# **CESI**







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# Schema di certificazione Chema di certificazione Chema di certificazione



PRD N. 018B
Membro degli Accordi di Mutuo
Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC
Mutual Recognition Agreement

# **CERTIFICATE**

[1] SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE

[2] Component intended for use on/in equipment or protective system intended for use in potentially explosive atmospheres

Directive 2014/34/EU

[3] Supplementary EU-Type Examination Certificate number:

# **CESI 01 ATEX 034 U /07**

[4] Component:

Empty enclosures series CCA and GUB for electrical equipment

[5] Manufacturer:

COR.TEM S.p.A.

[6] Address:

Via Aquileia, 12 – 34070 Villesse (GO) – Italy

- [7] This supplementary certificate extends EC—Type Examination Certificate CESI 01 ATEX 034U, to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.
- [8] CESI, notified body n. 0722 in accordance with Article 17 of the Directive 2014/34/EU of the Parliament and Council of 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 and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report n. EX-B6023461.

- [9] In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016
- [10] The sign "U" placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.
- [11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified component in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.
- [12] The marking of the component shall include the following:

(ξx)

IM2 Ex

Ex db I Mb

(Stainless Steel enclosures only)

€x

II 2 GD Ex db IIC Gb Ex tb IIIC Db IP66

This certificate may only be reproduced in its entirety and without any change, schedule included.

Date 2016.09.27 - Translation issued the 2016.09.27

Prepared

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[13] Schedule

# [14] SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 01 ATEX 034 U /07

## [15] Description of the variation to the component

- Updating to standards EN 60079-0: 2012 + A11:2013, EN60079-1:2014 and EN60079-31:2014.
- New minimum ambient temperature -60°C.
- Holes on box bottom were added.

### **Description of component**

The empty enclosures series GUB-... and CCA.. have the body and the cover made in aluminium alloy or stainless steel and are in Ex db I, Ex db IIC and Ex tb IIIC execution. They can be equipped with command and signalling operators series M-0.. certified as components with separate certificate, mounted on the walls or on the cover (for the version CCAI-C..), with window on the cover and with extension for the cover.

The covers of **CCA-..C** and **CCAI..** versions have a cylindrical joint and are fixed with quality A2-70 stainless steel screws.

A transparent window made in tempered glass is sealed with silicon resin red colour. Gaskets between cover and body and for all other accessories are made in silicon to guarantee the protection degree IP66.

The walls of the enclosures can be drilled and threaded with maximum size and maximum number of holes as specified in the manufacturer documents annexed. Each enclosure is provided with internal and external earthing screw or bolt and an internal bottom plate for equipment mounting.

### Model identification:

| Aluminium alloy enclosures |            |          | Aluminium alloy enclosures<br>with glass window |            |  |
|----------------------------|------------|----------|---|------------|--|
| GUB series                 | CCA series |          | GUB series                                      | CCA series |  |
| GUB                        | -          | <u>-</u> | -   | -          |  |
| GUB-S                      | -          | -        | -   |            |  |
| GUB-0                      | CCA-0E     | CCA-0C   | GUB-0V  | CCA-0EH    |  |
| GUB-01                     | CCA-01E    | CCA-01C  | GUB-01V   | CCA-01EH   |  |
| -                          | CCA-01PF   | -        | -   | -          |  |
| GUB-02                     | CCA-02E    | CCA-02C  | GUB-02V   | CCA-02EH   |  |
| GUB-03                     | CCA-03E    | CCA-03C  | GUB-03V   | CCA-03EH   |  |
| GUB-04                     | CCA-04E    | CCA-04C  | GUB-04V   | CCA-04EH   |  |
| GUB-05                     | =          | -        | _   | -          |  |

| Stainless steel enclosures |            |          |            | Stainless steel enclosures<br>with glass window |              |  |
|----------------------------|------------|----------|------------|---|--------------|--|
| GUB series                 | CCA series |          |            | CCAI series                                     | CCAIF series |  |
| GUBSS                      | _          | -        | _          |   | -            |  |
| GUB-SSS                    | -          | _        | -          | -   | -            |  |
| GUB-0SS                    | CCA-0ESS   | CCAI2020 | CCAIF-2020 | CCAI2020H                                       | CCAIF-2020H  |  |
| GUB-01SS                   | CCA-01ESS  | CCAI3020 | CCAIF-3020 | CCAI3020H                                       | CCAIF-3020H  |  |
| GUB-02SS                   | CCA-02ESS  | CCAI3030 | _          | CCAI3030H                                       | -            |  |
| GUB-03SS                   | CCA-03ESS  | CCAI4030 | CCAIF-4030 | CCAI4030H                                       | CCAIF-4030E  |  |
| GUB-04SS                   | CCA-04ESS  | _        | -          | -   |              |  |
| GUB-05SS                   | -          | -        | _          | -   | _            |  |

This certificate may only be reproduced in its entirety and without any change, schedule included.

