



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 13.0102U issue No.:0 Certificate history: _____

Status: **Current**

Date of Issue: **2014-01-31** Page 1 of 4

Applicant: **FEAM**
Via Mario Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy

Electrical Apparatus: **Enclosures type ESA*** AND ESX*****
Optional accessory:

Type of Protection: **e and tb**

Marking: Ex e IIC Gb
Ex tb IIIC Db IP66

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

Position: Ex Certification Officer

Signature:
(for printed version) 

Date: 2014-01-31

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



INERIS is accredited by COFRAC under number 5-0045 for certification of products and services
(scope of accreditation is available on website www.cofrac.fr)



IECEx Certificate of Conformity

Certificate No.: IECEx INE 13.0102U

Date of Issue: **2014-01-31**

Issue No.: **0**

Page 2 of 4

Manufacturer: **FEAM**
Via Mario Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy

Additional 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 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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/ExTR13.0105/00](#)

Quality Assessment Report:

[IT/CES/QAR09.0003/04](#)

IECEx Certificate



of Conformity

Certificate No.: IECEx INE 13.0102U

Date of Issue: 2014-01-31

Issue No.: 0

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

These enclosures made in light alloy for the type ESA or stainless steel for the type ESX are protected by increased safety "e" for gas atmospheres and protected by enclosure "tb" for dust atmospheres. These Ex Components get the degrees of protection IP66 according to the IEC 60529 standard.

SCHEDULE OF LIMITATIONS

These components have been assessed to be used with an operating temperature range between -60°C and +100°C.

Impact tests have been performed on the components with an impact energy of 7J on the cover and 4J on the window.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate



of Conformity

Certificate No.: IECEx INE 13.0102U

Date of Issue: **2014-01-31**

Issue No.: **0**

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Additional information:

PARAMETERS RELATING TO THE SAFETY

None

MARKING

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

- FEAM
- I – 20090 TREZZANO SUL NAVIGLIO (MI)
- ESA*** or ESX*** (1)
- IECEx INE 13.0102U
- Ex e IIC Gb
- Ex tb IIIC Db IP66

(1) Type is completed by numbers and /or letters corresponding to manufacturing variations.

ROUTINE EXAMINATIONS AND TESTS

None.



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 13.0102U Issue No: 1 Certificate history:
Status: Current Page 1 of 5 Issue No. 1 (2016-03-01)
Date of Issue: 2016-03-01 Issue No. 0 (2014-01-31)
Applicant: FEAM
Via Mario Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy
Electrical Apparatus: Enclosures type ESA.... or ESX....
Optional accessory:
Type of Protection: e and tb
Marking: Ex e IIC Gb
Ex tb IIIC Db IP66 or IP65

Approved for issue on behalf of the IECEx
Certification Body:

Thierry HOUEIX

Position:

Ex Certification Officer

Signature:
(for printed version)

Date:

2016-03-01



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F-60550 Verneuil-En-Halatte
France

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The certification rules are available on the INERIS website www.ineris.fr.



IECEX Certificate of Conformity

Certificate No: IECEX INE 13.0102U Issue No: 1

Date of Issue: 2016-03-01 Page 2 of 5

Manufacturer: **FEAM**
Via Mario Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy

Additional 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2006-07 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

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:

[HR/EXA/ExTR15.0010/00](#)

[FR/INE/ExTR13.0105/00](#)

[FR/INE/ExTR13.0105/01](#)

Quality Assessment Report:

[IT/CES/QAR09.0003/06](#)



IECEX Certificate of Conformity

Certificate No: IECEx INE 13.0102U

Issue No: 1

Date of Issue: 2016-03-01

Page 3 of 5

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

These enclosures made in light alloy for the type ESA... or stainless steel for the type ESX... are protected by increased safety "e" for gas atmospheres and protected by enclosure "tb" for dust atmospheres.

The ESA.. enclosures could be closed by screws and the ESX... enclosures could be closed by screws or by key lock in accordance with the descriptive documents of the manufacturer.

These Ex Components get the degrees of protection IP66 or IP65 according to the IEC 60529 standard.

SCHEDULE OF LIMITATIONS:

For enclosures ESA... – ESX... (excepted for ESX closed by key lock):

The tests (ageing tests, impact tests and IP tests) have been performed for a range of operating temperatures between -60°C up to +180°C.

