[1] EC-TYPE EXAMINATION CERTIFICATE



[2]

Component intended for use on/in equipment or protective system intended for use in potentially explosive atmospheres

Directive 94/9/EC

[3] EC-Type Examination Certificate number:

CESI 00 ATEX 036 U

[4] Component:

Empty enclosures series CCF...and EJB... for control and signaling equipment

[5] Manufacturer:

COR.TEM S.p.A.

[6] Address:

Via Aquileia 6, 34070 Villesse (Gorizia), Italy

- [7] This component 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 component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of components 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-A0/024869.

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

EN 50014: 1997 + A1..A2 EN 50018: 1994

- [10] The sign "U" placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.
- [11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified component. If applicable, further requirements of this Directive apply to the manufacture and supply of this component.
- [12] The marking of the component shall include the following:

⟨Ex⟩ II 2 G EEx d IIB

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

date

July 24th, 2000 - translation issued on July 26th, 2000

prepared

CERT - M. Balaz

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO

Responsabile Area Pertificazione

approvved CERT - U. Colombo

[13] Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE N° CESI 00 ATEX 036 U

[15] Description of component

Empty enclosures series CCF... and EJB... for control and signaling equipment.

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

The various items of the code show 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 enclosures subject of this certificate are reported in the drawing A1-4094 annexed.

The enclosures are made normally in aluminium or in stainless steel (see technical note A1-4099 annexed).

Other characteristics of the enclosures are reported in the drawings annexed to this certificate, in particular:

- holes on the covers used for mounting accessories: drawing A1-4096.
- dimensions and characteristics of glass windows: drawing A1-4097.
- number and dimensions of possible holes for cable entries: drawing A1-4095.

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

Plate warnings

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

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



[13] Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE N° CESI 00 ATEX 036 U

[16] Report N° EX-A0/024869

Routine tests

The manufacturer shall carry out the routine tests prescribed at clause 24 of the EN 50014 standard and at clause 16 of EN 50018 standard.

The 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 enclosures of size from 1 to 5
- 11.5 bar for enclosures of size 6

Descriptive documents (prot. EX-A0/024873)

- Tecnical note n° A1-4099 Rev. 0 (2p.)	dated	26.06.2000
- Drawing n° A4-4129 Rev. 0	dated	26.06.2000
- Drawing n° A1-4094 Rev. 1	dated	26.06.2000
- Drawing n° A1-4095 Rev. 1	dated	26.06.2000
- Drawing n° A1-4096 Rev. 1	dated	26.06.2000
- Drawing n° A1-4097 Rev. 1	dated	26.06.2000
- Drawing n° A1-4098 Rev. 1	dated	26.06.2000
- Attestation of conformity for components	dated	09.07.2000
- Safety instructions Rev. 0 (4 p.)	dated	26.06.2000

[17] Schedule of limitations

The cementing used for the windows and the pilot lights shall not be submitted to a temperature higher than 100 °C.

The pilot lights shall not be submitted to high risk of mechanical danger.

[18] Essential Health and Safety Requirements

Covered by statndards

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

EXTENSION n. 01/02



to EC-Type Examination Certificate CESI 00 ATEX 036 U

Equipment:

Empty enclosures series CCF... and EJB... for control and signalling equipment

Manufacturer:

COR.TEM S.p.A.

Address:

Via Aquileia 10, Villesse, Gorizia (Italy)

Admitted variation

- new models CCFE-01 and AQS. -1

Report n. EX-A2/020657

Descriptive documents (prot. EX-A2/020661)

- n. A4-4254 Rev. 0

dated 18.04.2002

- n. A1-4252 Rev. 0

dated 18.04.2002

- n. A1-4253 Rev. 0 (2 p.)

dated 18.04.2002

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 00 ATEX 036 U.

This document may only be reproduced in its entirety and without any change.

date

26th June 2002 - translation issued on 26th June 2002

Falson 1

prepared

approved

CERT - U. Colombo

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO

Business Unit Certificazione

page 1/1

Prot. A2/020679

P: 1

13010R

24080T

48010M

542500

66540E

EXTENSION n. 02/02



to EC-Type Examination Certificate CESI 00 ATEX 036 U

Equipment:

Empty enclosures series CCF... and EJB... for control and signalling equipment

Manufacturer:

COR.TEM S.p.A.

