

CESI

CESI
Centro Elettrotecnico
Sperimentale Italiano
Giacinto Motta SpA

Via R. Rubattino 54
20134 Milano - Italia
Telefono +39 0221 25 1
Fax +39 0221 255440
www.cesi.it

Capitale sociale 8 550 000 €
interamente versato
Codice fiscale e numero
iscrizione CCIAA 00793580150

Registro Imprese di Milano
Sezione Ordinaria
N. R.E.A. 428222
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.

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 02 ATEX 097

[4] **Equipment:** Command, control and signalling 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-A2/031047.

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

EN 50014: 1997 +A1...A2

EN 50018:2000

[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 G EEx d IIB T6 or T5 or T4

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

Date October 4th, 2002 **Translation issued on** October 4th, 2002

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 02 ATEX 097

[15] Description of equipment

Command, control and signalling units series CCF... and EJB...

The enclosures of these units are made in aluminium or in stainless steel (see technical note A4-4105 annexed to this certificate).

The various items of the code indicate the size of the enclosure (from 1 to 6), 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 drawing EE.246.1 annexed to this certificate.

The enclosures of the command, control and signalling units are subject of the certificate of component CESI 01 ATEX 004 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 A4-4105 together with their electrical characteristics.

On the enclosures of the CCF and EJB units, accessories and windows as indicated in the certificate of component CESI 01 ATEX 004 U and command and signalling operators series M... P... as indicated in the certificate of component CESI 02 ATEX 002 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	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	T6, T5, T4 as a function of the enclosure dimension, ambient temperature and power dissipated inside the enclosure	

Maximum values of the power which can be dissipated inside the enclosure CCFE-6 having the maximum volume

Ambient temperature	+ 40 °C			+ 55 °C		
	T6	T5	T4	T6	T5	T4
Dissipated power [W]	600	910	1740	460	680	1300

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.

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

Schedule

[13]

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 097**

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

The accessories used for cable entry and for closing unused apertures shall be certified according to the standards EN 50014 and EN 50018.

The service temperature of windows and of signal and control operators series M... P... 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 T4 or T5:

"Use cables suitable for a temperature of 100 °C"

[16] **Report n. EX-A2/031047**

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-A2/031048)

- | | |
|--|------------------|
| - n. A4-4105 Rev. 0 (2 p.) | dated 11.03.2002 |
| - n. EE.246.1 Rev. 0 | dated 11.03.2002 |
| - n. A4-4129 Rev. 0 | dated 11.03.2002 |
| - Safety instructions SAFETY EJB Rev. 0 (5 p.) | dated 11.03.2002 |
| - EC declaration of conformity | dated 11.03.2002 |

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.