

CESI

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interamente versato
Codice fiscale e numero
iscrizione CCIAA 00793580150

Registro Imprese di Milano
Sezione Ordinaria
N. R.E.A. 429222
P.I. IT00793580150

Schema di certificazione

ATEX CESI

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

ATEX E C-02

CERTIFICATE



EC-TYPE EXAMINATION CERTIFICATE

- [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 03 ATEX 266
- [4] **Equipment:** Command and control units and interface units series CCF and EJB .
- [5] **Manufacturer:** **BARTEC NEDERLAND b. v.**
- [6] **Address:** Keurmeesterstraat 17b, Ridderkerk (Netherlands)
- [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-A3/030458.
- [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 50020:2002 EN 50281-1-1:1998+A1
- [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(1) G EEx d [ia] IIB T6 o T5
- II 2(1) GD EEx d [ia] IIB T6 o T5 IP 65 o IP 66/67 T85°C o T100°C

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

Date September 10th, 2003 translation issued on September 10th, 2003

Prepared
Mirko Balaz

Approved
Ulisse Colombo

CESI
CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO
Business Unit Certificazione

Il Responsabile

[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 266**

[15] **Description of equipment**

Command and control units and interface units series CCF and EJB.

In the interface units only associated apparatus are installed for the connection to intrinsic safety circuits.

In the command and control units both electrical and electronic components with command and control functions and associated apparatus for interface with intrinsic safety circuits are installed.

The associated apparatus are subject of separate certification with type of protection [EEx ia] IIB or IIC.

As regards the protection against combustible gases the type of protection is:

- EEx d [ia] IIB T6 for the interface units
- EEx d [ia] IIB T6 or T5 for the command and control units

As regards the protection against combustible dusts, the CCF and EJB enclosures are made in two versions with different degree of protection IP:

- enclosures with silicone grease placed between body and cover: IP 65
- enclosures with sealing gasket placed between body and cover: IP 66/67

The enclosures of these units are made in aluminium or stainless steel.

The characteristics of the electrical and electronic components which can be installed inside the enclosures are reported in the technical note A4-4249 annexed to this certificate.

The empty enclosures series CCF and EJB are subject of the component certificate CESI 01 ATEX 004 U. All the constructional details of the enclosures are reported in the documents annexed to the above mentioned component certificate.

Command and signalling operators type M. and P., subject of the component certificate CESI 02 ATEX 002 U, can be mounted on the units subject of this certificate. In this case the degree of protection of the enclosures is IP 66.

Electrical characteristics

Rated voltage	24 ÷ 1000 V a.c.	12 ÷ 250 V d.c.
Rated frequency	50 ÷ 60 Hz	---
Max. current in fuses and contacts	400 A	400 A

Ambient temperature	- 20 ÷ + 40 °C
	- 20 ÷ + 55 °C

Temperature class of the units of category II 2(1) G and II 2(1) GD: T6 or T5

Maximum surface temperature of the units of category II 2(1) GD: T85°C or T100°C

Maximum dissipated power: the maximum power which can be dissipated inside each enclosure is reported in the technical note A4-4249 annexed to this certificate, as a function of the enclosure dimensions, of the temperature class and of the ambient temperature.

Intrinsic safety circuits

The electrical characteristics of the intrinsic safety circuits are reported on the label of the associated apparatus used.

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[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 266**

[15] **Description of equipment** (follows)

The accessories used for cable entries and for closing unused apertures in the units of category II 2(1) G shall be certified according to the standards EN 50014 and EN 50018.

The accessories used for cable entries and for closing unused apertures in the units of category II 2(1) GD shall be certified according to the standards EN 50014, EN 50018 and EN 50281-1-1 and shall guarantee a degree of protection IP at least equal to that of the enclosure.

The service temperature of the command and signalling operators shall not be higher than 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-A3/030458**

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:

- 11.9 bar for enclosure size from 1 to 5
- 11.5 bar for enclosure size 6

Descriptive documents (prot. EX-A3/030461)

- | | |
|--|------------------|
| - n. A4-4249 Rev. 0 (10 p.) | dated 16.05.2003 |
| - n. A1-4239 Rev. 0 (2 p.) | dated 15.05.2003 |
| - Safety instructions SAFETY EJB-i Rev. 0 (7 p.) | dated 15.05.2003 |
| - EC declaration of conformity EJB-i | dated 15.05.2003 |

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.