Address:

Via Aquileia 10, Villesse, Gorizia (Italy)

Admitted variation

- added degree of protection IP 65 or IP 66/67 (EN 60529 – 1991)

- new category II 2 GD (added protection against the risk of explosion from combustible dusts in conformity with the standard EN 50281-1-1)
- use of glass windows of rectangular shape

The results of verifications and tests are reported in the confidential report EX-A2/025603.

Identification and description of the component

Empty enclosures series CCF... and EJB... for control and signalling equipment.

The enclosures of these units are made in aluminium or in stainless steel (see technical note A4-4099 annexed to this extension).

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.

On the enclosures command and signalling operators CORTEM type M-0 and operators model FONDISONZO can be installed.

The complete codes of all the units subject of this extension are reported in the drawings A1-4094 and A1-4098 annexed. Other characteristics of the enclosures are reported in the drawings annexed to this extension, in particular:

- holes on the covers for mounting accessories: drawing A1-4096.
- dimensions and characteristics of the glass windows: drawings A1-4097 and A1-4232.
- number and dimensions of the holes for cable entries admissible on the enclosures: drawing A1-4095.
- characteristics of the command and signalling operators type M-0: drawing A2-4137.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 00 ATEX 036 U.

This document may only be reproduced in its entirety and without any change.

date

26th February 2003

revision of the document issued on 6th August 2002

prepared

CERT - M. Balaz

GENTRO ELETTROTECNICO SPERIMENTALE ITALIANO

Business Unit Certificazion

approved

CERT - U. Colombo

EXTENSION n. 02/02

to EC-Type Examination Certificate CESI 00 ATEX 036 U

Identification and description of the component (follows)

The enclosures series CCF and EJB are made in two different versions as regards the degree of protection IP:

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

When operators model FONDISONZO are used (drawing A1-4096) the enclosures are of category II 2 G with degree of protection IP 54.

According to the protection adopted the enclosures series CCF and EJB can have the following marking:

€x	II 2 G	EEx d IIB		enclosures protected only against flammable gases
⟨£x⟩	II 2 GD	EEx d IIB	IP 65	enclosures with silicone grease
⟨Ex⟩	II 2 GD	EEx d IIB	IP 66/67	enclosures with sealing gasket without command and signalling operators
⟨£x⟩	II 2 GD	EEx d IIB	IP 66	enclosures with sealing gasket with command and signalling operators type M-0.

The accessories used for cable entries and for closing unused apertures on the enclosures category 2 G shall be certified according to the standards EN 50014 and EN 50018.

The accessories used for cable entries and for closing unused apertures on the enclosures category 2 GD shall be certified according to the standards EN 50014, EN 50018 and EN 50281-1-1 and shall have a degree of protection IP equal to that of the enclosure.

Warning label

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

Schedule of limitations

The sealing used for windows and for signalling lamps shall not be submitted to a temperature higher than 100 °C. The signalling lamps model FONDISONZO (drawing A1-4096) shall not be submitted to high risk of mechanical danger.

This document may only be reproduced in its entirety and without any change..

EXTENSION n. 02/02

to EC-Type Examination Certificate CESI 00 ATEX 036 U

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-A2/025611)

One copy of the above mentioned documents is kept in CESI files.

Essential Health and Safety Requirements

Compliance with the Health and Safety Requirements has been assured by compliance with the following standards:

EN 50014 - 1997 + A1..A2 - General requirements

EN 50018 - 2000 - Flameproof enclosures "d"

EN 50281-1-1 – 1999 – Electrical apparatus for use in the presence of combustible dust. Part 1-1: Electrical apparatus protected by enclosures – Construction and testing.

EXTENSION n. 03/03



to EC-Type Examination Certificate CESI 00 ATEX 036 U

Equipment:

Empty enclosures series CCF... and EJB... for control and signalling equipment

Manufacturer:

COR.TEM S.p.A.

Address:

Via Aquileia 10, Villesse, Gorizia (Italy)

Admitted variation

- use of rectangular windows of larger size

Report n. EX-A3/035013

Descriptive documents (prot. EX-A3/035016)

- n. A1-4232 Rev. 4

dated 31.03.2003

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 00 ATEX 036 U.

