1205

Type Examination Certificate CML 23ATEX3007X Issue 1

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

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

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 Eurofins CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, 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 of Directive 2014/34/EU.

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 Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Annex VIII 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 60079-18:2015+A1:2017
EN IEC 60079-15:2019	EN 60079-28:2015

10 The equipment shall be marked with the following:

Ⓔx II 3 G

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, the enclosure material and gasket used 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, the parts fitted, the enclosure material and gasket used as defined in the manufacturer's documentation and this certificate.**

S. Roumbedakis
Certification Manager

11 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	ATEX Certificate
HMI Assembly Genesis Touch Screen Interface Assembly	Thermon	SIRA 18 ATEX 3211U
IOM Assembly Genesis, Interface Board, System Alarm Outputs DTM6 Assembly Genesis, Interface Board, Six RTD Inputs DCM Control Board	Thermon	SIRA 18 ATEX 3115U
Heatsink Assembly w/ 1-Pole SSRs Genesis Heatsink Assembly with Mounting Hardware and 1-Pole SSRs.	Thermon	ETL 21 ATEX 0047U
23854: Genesis Bridge Assembly Genesis Bridge – Panel Mount Kit	Thermon	ITS 20 ATEX 105827U
Power Supply PS1000-A6-24.5	Pepperl+Fuchs	EPS 19 ATEX 1201 X
Power Supply QUINT-PS/1AC/24DC/ 5/CO	Phoenix contact	TÜV 11 ATEX 555674 X
Relay module type PLC	Phoenix contact	IBExU16ATEXB015X
FL Switch SFNT Series	Phoenix contact	DEMKO 16 ATEX 1617X
SA... CTB CORTEM enclosures (junction box application)	CORTEM S.p.A	CESI 03 ATEX 333
SA.. CTB.. enclosures series (for equipment, such us fieldbus, proximitor, heater etc...)	CORTEM S.p.A	CML 16 ATEX 3163X
SA.. CTB.. enclosures series (control, monitoring and signalling application)	CORTEM S.p.A	CESI 03 ATEX 115X
Siemens HMI panel 6AV.. series	Siemens	DEKRA 19 ATEX 0111X
Beijer HMI panel X2 Extreme Panels series	Beijer Electronics Corp	DEMKO 17 ATEX 1900X
Series 3300XL Proximitor	Bently Nevada Inc	SIRA 16 ATEX 2299X
Series proTIM-C & proTIM-R interface modules	Bently Nevada Inc	SIRA 17 ATEX 4154X

Component Description	Manufacturer	ATEX 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	DEMKO 11ATEX150193X
Programmable Logic Controller Systems SIMATIC NET Scalance-X-M Type 6GK	SIEMENS AG	DEKRA 18 ATEX 0025X
Open type programmable controllers Models: FL SWITCH & FL MGUARD	PHOENIX CONTACT GmbH & Co. KG	DEMKO 16 ATEX 1709X
Open Type, Industrial Network equipment (Unmanaged narrow Ethernet Switches), Models : FL SWITCH	PHOENIX CONTACT GmbH & Co. KG	UL 21 ATEX 2638X
Segment Protector R2-SP-IC***	Pepperl+Fuchs SE	TUV 12 ATEX 098651X
Active Barrier RN22 and RN42	Endress+Hauser Wetzer GmbH + Co. KG	EC_00901_01.21 & EC_00927_01.21 (ATEX declaration)

Variation 1

This variation introduces the following modifications:

i. 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.

ii. Addition of an option for T5 marking, depending on the power used.

12 Certificate history and evaluation reports

Issue	Date	Associated Report	Notes
0	17 Feb 2023	R16086A/00	Issue of Prime Certificate
1	22 May 2025	R18219A/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. 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 ATEX/IECEx certified and installed in accordance with EN/IEC 60079-14.

v. 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.

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.

ix. The Programmable Controller Communication Interface Unit (DEMKO 11ATEX15193X) is permitted for use with the equipment only in ATEX applications, i.e. it is an option only for the equipment covered under CML 23ATEX3007X.

14 Specific Conditions of Use (Special Conditions)

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 EN/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/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.

vi. When the following parts are installed in the equipment, it shall only be installed in an area of not more than pollution degree 2 according to EN/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 the 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 the 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,
- Weidmüller Interface Programmable Controller Communication Interface Units Model IE-SW-BL08(T) series
- Phoenix Contact Open Type, Industrial Network equipment (Unmanaged narrow Ethernet Switches) Models FL SWITCH series.

ix. When the device Phoenix Contact FL Series is 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.

Certificate Annex

Certificate Number	**CML 23ATEX3007X Issue 1**
Equipment	**Series SA..., CTB..., CSTB..., and CTBE... enclosures with equipment for zone 2**
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
A4-8197	1 to 16	0	16 Feb 2023	Technical note
A3-8196	1 of 3	0	16 Feb 2023	Other examples of system with SA... (or SA...P) and with CTB enclosures

Issue 1

Drawing No	Sheets	Rev	Approved Date	Title
A4-8197	1 to 18	1	22 May 2025	Technical Note: Control And Monitoring System Series SA... CTB... CSTB... CTBE...
A3-8196	1 of 3	1	22 May 2025	Example of System with SA..SS external components installation
A3-8196	2 of 3	1	22 May 2025	Example of System with SA..SS internal components installation
A3-8196	3 of 3	1	22 May 2025	Other Examples of system with SA...(or SA...P) and with CTB Enclosures