The impact tests have been carried out (with positive result) with an impact energy of 7J on the metallic parts and 4J on the window.

These Ex Components get the degrees of protection IP66 according to the IEC 60529 standard.

For enclosures ESX... closed by key lock:

The tests (ageing tests, impact tests and IP tests) have been performed for a range of operating temperatures between -60°C up to +100°C.

The impact tests have been carried out with an impact energy of 7J on the metallic parts and 4J on the window.

These Ex Components get the degrees of protection IP66 (with an additional protection plug required for Enclosures ESX150110 and ESX 200180) or IP65 for enclosures ESX150110 and ESX 200180 without protection plug according to the IEC 60529 standard.

CONDITIONS OF CERTIFICATION: NO



IECEX Certificate of Conformity

Certificate No: IECEx INE 13.0102U

Issue No: 1

Date of Issue: 2016-03-01

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

Purpose of the Issue 1:

- Extension of the maximum operating temperature from +100°C to +180°C for enclosures ESA – ESX (excepted for enclosures ESX closed by key lock)
- Introduction of 2 new versions of ESX enclosures : ESX150110 and ESX 200180
- Update of the thickness of ESA enclosures
- Application of the standard IEC 60079-31:2013



IECEx Certificate of Conformity

Certificate No: IECEx INE 13.0102U

Issue No: 1

Date of Issue: 2016-03-01

Page 5 of 5

Additional Information:

PARAMETERS RELATING TO THE SAFETY

None

MARKING

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

- FEAM
 - I – 20090 TREZZANO SUL NAVIGLIO (MI)
 - ESA...or ESX... (1)
 - IECEx INE 13.0102U
 - Ex e IIC Gb
 - Ex tb IIIC Db IP66 or IP65
- (1) Type is completed by numbers and /or letters corresponding to manufacturing variations.

ROUTINE EXAMINATIONS AND TESTS

None.



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx INE 13.0102U** Page 1 of 5 Certificate history:
Status: **Current** Issue No: 2 Issue 1 (2016-03-01)
Date of Issue: 2020-07-28 Issue 0 (2014-01-31)
Applicant: **FEAM**
Via Mario Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy
Ex Component: Enclosures type ESA.... or ESX....

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **eb, tb**

Marking: Ex eb IIC Gb
Ex tb IIIC Db IP66 or IP65

Approved for issue on behalf of the IECEx
Certification Body:

Olivier COTTIN

Position:

Head of Equipment and Corporate Services Unit

Signature:
(for printed version)

Olivier COTTIN

Date:

2020.07.28

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



controlling risks |
for sustainable development |



IECEx Certificate of Conformity

Certificate No.: **IECEx INE 13.0102U**

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Date of issue: 2020-07-28

Issue No: 2

Manufacturer: **FEAM**
Via Mario Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy

Additional
manufacturing
locations:

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with 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 Reports:

[FR/INE/ExTR13.0105/02](#)

[HR/EXA/ExTR15.0010/00](#)

Quality Assessment Report:

[IT/CES/QAR09.0003/11](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx INE 13.0102U**

Page 3 of 5

Date of issue: 2020-07-28

Issue No: 2

Ex Component(s) covered by this certificate is described below:

These enclosures made in light alloy for the type ESA... or stainless steel for the type ESX... are protected by increased safety "eb" for gas atmospheres and protected by enclosure "tb" for dust atmospheres.
The ESA... enclosures could be closed by screws and the ESX... enclosures could be closed by screws or by key lock in accordance with the descriptive documents of the manufacturer.
These Ex Components get the degrees of protection IP66 or IP65 according to the IEC 60529 standard.

SCHEDULE OF LIMITATIONS:

For enclosures ESA... – ESX... (excepted for ESX closed by key lock):

- The tests (ageing tests, impact tests and IP tests) have been performed for a range of operating temperatures between -60°C up to +180°C.
- The impact tests have been carried out with an impact energy of 7J on the metallic parts and 4J on the window.
- These Ex Components get the degrees of protection IP66 according to the IEC 60529 standard.

For enclosures ESX... closed by key lock:

- The tests (ageing tests, impact tests and IP tests) have been performed for a range of operating temperatures between -60°C up to +100°C.
- The impact tests have been carried out with an impact energy of 7J on the metallic parts and 4J on the window.
- These Ex Components get the degrees of protection IP66 (with an additional protection plug required for Enclosures ESX150110 and ESX 200180) or IP65 for enclosures ESX150110 and ESX 200180 without protection plug according to the IEC 60529 standard.