This document may only be reproduced in its entirety and without any change.

date

 8^{th} October 2003 - translation issued on 8^{th} October 2003

Kalas

prepared

CERT - M. Balaz

CESI

approved CERT – U. Colombo

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO

Business Unit Certificazione

page 1/1

Prot. A3/035025

Keywords

P: 1 13010R

24080T

48010M

www.cesi.it

54250O

66540E

EXTENSION n. 04/07



to EC-Type Examination Certificate CESI 00ATEX036U

Component:

Empty enclosures series CCF... and EJB... for control and signalling equipment

Manufacturer:

CORTEM S.p.A.

Address:

Via Aquileia, 10 Villesse (Gorizia), Italia

Admitted variation

- Conformity to EN 60079-0 (2006), EN60079-1 (2004), EN 61241-0 (2006), EN 61241-1 (2004) Standards
- Update of nameplate
- Execution IIB + H₂
- Execution I M2 Ex d I (series EJBX in stainless steel)
- Add new boxes:
 - EJB-55, EJB-55B
 - EJBX7 (only for stainless steel material)
- Modification of the ambient temperature range and the service temperature range.

Identification and description of the component

The marking of the equipment shall include the following:

 $\langle \epsilon_x \rangle$

II 2G Ex d IIB



II 2G Ex d IIB+H₂



II 2GD Ex d IIB; Ex tD A21 IP65 o IP66/67



II 2GD Ex d IIB+H₂; Ex tD A21 IP65 o IP66/67



I M2 ExdI

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 00ATEX036U.

This document may only be reproduced in its entirety and without any change.

date

19 November 2007 - translation issued the 19th November 2007

prepared

Pierluigi Molinari

verified

Mirko Balaz

approved

Fiorenzo Bregani

CESI S.p.A.

Divisione Energia
"Area Tecnica Certificazione"

Il Responsabile

EXTENSION n. 04/07

to EC-Type Examination Certificate CESI 00ATEX036U

Identification and description of the component (follows)

The enclosures series CCF and EJB are made in two different versions as regards the degree of protection IP:

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

Cable entries

The accessories used for cable entries and for unused holes shall be subject of separate certification:

- for the unit of category II 2G in the execution Ex d IIB (or Ex d IIB+H2) shall be certified according to the Standards: EN 60079-0 (2006); EN 60079-1 (2004);
- for the unit of category II 2GD in the execution Ex d IIB (or Ex d IIB+H2) and Ex tD A21 shall be certified according to the standards: EN 60079-0 (2006); EN 60079-1 (2004); EN 61241-0 (2006); EN 61241-1 (2004) and shall guarantee a degree of protection IP equal to that of the enclosure according to EN 60529 (1991) Standard.
- for the unit of category I M2 in the execution Ex d I shall be certified according to the Standards: EN 60079-0 (2006); EN 60079-1 (2004).

Warning label

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

Report n. EX- A7/030648

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 overpressure routine test shall be carried out with static method, at the pressure of

- 11.9 bar for enclosure size from 1 to 5
- 11.5 bar for enclosure size 6
- 10 bar for enclosure size 7

in conformity to the par. 15.1.3.1 of the EN 60079-1 Standard

EXTENSION n. 04/07

to EC-Type Examination Certificate CESI 00ATEX036U

Descriptive documents (prot. EX-A7/030659)

- Technical Note A4-4972 Rev. 0 (2 pg.)	dated	21.03.2007
- Dwg. n. A1-4094 Rev. 3	dated	21.03.2007
- Dwg. n. A1-4098 Rev. 3	dated	21.03.2007
- Dwg. n. A1-4170 Rev. 2	dated	21.03.2007
- Dwg. n. A3-5025 Rev. 0 (2 sheets)	dated	21.03.2007
- Dwg. n. A3-5028 Rev. 0 (2 sheets)	dated	21.03.2007
- Dwg. n. A2-4137 Rev. 2	dated	21.03.2007
- Document A4-4951 Rev. 0	dated	02.04.2007
- Document A4-4952 Rev. 0	dated	02.04.2007
- Safety instructions F-276A Rev. 0 (7 pg.)	dated	21.03.2007
- Attestation of conformity for components n. 0018	dated	21.03.2007

One copy of all documents is kept in CESI files.

