



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx INE 10.0015X issue No.:1

Status: **Current**

Certificate history:
Issue No. 1 (2011-7-20)
Issue No. 0 (2011-1-20)

Date of Issue: **2011-07-20** Page 1 of 4

Applicant: **TECHNOR ITALSMEA**
Via Italia, 33
I-20060 Gessate (MI)
Italy

Electrical Apparatus: **Controls Units type EJB..**
Optional accessory:

Type of Protection: **d, d [ia], d [ib], tb, tb [iaD/ibD]**

Marking: **Ex d IIB T6 or T5 or T4 Gb, Ex tb IIIC T85°C or T100°C or T135°C Db IP66**
Ex d [ia Ga] IIB T6 Gb, Ex tb [ia Da] IIIC T85°C Db IP66
or
Ex d [ib] IIB T6 Gb, Ex tb [iaD/ibD] IIIC T85°C Db IP66
or
Ex db IIB T6 or T5 or T4, Ex tb IIIC T85°C or T100°C or T135°C IP66
or
Ex db [ia] IIB T6, Ex tb [iaD/ibD] IIIC T85°C IP66

*Approved for issue on behalf of the IECEx
Certification Body:*

Thierry HOUEIX

Position:

Ex Certification Officer

*Signature:
(for printed version)*

Date:

2011-07-21

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

INERIS
Institut National de l'Environnement Industriel
et des Risques
BP n2
Parc Technologique ALATA
F-60550 Verneuil-En-Halatte
France



IECEx Certificate of Conformity

Certificate No.: IECEx INE 10.0015X

Date of Issue:

2011-07-20

Issue No.: 1

Page 2 of 4

Manufacturer:

TECHNOR ITALSMEA
Via Italia, 33
I-20060 Gessate (MI)
Italy

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2007-10 Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2006 Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-11 : 2005 Edition: 1	Electrical apparatus for use in the presence of combustible dusts - Part 11: Protection by intrinsic safety 'iD'

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[FR/INE/ExTR10.0014/00](#) --- [FR/INE/ExTR10.0014/01](#)

Quality Assessment Report:

[FR/INE/QAR08.0002/03](#)



IECEx Certificate of Conformity

Certificate No.: IECEx INE 10.0015X

Date of Issue: 2011-07-20

Issue No.: 1

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

These enclosures type EJB.. are intended to contain equipment defined in the technical note. These enclosures can be fitted with rotary actuator, push buttons, reset device, and breathing or draining device. Pilot lights are intended on the enclosures with maximum dissipated power 300 W. Enclosures get the degree of protection IP66 in accordance with the IEC 60529 standard.

CONDITIONS OF CERTIFICATION: YES as shown below:

The gap and diametrical clearance of the flamepath are less than the values specified in the Table 1 of the IEC 60079-1 standard.
The length of the flameproof joint is superior to these specified in Tables 1, 3 and 4 of IEC 60079-1 standard.
The screws used for the lid fastening must have a tensile strenght higher or equal to 800 N/mm².



IECEx Certificate of Conformity

Certificate No.: IECEx INE 10.0015X

Date of Issue:

2011-07-20

Issue No.: 1

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

ISSUE 1:

- Introduction of new enclosures type EJB2, EJB3, EJB3A, EJB4, EJB5, EJB6, EJB9, EJB11 and EJB13A.
- Possibility to use, into enclosures, some intrinsic safety elements covered by an IECEx certificate with or without "NIS" elements. When the enclosure is fitted with "IS" and "NIS" element the enclosure is provided with an internal thermal probe.
- Possibility to use enclosures at maximum ambient temperature 50°C or 55°C.



IECEx Certificate of Conformity

Certificate No.: IECEx INE 10.0015X

Date of Issue: 2011-07-20

Issue No.: 1

Page 1 of 4

Annexe: IECEx INE 10.0015X_01_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

Maximum supply voltage : 440 V(DC) or 5 000 V (AC)

Frequency : 50/60Hz

Maximum power dissipated:

AMBIENT TEMPERATURE $\leq 40^{\circ}\text{C}$				
Enclosure type	Maximum dissipated powers (W / VA)			
	T6	T5	T4	I max (A)
EJB 2 ; 3 ; 3A	30	40	60	125
EJB 4 ; 5	50	65	100	250
EJB 6	100	130	190	300
EJB 9	180	230	350	350
EJB 11	225	315	400	400
EJB 12	300	380	450	630
EJB 13	350	430	500	1000
EJB 13A	400	480	530	1000

AMBIENT TEMPERATURE $\leq 50^{\circ}\text{C}$				
Enclosure type	Maximum dissipated powers (W / VA)			
	T6	T5	T4	I max (A)
EJB 2 ; 3 ; 3A	20	30	45	125
EJB 4 ; 5	35	45	75	250
EJB 6	75	95	140	300
EJB 9	135	170	260	350
EJB 11	165	235	300	400
EJB 12	225	285	335	630
EJB 13	260	320	375	1000
EJB 13A	300	360	395	1000



