx certified and installed in accordance with IEC 60079-14.

v. The IECEx certificate and instruction manual for each previously certified part used with the equipment shall be provided with the equipment to the end-user.

vi. 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.

vii. A copy of Technical Note A4-8197 shall be referenced for ambient temperature ranges and shall be provided with the equipment to the end-user.

viii. When the Pepperl+Fuchs Segment Protector R2-SP-IC*** is installed, the signal lines of any Spur must not be connected to earth potential or the cable shield.

Specific Conditions of Use

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

i. When using intrinsically safe circuits, the ratings and intrinsically safe parameters of these parts shall be observed.

ii. Where the Genesis DCM, DTM, and IOM modules are installed in the equipment, a 500Vrms dielectric test in accordance with Clause 6.1 of IEC 60079-7:2015 shall be performed between the terminals or closest metal contact of the modules, and the closest metal contact of the metallic enclosure in the final assembly.

iii. When the Siemens 6AV.. series HMI is installed, the ingress protection rating of the equipment may be reduced from IP 66 to IP 65 dependent upon the IP rating of the HMI.

iv. When the Siemens HMI pane, or Beijer Electronics Corp I HMI panel X2 Extreme Panels series are used, the user shall ensure that the equipment is protected from mechanical impact in service, by location or suitable guarding.

v. Cable glands and entry devices, whether selected by the equipment manufacturer or end user, shall be suitably IECEx certified, suitable for the service temperature range and shall be installed in accordance with IEC 60079-14. All wiring shall also be conducted in accordance with IEC 60079-14.

vi. When theses following parts are installed in the equipment, it shall only be installed in an area of not more than pollution degree 2 according to IEC 60664-1:

- Phoenix Contact Open type programmable controllers FL SWITCH & FL MGUARD series,
- SIEMENS 6AV.. series HMI,
- SIEMENS Programmable Logic Controller Systems, NET Scalance-X-M Type 6GK series.
- Phoenix Contact relay module type PLC series or FL Switch SFNT series,
- Beijer Electronics Corp HMI panel X2 Extreme Panels series,
- Weidmüller Interface Programmable Controller Communication Interface Units series,
- Phoenix Contact Open Type, Industrial Network equipment (Unmanaged narrow Ethernet Switches) Models FL SWITCH series.

vii. When theses following parts are installed in the equipment, transient protection shall be provided that is set at a level not exceeding 119V:

- SIEMENS 6AV.. series HMI,
- SIEMENS Programmable Logic Controller Systems, NET Scalance-X-M Type 6GK.

viii. When theses following parts are installed in the equipment, transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage at the supply terminals to the equipment:

- Phoenix Contact relay module type PLC series or FL Switch SFNT series,
- Beijer Electronics Corp HMI panel X2 Extreme Panels series,
- Phoenix Contact Open Type, Industrial Network equipment (Unmanaged narrow Ethernet Switches) Models FL SWITCH series.

ix. When the devices Phoenix Contact FL Series are installed, the ambient temperature inside the enclosure shall be measured and maintained within 25mm to the device.

x. When the device Active Barrier RN22 or RN42 Series is installed, this equipment can be marked with a T5 class temperature, if the power dissipated is not greater than 50%, and the maximum ambient temperature is not greater than +50°C.

Components used which are covered by Ex Certificates issued to older editions of Standards

Certificate number	Standards (incl Ed)	Assessment result
IECEx ETL 20.0041U	IEC 60079-0:2011 (Ed 6.0)	No applicable technical differences
IECEx CSA 18.0018U	IEC 60079-7:2015 (Ed 5.0)	No applicable technical differences