

[1] **EC-TYPE EXAMINATION CERTIFICATE**

[2] **Equipment or Protective System intended for use
in potentially explosive atmospheres
Directive 94/9/EC**

[3] EC-Type Examination Certificate number:

CESI 01 ATEX 036

[4] Equipment: Command, control and signalling units series CCA..., GUB..., CCAI...

[5] Manufacturer: **COR.TEM S.p.A.**

[6] Address: Via Aquileia 6, 34070 Villesse, Gorizia (Italy)

[7] This equipment or protective system 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 equipment or protective system 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-A1/015465.

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

EN 50014: 1997 + A1...A2 EN 50018: 2000 EN 50281-1-1:1999

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:

Ex II 2 GD EEx d IIC T6 or T5 IP 66 T85 or T100 °C

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

date November 9th, 2001 - translation issued on November 15th, 2001

prepared CERT - M. Balaz

CESI

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO

Business Unit Certificazione

Il Responsabile

approved CERT - U. Colombo

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Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 036**

[15] **Description of equipment**

Command, control and signalling units series CCA..., GUB..., CCAI...

The enclosures of these units are made in aluminium or in stainless steel (see technical note A4-4116 annexed to this certificate).

The CCA... and GUB... series are identical in every detail. The code CCA or GUB refers only to the firm which puts the product into the market.

The various items of the code show the size of the enclosure (volumes from 0.5 to 32 dm³), constructional modifications, the type of material used, the presence of glass windows.

The complete codes of all the units subject of this certificate are reported in the drawings A1-4115 and A1-4123 annexed to the certificate.

The enclosures of the command, control and signalling units are subject of the certificate of component CESI 01 ATEX 034 U. All the constructional details of the enclosures are reported in the drawings annexed to this certificate of component.

The types of electrical and electronic components installed inside the command, control and signalling units are reported in the technical note A4-4116 together with their electrical characteristics.

On the enclosures subject of this certificate, type M-0...command and signalling operators as indicated in the certificate of component CESI 01 ATEX 025 U can be installed.

Electrical characteristics

Rated voltage	24 ÷ 1000 V a.c.	12 ÷ 250 d.c.
Rated frequency	50 ÷ 60 Hz	----
Max. current in fuses and contacts ^[1]	400 A	400 A
Ambient temperature	- 20 ÷ + 40 °C - 20 ÷ + 55 °C	
Maximum lamp power	5 W for ambient temperature – 20 ÷ + 40 °C 3 W for ambient temperature – 20 ÷ + 55 °C	

Temperature class for category 2G. units:

T6 or T5 as a function of the enclosure dimension, ambient temperature and power dissipated inside the enclosure

Maximum surface temperature for category 2.D units:

T85 °C or T100°C as a function of the enclosure dimension, ambient temperature and power dissipated inside the enclosure

Degree of protection IP 66 (EN 60529 – 1991)

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Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 036**

Maximum values of the power which can be dissipated inside the enclosure CCA04 having a volume of 31 dm³:

Ambient temperature	+ 40 °C		+55 °C	
Temperature class	T6	T5	T6	T5
Max. surface temperature [°C]	T85	T100	T85	T100
Dissipated power [W]	112	197	84	150

The maximum power which can be dissipated inside the enclosure and the maximum current on contacts and fuses are a function of enclosure size, of the temperature class and of the ambient temperature as specified in details in the documentation annexed to this certificate.

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

The service temperature of windows and of signal and control operators type M-0... shall not exceed 100 °C.

Warning label

“Use screws of quality A2-70 according UNI 7323 with ultimate tensile strength of at least 700 N/mm²”.

Additional warnings

In case of enclosures including capacitors:
“After de-energizing, wait 10 minutes before opening”

In case of enclosures of temperature class T5:
“Use cables suitable for a temperature of 100 °C”

[16] **Report n. EX-A1/015465**

Routine tests

The manufacturer shall carry out the routine tests prescribed at clause 24 of the EN 50014 standard.
The routine overpressure test shall be carried out with the static method (clause 15.1.3.1 of EN 50018 standard) at the pressure of 13.5 bar.

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Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 036**

Descriptive documents (prot. EX-A1/015467)

- n. A4-4116 Rev. 0 (3 p.)	dated 28.08.2000
- n. A1-4115 Rev. 1	dated 04.08.2000
- n. A1-4123 Rev. 1	dated 18.09.2000
- n. A4-4129	dated 26.06.2000
- Safety instructions mod. F-257 Rev. 0 (5 p.)	dated 28.08.2000
- EC declaration of conformity CE/0021	dated 28.08.2000

One copy of all documents is kept in CESI files.

