



# EC-TYPE EXAMINATION CERTIFICATE

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[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 092

[4] Equipment: Control and signalling stations series CSC..., EFD..., EFSCO..., EMH...

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

[6] Address: Via Aquileia 10, 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-A1/038525.



[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:

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

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

date December 20<sup>th</sup>, 2001 - translation issued on December 20<sup>th</sup>, 2001

prepared CERT - M. Balaz

approved CERT - U. Colombo

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Business Unit Certificazione

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## Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 092

[15] Identification and description of equipment

Control and signalling stations series CSC..., EFD..., EFSCO..., EMH...

The complete codes of the units subject of this certificate are reported in the drawing A1-3925 annexed to this certificate.

The above-mentioned stations can be made with single body or double body. In the case of double body the two compartments of the station are connected through a sealing bushing.

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.

Inside the enclosures switches, measuring instruments and other apparatus can be installed.

### Electrical characteristics

Maximum voltage	690 V
Maximum current	63 A
Rated frequency	50 ÷ 60 Hz
Maximum lamp power	3 W
Ambient temperature	- 20 ÷ + 40 °C - 20 ÷ + 55 °C

Temperature class of the units of category 2 GD:

T6 for ambient temperature - 20 ÷ + 40 °C

T5 for ambient temperature - 20 ÷ + 55 °C

Maximum surface temperature T of the units of category 2 GD and 2 D:

T85 °C for ambient temperature - 20 ÷ + 40 °C

T100 °C for ambient temperature - 20 ÷ + 55 °C

Degree of protection IP 66 (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 of at least IP 65.

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

### Warning label

In case of enclosures of temperature class T5:

“Use cables suitable for a temperature of 100 °C”

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## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 092**

[16] **Report n. EX-A1/038525**

### **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.

### **Descriptive documents (prot. EX-A1/038523)**

- n. A4-3926 Rev. 1 (2 p.)	dated 20.12.2001
- n. A1-3925 Rev. 1 (3 p.)	dated 20.12.2001
- n. A4-1279 Rev. 7 (2 pag.)	dated 20.10.1998
- n. A4-4129 Rev. 0	dated 26.06.2000
- Safety instructions mod. F-264 Rev. 0 (7 p.)	dated 10.04.2001
- Instructions for resin application F-268 Rev.0 (2 p.)	dated 29.04.2001
- EC declaration of conformity n° CE/0029	dated 10.04.2001

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 092

Equipment: Control and signalling stations series CSC., EFD., EFSCO., EMH.

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

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

**Admitted variations**

- New types CFC. and EFD. with double body

**Description of the equipment**

In the units type CFC. and EFD. subject of this extension the two compartments of the enclosure are in communication instead of being separated by a sealing bushing.

The complete code of the new types is reported in the documents annexed to this extension.

The electrical apparatus which can be installed inside the enclosures and their electrical characteristics are unchanged.

On the enclosures of the units subject of this extension, command and signalling operators type M-0, having component certificate CESI 01 ATEX 025 U, can be mounted.

Report n. EX-A3/016040

**Routine tests**

The manufacturer is exempted from the routine overpressure test on the units CSC. and EFD. subject of this extension since they have passed the type overpressure test carried out with the static method at 33.6 bar, that is at 4 times the reference pressure.

**Descriptive documents (prot. EX-A3/016043)**

- n. A4-4256 Rev. 1 (2 p.) dated 31.05.2002

- n. A1-4255 Rev. 1 (3 s.) dated 31.05.2002

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 092.

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date 9<sup>th</sup> May 2003 - translation issued on 9<sup>th</sup> May 2003

prepared CERT - M. Balaz

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Prot. A3/016046

P: 1

Keywords

13010R 27030T 48010M 54250O 66540E

## EXTENSION n. 02/07



to EC-Type Examination Certificate CESI 01ATEX 092

Equipment: Control and signalling units series CSC, EFD, EFSCO and EMH

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)
- Updating of nameplate

### 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

The accessories used for cable entries and for unused holes shall be subject of separate certification in compliance to the following standards: EN 60079-0 (2006); EN 60079-1 (2004); EN 61241-0 (2006); EN 61241-1 (2004) and they shall guarantee a minimum degree of protection IP 66 according to EN 60529 (1991) Standard.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 01ATEX092.