Schedule of limitations

- The ambient temperature range of empty enclosures series CCF... and EJB... in execution Ex d I; Ex d IIB; Ex d IIB+H2 and Ex tD A21 is: $-20 \div +60$ °C.
- The ambient temperature range of empty enclosures series CCF... and EJB... sizes 1, 2, 3, 3B, 4, 4B, 45, 45B, 5, 5B, 503, 55, 55B, 6, e 6B in execution Ex d IIB only and with silicone grease placed between the body and the cover for IP 65 is: $-20 \div +100$ °C.
- The enclosures for group I M2 are made in stainless steel (series EJBX..) in this case are admitted only stainless steel command and signal operators series M-0 (drawing A2-4137 rev.2) onto enclosures.
- The sealing used for windows and for signalling lamps shall not be submitted to a temperature higher than 100 °C.
- The maximum service temperature of empty enclosures series CCF... and EJB... with the accessories, control-signal operators and windows shall not exceed $100\,^{\circ}$ C.
- The maximum service temperature of empty enclosures series CCF... and EJB... (without the accessories, control-signal operators, windows and with silicone grease placed between the body and the cover for IP 65) is up to 150 °C.
- The contents of the enclosure shall comply with the appropriate requirements of relevant standards for electrical apparatus.
- When the accessories and operators FONDISONZO (drawing A1-4096) are used the empty enclosures are category II 2G with the degree of protection IP 54. The signalling lamps model FONDISONZO (drawing EE.225.1) shall not be submitted to high risk of mechanical danger.

Essential Health and Safety Requirements

Compliance with the Health and Safety Requirements has been assured by compliance with the following standards:

EN 60079-0: 2006 - Electrical apparatus for explosive gas atmospheres. Part 0: General requirements

EN 60070-1: 2004 - Electrical apparatus for explosive gas atmospheres. Part 1: Flameproof enclosure

EN 61241-0: 2006 - Electrical apparatus for use in the presence of combustible dust. Part 0: General requirements

EN 61241-1: 2004 - Electrical apparatus for use in the presence of combustible dust. Part 1: Protection by enclosures "tD"

EXTENSION n. 05/09



to EC-Type Examination Certificate CESI 00 ATEX 036U

Component: Empty enclosures series CCF and EJB for control and signalling equipment

Manufacturer: COR.TEM S.p.A.

Address: Via Aquileia, 10 – 34070 Villesse (GO) - Italy

Admitted variation

- Conformity to new edition of EN60079-1: 2007 standard;
- Constructional modification: new position of O-ring gasket on enclosure cover;
- Determination of the minimum distance of installation between flameproof flanged joint and external obstructions;
- Modification of the minimum ambient and service temperature;
- Add new enclosure types: EJB-7 and EJB-7B.

Identification and description of the component

The empty enclosures series CCF and EJB have identification, constructional characteristics and safety marking code conform to those indicated in the certificate CESI 00 ATEX 036U and annexed extensions with addition of new characteristics and admitted variation as indicated in this extension.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 00 ATEX 036U.

This document may only be reproduced in its entirety and without any change.

date

23th July 2009 - translation issued the 23th July 2009

prepared

Damiano Cavanna

verified

Mirko Balaz

approved

Fiorenzo Bregani

CESI s.p.A.

Divisione Energia

EXTENSION n. 05/09

to EC-Type Examination Certificate CESI 00 ATEX 036U

Admitted constructional modifications

- The empty enclosures series in subject increase of two new aluminium alloy enclosure size named EJB-7 and EJB-7B, with type of protection:
 - Ex d IIB or Ex d IIB+H2
 - Ex d IIB Ex tD A21 IP65 or IP66/67 or Ex d IIB+H2 Ex tD A21 IP65 or IP66/67
- The empty enclosures type EJB-01, EJB-1, EJB-2, EJB-3, EJB-3, EJB-4, EJB-4B, EJB-45, EJB-45B, EJB-5, EJB-5B, EJB-503, EJB-55, EJB-55B, EJB-6, EJB-6B, EJB-7, EJB-7B and AQS-1 can be realized with Oring gasket placed in the cover (enclosure internal side) for IP guaranty on flanged joint.
- The enclosure series EJB in Ex d IIB execution have been submitted to test for non-transmission of an internal ignition, according par. 15.2 and par. 15.2.1, for setting the minimum distance of installation between flameproof flanged joint and external obstructions. The minimum admitted distance is reported on additional warning label:

