

CESI**CERTIFICATE**

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 Sezione Ordinaria
 N. R.E.A. 429222
 P.I. IT00793580150

Schema di certificazione

CESI-ATEX

Il CESI è stato autorizzato dal governo italiano ad operare quale organismo di certificazione di apparecchi e sistemi destinati a essere utilizzati in atmosfera potenzialmente esplosiva con D.M. 1/3/1983, D.M. 19/6/1990, D.M. 20/7/1998 e D.M. 27/9/2000

[1] **EC-TYPE EXAMINATION CERTIFICATE**[2] **Component intended for use on/in equipment or protective system intended for use in potentially explosive atmospheres Directive 94/9/EC**[3] **EC-Type Examination Certificate number:****CESI 03 ATEX 059 U**[4] **Component:** Pulling boxes and empty enclosures series S.1, S, GUA, GUF, EAH.[5] **Manufacturer:** **COR.TEM S.p.A.**[6] **Address:** Via Aquileia 10, Villesse (Gorizia - Italy)

[7] This component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of components 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-A3/009738.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014: 1997 + A1..A2 EN 50018:2000 + A1 EN 50281-1-1:1998 + A1

[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 EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified component in accordance to the Directive 94/9/EC. 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:

II 2 GD EEx d IIC IP 66/67

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

Date 19th March 2003Translation issued the 19th March 2003**Prepared**
Mirko Balaz**Approved**
Ulisse Colombo**CESI****CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO**
Business Unit Certificazione

R/L Responsabile

[13]

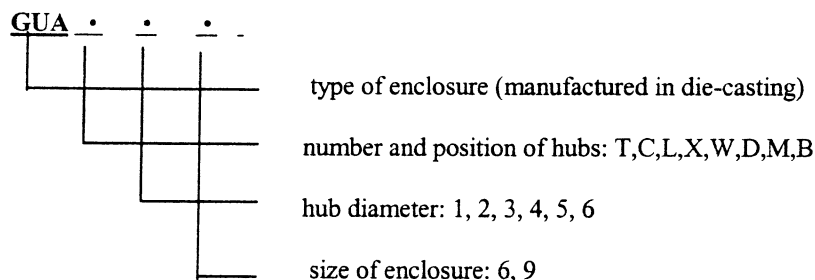
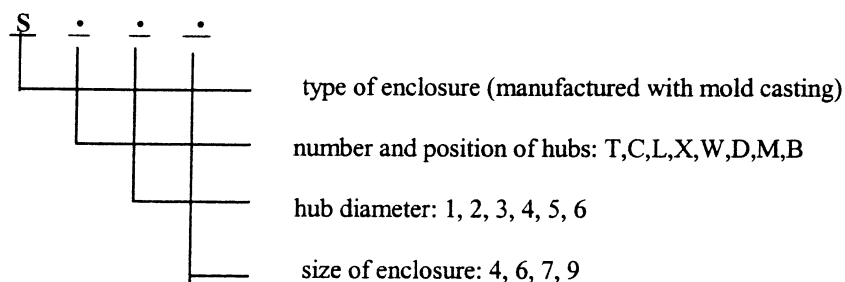
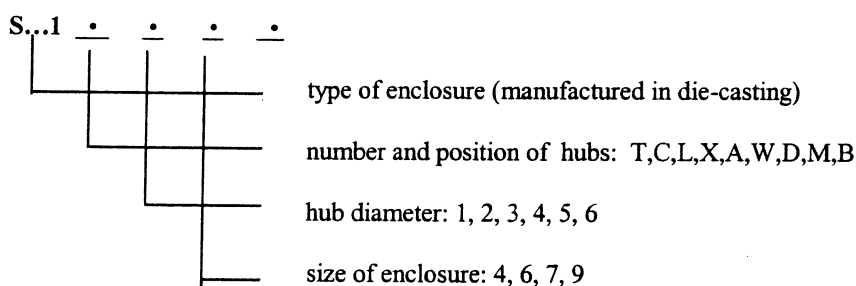
Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 059 U**

[15] **Description of component**

The enclosures subject of this certificate can be used as pulling boxes for cable insertion or as empty enclosures. These enclosures are generally made in aluminium alloy. As an alternative they can also be made in brass or in stainless steel (see technical note A4-892 annexed to this certificate).