[17] **Special conditions for safe use**

None.

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

Covered by standards.

EXTENSION n. 01/03



to EC-Type Examination Certificate CESI 01 ATEX 036

Equipment: Command, control and signalling units series CCA..., GUB..., CCAI...

Manufacturer: **COR.TEM S.p.A.**

Address: Via Aquileia 10, Villesse, Gorizia (Italy)

Admitted variations

- a) Installation of surge arresters in the enclosures
- b) Installation of ignition transformers in the enclosures

Electrical characteristics

- a) Surge arresters
 - Rated spark-over voltage 90 ÷ 600 Vdc
 - Max. impulse discharge current 20 kA
- b) Ignition transformers
 - Primary voltage 110 / 230 V
 - Max. secondary voltage 10 kV
 - Secondary current 15 mA

Temperature class for category 2G units: T6 or T5 as a function of the enclosure dimension, ambient temperature and power dissipated inside the enclosure (see documents annexed to the certificate CESI 01 ATEX 036).

Maximum surface temperature for category 2D units: T85 °C or T100°C as a function of the enclosure dimension, ambient temperature and power dissipated inside the enclosure (see documents annexed to the certificate CESI 01 ATEX 036).

Report n. EX-A3/000966

Descriptive documents (prot. EX-A3/000972)

- n. A1-4301 Rev. 0 (2 sheets) dated 15.07.2002

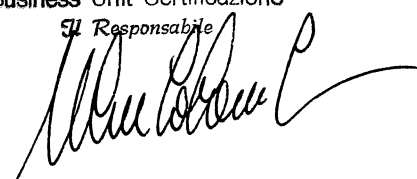
One copy of all documents is kept in CESI files.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 01 ATEX 036.

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date 14th January 2003 - translation issued on 14th January 2003

prepared CERT - M. Balaz 

approved CERT - U. Colombo 

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Prot. A3/000981 P: 1
Keywords 13010R 24080T 48010M 54250O 66540E

EXTENSION n. 02/07



to EC-Type Examination Certificate CESI 01ATEX 036

Equipment: Command, control and signalling units series CCA..., GUB..., CCAI...

Manufacturer: **COR.TEM S.p.A.**

Address: Via Aquileia 10, Villesse (GO)

Admitted variation

- Updating to new standards EN 60079-0 (2006), EN 60079-1 (2004), EN 61241-0 (2006), EN 61241-1 (2004) Standards
- Updating of nameplate
- New electrical characteristics of ignition transformers
- Boxes with glass windows type CCA-04H and CCA-04EH

Equipment identification

The equipment shall include the following markings:

 II 2GD Ex d IIC T6 ; Ex tD A21 IP66 T 85 °C

or

 II 2GD Ex d IIC T5 ; Ex tD A21 IP66 T 100 °C

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 01ATEX036.

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date 08/06/2007 - translation issued the 08/06/2007

prepared Sergio Mezzetti

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EXTENSION n. 02/07

to EC-Type Examination Certificate CESI 01ATEX 036

Electrical characteristics for ignition transformers

- primary voltage 1000 V
 - secondary voltage 20kV max. (max. impulse 25 kV for 3 micro seconds)
 - secondary current 50 mA
- Unchanged the other characteristics

Report n. EX-A7015965

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 routine overpressure test shall be carried out, with the static method (par. 15.1.3.1 of EN 60079-1 Standard), at the pressure of 13.5 bar

Descriptive documents (prot. EX-A7015967)

- Technical Note A4-4977 (2 pg.)	Rev. 00	dated	02/04/2007
- Drawing n°. A4-4951	Rev. 00	dated	02/04/2007
- Drawing n°. A4-4952	Rev. 00	dated	02/04/2007
- Drawing n°. A1-4469	Rev. 00	dated	22/03/2007
- EC Declaration of Conformity		dated	22/03/2007
- Safety Instruction mod. F-.257 (13 pg.)	Rev. 01	dated	22/03/2007

One copy of all documents is kept in CESI files.

Essential Health and Safety Requirements

The Health and Safety Requirements are assured by compliance with the following Standards:

- EN 60079-0 : 2006 Electrical apparatus for explosive gas atmospheres.
General requirements
- EN 60079-1 : 2004 Flamoproof enclosures "d".
- EN 61241-0 : 2006 Electrical apparatus for use in the presence of combustible dust.
General requirements
- EN 61241-1 : 2004 Protection by enclosures "tD"

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