

CESI

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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

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 05 ATEX 077
- [4] **Equipment:** Command and control units and interface units series CCA and GUB.
- [5] **Manufacturer:** **BARTEC Nederland B.V.**
- [6] **Address:** Keurmeesterstraat 17B - 2984 Ridderkerk (Nederland)
- [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-A5/035282.
- [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 EN50281-1-1:1998+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] IIC T6 or T5
- II 2(1) GD EEx d [ia] IIC T6 or T5 IP 66 T85°C or T100°C

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

Date August 3rd, 2005

translation issued on August 3rd, 2005

Prepared
Mirko Balaz

Approved
Ulisse Colombo

CESI
CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO
Business Mail Certification
02 2125440

[13]

Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 05 ATEX 077

[15] Description of equipment

Command and control units and interface units series CCA and GUB.

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] IIC.

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

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

As regards the protection against combustible dusts, the CCA and GUB enclosures are made with degree of protection IP 66.

The enclosures of these units are made in aluminium or stainless steel. 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 A4-4399 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 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	
Maximum lamp power	5 W for ambient temperature – 20 ÷ + 40 °C 3 W for ambient temperature – 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 the enclosure and the maximum current on contacts and fuses are a function of enclosure size, of the temperature class (or of the maximum surface temperature for category 2.D units) and of the ambient temperature as specified in details in the documentation annexed to this certificate..

Degree of protection IP 66 (EN 60529 – 1991)

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 05 ATEX 077**

[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 IP66.

If cylindrical threads are used, the coupling between the cable gland and the terminal box shall be provided with block to prevent loosening

The service temperature of the command and signalling operators shall not be higher than 100 °C.

Warning label

For units series CCA-.C e CCAI-:

“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-A5/035282**

Routine tests

The manufacturer shall carry out the routine tests prescribed at paragraph 24 of the EN 50014 standard and at paragraph 16 of the EN 50018 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-A5/035291)

- n. A4-4399 Rev. 0 (10 p.)	dated 24.01.2005
- n. A1-4400 Rev. 0 (2 p.)	dated 30.05.2005
- Safety instructions SAF017-03 Rev. 0 (7 p.)	dated 30.05.2005
- EC declaration of conformity n. CE/0344	dated 24.01.2005

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.