The various models of the boxes subject of this certificate are identified by a code as follows:



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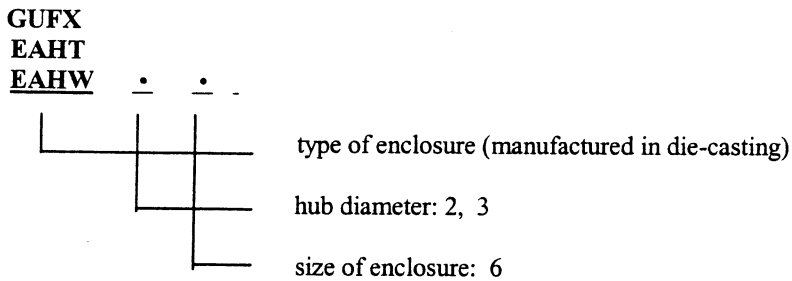


[13]

Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 059 U

[15] Description of component (follows)



The complete code of all the boxes subject of this certificate is reported in the drawings A2-200, A2-201 and A2-202 annexed to this certificate.

Degree of protection IP 66/67 (EN 60529 – 1991)

The accessories used for cable entry and for closing unused apertures shall be certified according to the standards EN 50014, EN 50018 and EN 50281-1-1 and shall guarantee a degree of protection IP 66/67.

[16] Report n. EX-A3/009738

Routine tests

The manufacturer shall carry out the routine tests prescribed at clause 24 of the EN 50014 standard.

The manufacturer is exempted from the routine overpressure test since the enclosures series S.1, S, GUA, GUF and EAH have passed the type overpressure test carried out with the static method at 4 times the reference pressure:

- 51.5 bar for enclosures of size 4 and 6 (for operation at - 40°C)
- 35.5 bar for enclosures of size 7 and 9 (for operation at - 20°C)

[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 059 U**

Descriptive documents (prot. EX-A3/009739)

- n° A4-892 Rev. 0 (7 p.)	dated	11.02.2003
- n° A3-229 Rev. 0	dated	19.03.2001
- n° A3-308 Rev. 0	dated	10.02.2003
- n° A3-309 Rev. 0	dated	10.02.2003
- n° A3-310 Rev. 0	dated	10.02.2003
- n° A3-311 Rev. 0	dated	10.02.2003
- n° A3-312 Rev. 0	dated	10.02.2003
- n° A2-200 Rev. 0	dated	10.02.2003
- n° A2-201 Rev. 0	dated	10.02.2003
- n° A2-202 Rev. 0	dated	10.02.2003
- n° A4-801 Rev. 0	dated	01.06.2000
- Safety instructions Annexe A/28 Rev. 0 (4 p.)	dated	11.02.2003
- Attestation of conformity for components N. 0037	dated	10.03.2003

One copy of all documents is kept in CESI files.

[17] **Schedule of limitations**

The enclosures of size 4 and 6 can be used at an ambient temperature in the range $-40^{\circ}\text{C} \div +60^{\circ}\text{C}$.
The enclosures of size 7 and 9 can be used at an ambient temperature in the range $-20^{\circ}\text{C} \div +60^{\circ}\text{C}$.

[18] **Essential Health and Safety Requirements**

Covered by standards.

EXTENSION n. 01/07.



to EC-Type Examination Certificate CESI 03ATEX059U

Component: Pulling boxes and empty enclosures series S.1, S, GUA, GUF, EAH
Manufacturer: **COR.TEM S.p.A.**
Address: Via Aquileia 10, Villesse (Gorizia - Italia)

Admitted variation

- Conformity to EN 60079-0 (2006), EN60079-1 (2004), EN 61241-0 (2006), EN 61241-1 (2004) Standards
- Update of nameplate
- New material (cast iron)
- Modification of the ambient temperature range and the service temperature range.

Description of component

Pulling boxes and empty enclosures series S.1., S..., GUA..., GUF... and EAH...

The various items of the code show the size of the enclosure, different constructional versions, type of constructions and number of entries.