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date 07/09/2007 - translation issued the 07/09/2007

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Divisione Energia  
"Area Tecnica Certificazione"  
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## EXTENSION n. 02/07

to EC-Type Examination Certificate CESI 01ATEX 092

### Electrical characteristics

Unchanged

Report n. EX-A7023237

### Routine tests

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

### Overpressure tests

For the equipment series CSC and EFD, the manufacturer is exempted from the overpressure routine test prescribed at par. 15.1.3.1 of the EN 60079-1 Standard, since the equipment have been submitted, with good outcome, to the overpressure test (static method) at a pressure of 33.6 bar, corresponding to 4 time the reference pressure

For the equipment series EFSC0 and EMH, the manufacturer shall carry out the overpressure routine tests, with the static method (par. 15.1.3.1 of EN 60079-1 Standard), at the pressure of 10.5 bar

### Descriptive documents (prot. EX-A7023239)

- Technical Note A4-4980	Rev. 00	dated	20/03/2007
- Drawing n°. A4-4951	Rev. 00	dated	02/04/2007
- Drawing n°. A4-4952	Rev. 00	dated	02/04/2007
- EC Declaration of Conformity		dated	20/03/2007
- Safety Instruction mod. F-264 (6 pg.)	Rev. 01	dated	20/03/2007

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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## EXTENSION n. 03/10

to EC-Type Examination Certificate CESI 01ATEX 092



Equipment: Control and signalling units series CSC, EFD, EFSCO and EMH

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

Address: Via Aquileia 10, Villesse (GO)

### Admitted variation

- New minimum ambient temperature  $T_a = - 50\text{ }^{\circ}\text{C}$

### Equipment identification

The equipment shall include the following markings:

II 2GD Ex d IIC T6 ; Ex tD A21 IP66 T 85 °C for  $T_a + 40\text{ }^{\circ}\text{C}$

or

II 2GD Ex d IIC T5 ; Ex tD A21 IP66 T 100 °C for  $T_a + 55\text{ }^{\circ}\text{C}$

The accessories used for cable entries and for unused holes shall be subject of separate certification in compliance to the following standards: EN 60079-0(2006); EN 60079-1(2007); EN 61241-0(2006); EN 61241-1(2004) and they shall guarantee a minimum degree of protection IP 66 according to EN 60529 Standard.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 01ATEX092.

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date 12/04/2010 - translation issued the 12/04/2010

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## EXTENSION n. 03/10

to EC-Type Examination Certificate CESI 01ATEX 092

### Electrical characteristics

Ambient temperature:                      Ta - 20 °C ÷ + 40 °C                      Ta - 20 °C ÷ + 55 °C  
   Ta - 50 °C ÷ + 40 °C                      Ta - 50 °C ÷ + 55 °C

The Control and signalling units equipped with polycarbonate are limited at the ambient temperature of – 40 °C

Other characteristics: Unchanged

Report n. EX-B0009881

### Routine tests

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

### Overpressure tests

Ta ≥ - 20 °C

- For the equipment series CSC and EFD, the manufacturer is exempted from the overpressure routine test prescribed at par. 15.1.3.1 of the EN 60079-1 Standard, since the equipment have been submitted, with good outcome, to the overpressure test (static method) at a pressure of 33.6 bar, corresponding to 4 time the reference pressure
- For the equipment series EFSC0 and EMH, the manufacturer shall carry out the overpressure routine tests, with the static method (par. 15.1.3.1 of EN 60079-1 Standard), at the pressure of 13.5 bar

Ta ≥ -50 °C

- For the equipment series CSC and EFD, the manufacturer shall carry out the overpressure routine tests, with the static method (par. 15.1.3.1 of EN 60079-1 Standard), at the pressure of 18.82 bar
- For the equipment series EFSC0 and EMH, the manufacturer shall carry out the overpressure routine tests, with the static method (par. 15.1.3.1 of EN 60079-1 Standard), at the pressure of 16.5 bar

### Descriptive documents (prot. EX-B0009882)

- Technical Note A4-5326 (3 pg)	Rev. 00	dated	27/10/2009
- Safety Instruction mod. F-264 (7 pg.)	Rev. 03	dated	27/10/2009

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 : 2007                      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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