IECEx Certificate of Conformity

Certificate No.: IECEx INE 10.0015X

Date of Issue: 2011-07-20

Issue No.: 1

Page 2 of 4

Annexe: IECEx INE 10.0015X_01_Annex.pdf

AMBIENT TEMPERATURE $\leq 55^{\circ}\text{C}$				
Enclosure type	Maximum dissipated powers (W / VA)			
	T6	T5	T4	I max (A)
EJB 2 ; 3 ; 3A	15	25	35	125
EJB 4 ; 5	30	40	60	250
EJB 6	60	80	115	300
EJB 9	110	140	210	350
EJB 11	135	190	240	400
EJB 12	180	230	270	630
EJB 13	210	260	300	1000
EJB 13A	240	290	320	1000

ENCLOSURE CONTAINING ASSOCIATED APPARATUS (AMBIENT TEMPERATURE $\leq 40^{\circ}\text{C}$)		
Enclosure type	Maximum dissipated powers (W / VA) for temperature class T6	Maximum number of active and/or passive barriers Ex i
EJB 2 ; 3 ; 3A	25	4
EJB 4 ; 5	30	6
EJB 6	50	8
EJB 9	80	8
EJB 11	140	10
EJB 12	200	12
EJB 13	260	20
EJB 13A	360	20

The enclosures containing in the same time, NIS and IS elements are fitted with an internal thermal probe.

- Threshold of release $55^{\circ}\text{C} \pm 5^{\circ}\text{C}$ when the IS elements are suitable for internal operating temperature $\geq 60^{\circ}\text{C}$.
- Threshold of release $65^{\circ}\text{C} \pm 5^{\circ}\text{C}$ when the IS elements are suitable for internal operating temperature $\geq 70^{\circ}\text{C}$.

Characteristiques of the pilot lamp:

Type of lamp : LED 3 W maxi



IECEX Certificate of Conformity

Certificate No.: IECEx INE 10.0015X

Date of Issue: **2011-07-20**

Issue No.: 1

Page 3 of 4

Annexe: IECEx INE 10.0015X_01_Annex.pdf

MARKING

Marking has to be readable and indelible; it has to include the following indications:

A - Enclosure without intrinsic safety element:

- TECHNOR ITALSMEA
 - I - 20060 Gessate (MI)
 - EJB... (*)
 - IECEx INE 10.0015X
 - (Serial number)
 - Ex d IIB T(**) Gb or Ex db IIB T(*)
 - Ex tb IIIC T(**) Db or Ex tb IIIC T(**)
 - IP66
 - T.amb : -20°C to (**)
 - **WARNINGS:**
 - DO NOT OPEN WHEN ENERGIZED
 - THREADED HOLES : SEE INSTRUCTIONS.
- (*) One of the following type : EJB2, EJB3, EJB3A, EJB4, EJB5, EJB6, EJB9, EJB1, EJB12, EJB13 or EJB13A.
- (**) See table above

B - Enclosure with intrinsic safety element "ia":

- TECHNOR ITALSMEA
 - I - 20060 Gessate (MI)
 - EJB... (*)
 - IECEx INE 10.0015X
 - (Serial number)
 - Ex d [ia Ga] IIB T6 Gb or Ex db [ia] IIB T6
 - Ex tb [ia Da] IIIC T85°C Db or Ex tb [ia Da] IIIC T85°C
 - IP66
 - T.amb : -20°C to (**)
 - **WARNINGS:**
 - DO NOT OPEN WHEN ENERGIZED
 - THREADED HOLES : SEE INSTRUCTIONS.
- (*) One of the following type : EJB2, EJB3, EJB3A, EJB4, EJB5, EJB6, EJB9, EJB1, EJB12, EJB13 or EJB13A.
- (**) See table above



IECEX Certificate of Conformity

Certificate No.: IECEx INE 10.0015X

Date of Issue: **2011-07-20**

Issue No.: 1

Page 4 of 4

Annexe: IECEx INE 10.0015X_01_Annex.pdf

C - Enclosure with intrinsic safety element "ib":

- TECHNOR ITALSMEA
 - I - 20060 Gessate (MI)
 - EJB...(*)
 - IECEx INE 10.0015X
 - (Serial number)
 - Ex d [ib] IIB T6 Gb or Ex db [ib] IIB T6
 - Ex tb [iaD/ibD] IIIC T85°C Db or Ex tb [iaD/ibD] IIIC T85°C
 - IP66
 - T.amb : -20°C to (**)
 - **WARNINGS:**
 - DO NOT OPEN WHEN ENERGIZED
 - THREADED HOLES : SEE INSTRUCTIONS.
- (*) One of the following type : EJB2, EJB3, EJB3A, EJB4, EJB5, EJB6, EJB9, EJB1, EJB12, EJB13 or EJB13A.
- (**) See table above

ROUTINE EXAMINATIONS AND TESTS

In accordance with clause 16.1 of IEC 60079-1 standard, each sample of the equipment defined above must have successfully passed before delivery, an overpressure test, of a period comprised between 10 and 60 seconds under:

- 13.5 bar for the enclosure EJB12.
- 11.7 bar for the enclosure EJB13.
- 13.5 bar for all other types.