"The enclosure shall be installed so that flanged joint has a minimum distance from external solid object of 20 mm for gas group IIB and 40 mm for gas group IIB+H2"

Ambient temperature

- -20 \div +60 °C For all types of empty enclosure.
- -50 \div +60 °C For all types of empty enclosure of group II with or without glass windows sealed in the cover; only silicon gasket for IP protection shall be used. When polycarbonate pilot lights are installed on enclosure the minimum ambient temperature admitted is -40 °C.
- -50 ÷ +100 °C For empty enclosure EJB series (exclude types EJB-01 and AQS-1) in Ex d IIB execution, with or without glass windows sealed in the cover and without control-signal operators; only silicon gasket for IP protection shall be used.

Rapporto n. EX-A9021662

Prove individuali

The manufacturer shall carry out the routine tests prescribed at paragraph 27 of 60079-0: 2006 standard, at paragraph 16 of the EN 60079-1: 2007 standard and paragraph 24 of EN 61241-0: 2006 standard.

The routine overpressure test shall be carried out on empty enclosure with the static method (paragraph 15.1.3.1 of EN 60079-1 standard), at:

- 13.7 bar on all Ex-d empty enclosure of group II for minimum ambient temperature until -50 °C;
- 11.9 bar on Ex-d empty enclosure size 1÷5 for minimum ambient temperature until -20 °C
- 11.5 bar on Ex-d empty enclosure size 6 for minimum ambient temperature until -20 °C
- 10.0 bar on Ex-d empty enclosure size 7 for minimum ambient temperature until -20 °C

This document may only be reproduced in its entirety and without any change...

CFSI

EXTENSION n. 05/09

to EC-Type Examination Certificate CESI 00 ATEX 036U

Descriptive documents (prot. EX-A9021676)

- Technical note A4-5045 (pg. 5)

dated 03.02.2009

- Safety Instruction mod. F-276A rev. 1 (pg. 8)

dated 03.02.2009

- Drawing N. A3-5044 (4 sheets)

dated 03.02.2009

- Drawing N. A1-4097 - Drawing N. A1- 4232 dated 03.02.2009 dated 03.02.2009

One copy of all documents is kept in CESI files.

Schedule of limitations

- The empty enclosures shall be used in the ambient temperature range indicated on the previous page.
- The minimum admitted distance is reported on additional warning label:
- "The enclosure shall be installed so that flanged joint has a minimum distance from external solid object of **20 mm** for gas group IIB and **40 mm** for gas group IIB+H2"
- Maximum service temperature of the empty enclosures:

+100 °C For all types of empty enclosure.

+150 °C For empty enclosure without control-signal operators; only silicon gasket for IP protection shall be

used

+80 °C For empty enclosure with NBR gasket.

Essential Health and Safety Requirements

The Essential Health and Safety Requirements are assured by compliance to the following standards:

EN 60079-0: 2006 - Electrical apparatus for explosive gas atmosphere - General requirements.

EN 60079-1: 2007 - Equipment protection by flameproof enclosure "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"

This document may only be reproduced in its entirety and without any change..



...ÍSMES



EXTENSION n. 06/12



to EC-Type Examination Certificate CESI 00 ATEX 036U

Equipment:

Empty enclosures series CCF and EJB for control and signalling equipment.

Manufacturer:

COR.TEM S.p.A.

Address:

Via Aquileia, 10 – 34070 Villesse (GO) – Italy.

Admitted variation

- Update to new edition of EN60079-0: 2009, EN 60079-1: 2007, EN 60079-31: 2009 standards.
- Removed the use of silicon grease on flange joint for IP protection degree.
- New size of enclosure EJB-55B has been added.
- Codes upgrades for EJB-55 and EJB-55C types due to the introduction of the new model,

Conformity to new edition of the harmonized European standard

The component subject of the certificate CESI 00 ATEX 036U and annexed extension are conform to the standards;

EN 60079-0: 2009 EN 60079-1: 2007 EN 60079-31: 2009

The component shall be marked as follows:

II2G Ex d IIB Gb

Or

Ex d IIB+H2 Gb

I M2

Ex d I Mb

(Stainless Steel enclosures only)

II2GD

Ex d IIB Gb

or

Ex d IIB+H2 Gb Ex tb IIIC Db

Ex th IIIC Db IP66/67

IP66/67

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 00 ATEX 036U.