The marking of the equipment shall include the following:



II 2GD Ex d IIC; Ex tD A21 IP66/67

Cable entries

The accessories used for cable entries and for unused holes shall be subject of separate certification:

- for the unit of category II 2GD in the execution Ex d IIC and Ex tD A21 shall be certified according to the standards: EN 60079-0 (2006); EN 60079-1 (2004); EN 61241-0 (2006); EN 61241-1 (2004) and shall guarantee a degree of protection IP 66/67 according to EN 60529 (1991) Standard.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 03ATEX059U.

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date 19/12/2007 - translation issued the 19/12/2007

prepared Pierluigi Molinari

verified Mirko Balaz

approved Fiorenzo Bregani

Molinari Pierluigi
Balaz Mirko

CESI S.p.A.
Divisione Energia
"Area Tecnica Certificazione"
Il Responsabile

Bregani

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EXTENSION n. 01/07

to EC-Type Examination Certificate CESI 03ATEX059U

Report n. EX-A7/035513

Routine tests

The manufacturer shall carry out the routine tests prescribed at par. 27 of the EN 60079-0 (2006) and at par. 24 of the EN 61241-0 (2006) Standards.

The manufacturer is exempted from the routine overpressure test since the enclosures series S.1, S, GUA, GUF and EAH have passed the type overpressure test carried out with the static method at 4 times the reference pressure:

- 51.5 bar for enclosures of size 4 and 6 (for operation at -40°C)
- 35.5 bar for enclosures of size 7 and 9 (for operation at -20°C)

Descriptive documents (prot. EX-A7/035516)

- Technical Note A4-4986 Rev. 0	dated	27.03.2007
- Dwg. n. A3-309 Rev. 1	dated	27.03.2007
- Data sheet gaskets Blue Tech	dated	22.03.2007
- Document A4-4951 Rev. 0	dated	02.04.2007
- Document A4-4952 Rev. 0	dated	02.04.2007
- Safety instructions F-277 Rev. 1 (5 pag.)	dated	27.03.2007
- Attestation of conformity for components n. 0020	dated	27.03.2007

One copy of all documents is kept in CESI files.

Schedule of limitations

- The boxes size 4 and 6 may be used to a minimum temperature -40 °C.
- The boxes size 7 and 9 may be used to a minimum temperature -20 °C.
- The ambient temperature range of the boxes series S.1.; S...; GUA...; GUF... ed EAH... with the NBR gasket or EPDM gasket placed between the body and the cover is $-20 \div +60$ °C ($-40 \div +60$ °C). The maximum temperature service of the boxes shall not exceed 80 °C with NBR gasket or 100 °C with EPDM gasket.
- The ambient temperature range of the boxes series S.1.; S...; GUA...; GUF... ed EAH... with silicon gasket Bluetech SI/50 placed between the body and the cover is $-20 \div +150$ °C ($-40 \div +150$ °C). The maximum temperature service of the boxes shall not exceed 170 °C.

The contents of the boxes shall comply with the appropriate requirements of relevant Standards for electrical apparatus.

Essential Health and Safety Requirements

Compliance with the Health and Safety Requirements has been assured by compliance with the following standards:
EN 60079-0: 2006 - Electrical apparatus for explosive gas atmospheres. Part 0: General requirements
EN 60079-1: 2004 - Electrical apparatus for explosive gas atmospheres. Part 1: Flameproof enclosure
EN 61241-0: 2006 - Electrical apparatus for use in the presence of combustible dust. Part 0: General requirements
EN 61241-1: 2004 - Electrical apparatus for use in the presence of combustible dust. Part 1: Protection by enclosures
"tD"

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EXTENSION n. 02/14

to EC-Type Examination Certificate CESI 03 ATEX 059 U

Component: Pulling boxes by insertion and empty boxes S.1-.. , S-.. , GUA-.. , EAH-.. series**Manufacturer:** COR.TEM S.p.A.**Address:** Via Aquileia, 10 – 34070 Villesse (GO) – Italy.**Admitted variation**


- Update to new edition of the harmonized European standard;
- Update marking label;
- Change of the ambient temperature range of the boxes S.1-27, -37, -47, -19, -29, -39, -49, -59, -69 , S-27, -37, -47, -49, -59, -69, GUA-49, -59, -69 series;
- All boxes are provided with standard O-Ring made of silicon material, placed in between the body and the cover.