[13] Schedule

# [14] SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 01 ATEX 034 U /07

Ambient temperature ranges

• from -20°C up to +60°C: For all Group I (made in stainless steel only), Group II and Group III empty

enclosures;

■ from -40°C up to +60°C: For all Group II and Group III empty enclosures with polycarbonate pilot lights;

• from -60°C up to +60°C: For all Group II and Group III empty enclosures without polycarbonate pilot lights;

• from -60°C up to +150°C: For all Group II and Group III empty enclosures with threaded joint coverenclosure coupling only, without glass windows sealed on the cover and without

control-signal.

Cable entries

The accessories used for cable entries and plugs for not used holes shall be subject of separate certification, suitable for type of enclosure execution, according to the applicable standards.

[16] Report n. EX- B6023461.

### Routine tests

The routine overpressure test shall be carried out on empty enclosure with the static method (paragraph 15.2.3.2 of EN 60079-1 Standard), at:

- 13.8 bar on all GUB and CCA enclosures for minimum ambient temperature until -20 °C;
- 19.0 bar on all GUB and CCA enclosures for minimum ambient temperature until -60 °C.

# [17] Schedule of limitations

- The accessories used for cable entries and for closing unused openings shall be certified according to EN 60079-0, EN 60079-1 and EN 60079-31. A minimum degree of protection IP66 shall be guaranteed according to EN 60529 standard.
- The empty enclosures shall be used in the following ambient temperature range:
  - from -20°C up to +60°C: all versions of empty enclosures for group I (made in stainless steel only), group II and group III;
  - from -40°C up to +60°C: all versions of empty enclosures for group II and group III with polycarbonate pilot lights;
  - from -60°C up to +60°C all versions of empty enclosures for group II and group III without polycarbonate pilot lights.
  - from -60°C up to +150°C: all versions of empty enclosures for group II and group III with threaded joint cover-enclosure coupling only and without glass windows sealed on the cover and without control-signal operators.
- Maximum service temperature of the empty enclosures:
  - +100 °C for all versions of empty enclosures.
  - +150 °C for empty enclosures of group II and III, without control-signal operators and window.
- The service temperature range of the components installed into the enclosures shall be taking into account.
- According to EN 60079-1 annex D, the content of the Ex component enclosure equipment may be placed in any arrangement, provided that:
  - for group I an area of at least 20% of each cross-sectional area remains free;
  - for groups IIC an area of at least 40% of each cross-sectional area remains free.
- Use screws of quality A2-70 with tensile strength of at least 700 N/mm<sup>2</sup>" (for covers with cylindrical joint CCA-..C and CCAI.. models).

[13] Schedule

# [14] SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 01 ATEX 034 U /07

# [18] Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements has been assured by compliance to the following standards:

EN 60079-0: 2012 + A11:2013 - Explosive atmospheres - Part 0: Equipment - General requirements;

EN 60079-1: 2014 Explosive atmospheres – Part 1: Equipment protection by flameproof enclosure "d";

EN 60079-31: 2014 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t".

# [19] **Descriptive documents** (prot. EX- B6023464).

| - Technical note A4-6588 (pg. 4)                                | rev.0 | dated | 2016.06.15 |
|---|-------|-------|------------|
| - Safety, maintenance and mounting instructions F-284A (pg. 12) | rev.3 | dated | 2016.06.15 |
| - Attestation of Conformity Facsimile no. 0020 (pg. 1)          |       | dated | 2016.06.15 |
| - Drawing no. A1-5928 (10 sheets)                               | rev.1 | dated | 2016.01.15 |
| - Drawing no. A3-5930 (3 sheets)                                | rev.1 | dated | 2016.01.15 |
| - Drawing no. A3-6078 (1 sheet)                                 | rev.1 | dated | 2016.01.15 |
| - Datasheet of materials (21 sheets)                            | rev.0 | dated | 2016.04.16 |

One copy of all documents is kept in CESI files.

Certificate history

| Issue nr | Issue Date | Summary description of variation  |  |
|----------|------------|---|--|
| 07       | 2016.09.27 | Updating to standards EN 60079-0: 2012+A11:2013, EN60079-1:2014 and EN60079-31:2014. New minimum ambient temperature -60°C. Holes on box bottom were added.   |  |
| 06       | 2012.04.03 | Updating to standards EN60079-0:2009, EN60079-1:2007 and EN60079-31:2009.   |  |
| 05       | 2010.02.04 | Updating to standard EN 60079-1: 2007, new size type GUB-05 was added. New min. ambient temperature ranges for group II.  |  |
| 04       | 2007.12.19 | Updating to standards EN60079-0:2006, EN60079-1:2004, EN61241-0:2006 and EN61241-1:2004. New exec. I M2. New box sizes GUB-04V and CCA-04EH were added. New service and ambient temperature ranges. |  |
| 03       | 2002.06.26 | New CCA-03 type was added.  |  |
| 02       | 2002.04.29 | New CCA-01PF type was added.  |  |
| 01       | 2001.11.09 | New CCAI Series was added.  |  |
| 00       | 2001.05.17 | First Issue of the Certificate.   |  |