This document may only be reproduced in its entirety and without any change.

16th March 2012 - translation issued the 16th March 2012 Date

Prepared Mirko Balaz

Approved

Page 1/3

www.cesi.it

EXTENSION n. 06/12

to EC-Type Examination Certificate CESI 00 ATEX 036U

Description of components

The empty enclosures series CCF and EJB have identification, constructional characteristics and safety marking code conform to those indicated in the certificate CESI 00 ATEX 036U and annexed extensions with addition of new characteristics and admitted variation as indicated in this extension.

Admitted constructional modifications

- The empty enclosures series EJB-.. and EJBX-.. and type AQS-1 are realized with O-ring gasket placed in the cover (enclosure internal side) for IP guaranty on flanged joint.
- To the series of empty enclosures is added a new size of aluminium alloy enclosure EJB-55, with the modification of the height of enclosure. The codes upgrades have been made for EJB-55B (new size), EJB-55 and EJB-55C due to the introduction of the new model.

Ambient temperature

- $-20 \div +60$ °C For all types of empty enclosure.
- -50 \div +60 °C For all types of empty enclosure of group II with or without glass windows sealed in the cover; only silicon gasket for IP protection shall be used. When polycarbonate pilot lights are installed on enclosure the minimum ambient temperature admitted is -40 °C.
- -50 ÷ +100 °C For empty enclosure EJB series (exclude types EJB-01 and AQS-1) in Ex d IIB execution, with or without glass windows sealed in the cover and without control-signal operators; only silicon gasket for IP protection shall be used.

Cable entries

The accessories used for cable entries and plugs for not used holes shall be subject of separate certification, suitable for type of enclosure execution, according to the applicable standards.

Report n. EX-B2008780

Routine tests

The manufacturer shall carry out the routine tests prescribed at paragraph 27 of EN 60079-0 standard, at paragraph 16 of the EN 60079-1 standard and paragraph 6 of EN 60079-31 standard.

The routine overpressure test shall be carried out on empty enclosure with the static method (paragraph 15.1.3.1 of EN 60079-1 standard), at:

- 13.7 bar on all Ex-d empty enclosure of group II for minimum ambient temperature until -50 °C;
- 11.9 bar on Ex-d empty enclosure size 1÷5 for minimum ambient temperature until –20 °C
- 11.5 bar on Ex-d empty enclosure size 6 for minimum ambient temperature until -20 °C
- 10.0 bar on Ex-d empty enclosure size 7 for minimum ambient temperature until -20 °C

Descriptive documents (prot. EX- B2008793)

- Technical note A4-5603 (pg. 3)	rev.0	dated	12.01.2012
- Safety Instruction F-276A (pg. 8)	rev.2	dated	12.01.2012
- Attestation of Conformity no. 0018 (pg. 1)	rev.0	dated	12.01.2012
- Drawing N. A3-5025 (2 sheets)	rev.1	dated	12.01.2012
- Drawing N. A3-5604 (2 sheets)	rev.0	dated	12.01.2012

One copy of all documents is kept in CESI files.

This document may only be reproduced in its entirety and without any change

EXTENSION n. 06/12

to EC-Type Examination Certificate CESI 00 ATEX 036U

Schedule of limitations

- The empty enclosures shall be used in the ambient temperature range indicated on the previous page.
- The minimum admitted distance is reported on additional warning label:
- "The enclosure shall be installed so that flanged joint has a minimum distance from external solid object of 20 mm for gas group IIB and 40 mm for gas group IIB+H2".
- Maximum service temperature of the empty enclosures:

+100 °C

For all types of empty enclosure.

+150 °C

For empty enclosure without control-signal operators; only silicon gasket for IP protection shall be used.

Special conditions for safe use (X)

None.

Essential Health and Safety Requirements

The Essential Health and Safety Requirements are assured by compliance to the following standards:

EN 60079-0: 2009

Explosive atmospheres – Part 0: Equipment - General requirements;

EN 60079-1: 2007

Explosive atmospheres – Part 1: Equipment protection by flameproof enclosure "d";

EN 60079-31: 2009

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t".