Conformity to new edition of the harmonized European standard

The component subject of the certificate CESI 03 ATEX 059U and annexed extension are conform to the standards:

EN 60079-0: 2012 EN 60079-1: 2007 EN 60079-31: 2009

The component shall be marked as follows:


II2GD Ex d IIC Gb
Ex tb IIC Db
IP 66/67

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 03 ATEX 059U.

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Date 8th May 2014 - translation issued the 8th May 2014**Prepared**

Gian Pietro Toledo


Verified

Mirko Balaz


Approved
Fiorenzo Bregani
CESI S.p.A.

 Testing & Certification Division
 Business Area Certification

 III Responsabile -
 Fiorenzo Bregani

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EXTENSION n. 02/14**to EC-Type Examination Certificate CESI 03 ATEX 059 U****Description of component**

The boxes covered by this certificate may be used as pulling boxes by insertion and empty boxes.

The boxes are basically manufactured with an aluminium alloy.

They can also be manufactured with AISI 303-304-316 stainless steel or cast iron.

The boxes manufactured with aluminium alloy or with stainless steel have a service temperature of $-40 \div +160$ °C, while the boxes manufactured with cast iron have a service temperature of $-20 \div +160$ °C.

All the boxes are supplied with silicon gaskets.

The accessories used for cable entries and for unused holes shall be subject of separate certification according to the standards EN 60079-0, EN 60079-1, EN 60079-31 and shall guarantee a degree of protection IP 66/67 according to the standard EN 60529.

Report n. EX- B4010267**Routine tests**

The manufacturer shall carry out the routine tests prescribed at par. 27 of the EN 60079-0.

The boxes type S- 14, 24, 16, 26, 36, 27, 37, 47, 49, 59, 69, type S.1- 14, 24, 16, 26, 36, 27, 37, 47, 19, 29, 39, 49, 59, 69, type GUA- 16, 26, 36, 49, 59, 69 e type GUFX - EAH- 26, 36, series are exempted from routine overpressure tests, as they have positively passed the test carried out at 3,55 MPa, corresponding to 4 times the reference pressure for the minimum Tamb of -20 °C.

The boxes type S.1-14, -24, -16, -26, -36, type S-14, -24, -16, -26, -36, type GUA-16, -26, -36 series are exempted from routine overpressure tests, as they have positively passed the test carried out at 5,15 MPa, corresponding to 4 times the reference pressure for the minimum Tamb of -40 °C.

While, the boxes type S-27, -37, -47, -49, -59, -69, type S.1-27, -37, -47, -19, -29, -39, -49, -59, -69, type GUA-49, -59, -69 series shall be subjected to routine test to overpressure of 1,93 MPa, corresponding to 1.5 times the reference pressure for the minimum Tamb of -40 °C.

Descriptive documents (prot. EX- B4010268)

- Technical note A4-5673 (pag. 3)	rev.0	dated	10.09.2012
- Safety, maintenance and mounting instructions F-277 (pag. 5)	rev.2	dated	10.09.2012
- Attestation of Conformity no. 0037 (pag. 1)	---	dated	10.09.2012
- Drawing n° A3-309	rev.2	dated	10.09.2012

One copy of all documents is kept in CESI files.

Schedule of limitations

Rated service temperature range of the boxes manufactured with:

- aluminium alloy or with stainless steel from -40°C up to +160°C;
- limitation of use up to -20°C of the boxes manufactured with cast iron.

The maximum service temperature of the boxes shall not exceed 160 °C.

The contents of the boxes shall be in accordance with the appropriate requirements of the standards relating to the electrical construction.

The safety instruction provided by Manufacturer shall be strictly respected.

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EXTENSION n. 02/14

to EC-Type Examination Certificate CESI 03 ATEX 059 U

Essential Health and Safety Requirements

The Essential Health and Safety Requirements are assured by compliance to the following standards:

- EN 60079-0: 2012 Explosive atmospheres – Part 0: Equipment - General requirements;
- EN 60079-1: 2007 Explosive atmospheres – Part 1: Equipment protection by flameproof enclosure “d”;
- EN 60079-31: 2009 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure “t”.