The markings may be omitted if the Ex Component manufacturer is also intended to be the holder of the equipment certificate.



IECEx Certificate of Conformity

Certificate No.: **IECEx INE 13.0102U**

Page 4 of 5

Date of issue: 2020-07-28

Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Purpose of the Issue 2:

- Introduction of the new type of silicone gasket for enclosures type ESX.
- Introduction of new type of fixing brackets and internal frame for enclosures type ESX.
- Introduction of new type of hinges system for ESX enclosures.
- Application of the last edition of the standards listed in the certificate.

Purpose of the Issue 1:

- Extension of the maximum operating temperature from +100°C to +180°C for enclosures ESA – ESX (excepted for enclosures ESX closed by key lock)
- Introduction of 2 new versions of ESX enclosures : ESX150110 and ESX 200180
- Update of the thickness of ESA enclosures
- Application of the standard IEC 60079-31:2013



IECEx Certificate of Conformity

Certificate No.: **IECEx INE 13.0102U**

Page 5 of 5

Date of issue: 2020-07-28

Issue No: 2

Additional information:

PARAMETERS RELATING TO THE SAFETY

None.

MARKING

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

- FEAM
 - I – 20090 Trezzano Sul Naviglio (MI)
 - ESA... or ESX... (1)
 - IECEx INE 13.0102U
 - Ex eb IIC Gb
 - Ex tb IIIC Db IP66 or IP65
- (1) Type is completed by numbers and /or letters corresponding to manufacturing variations.

ROUTINE EXAMINATIONS AND TESTS

None.



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEX INE 13.0102U**

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Certificate history:

Status: **Current**

Issue No: 3

[Issue 2 \(2020-07-28\)](#)

[Issue 1 \(2016-03-01\)](#)

[Issue 0 \(2014-01-31\)](#)

Date of Issue: 2021-12-23

Applicant: **BARTEC F.N. S.R.L.**
Via M. Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy

Ex Component: Enclosures type ESA.... or ESX....

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **eb, tb**

Marking: Ex eb IIC Gb
Ex tb IIIC Db IP66 or IP65

Approved for issue on behalf of the IECEx
Certification Body:

Position:

Signature:
(for printed version)

Date:



Thierry HOUEIX

Ex Certification Officer

Signé électroniquement
Digitally signed by
Thierry HOUEIX
Ex Certification Officer
Délégué Certification

2021-12-23

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Certificate issued by:

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



controlling risks |
for sustainable development |



IECEX Certificate of Conformity

Certificate No.: **IECEX INE 13.0102U**

Page 2 of 4

Date of issue: 2021-12-23

Issue No: 3

Manufacturer: **BARTEC F.N. S.R.L.**
Via M. Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy

Additional
manufacturing
locations:

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 equipment 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 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with 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 Reports:

[FR/INE/ExTR13.0105/02](#)

[FR/INE/ExTR13.0105/03](#)

[HR/EXA/ExTR15.0010/00](#)

Quality Assessment Report:

[IT/CES/QAR09.0003/14](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX INE 13.0102U**

Page 3 of 4

Date of issue: 2021-12-23

Issue No: 3

Ex Component(s) covered by this certificate is described below:

These enclosures made in light alloy for the type ESA... or stainless steel for the type ESX... are protected by increased safety "eb" for gas atmospheres and protected by enclosure "tb" for dust atmospheres.
The ESA... enclosures could be closed by screws and the ESX... enclosures could be closed by screws or by key lock in accordance with the descriptive documents of the manufacturer.
These Ex Components get the degrees of protection IP66 or IP65 according to the IEC 60529 standard.

SCHEDULE OF LIMITATIONS:

For enclosures ESA... – ESX... (excepted for ESX closed by key lock):

- The tests (ageing tests, impact tests and IP tests) have been performed for a range of operating temperatures between -60°C up to +180°C.
- The impact tests have been carried out with an impact energy of 7J on the metallic parts and 4J on the window.
- These Ex Components get the degrees of protection IP66 according to the IEC 60529 standard.

For enclosures ESX... closed by key lock:

- The tests (ageing tests, impact tests and IP tests) have been performed for a range of operating temperatures between -60°C up to +100°C.
- The impact tests have been carried out with an impact energy of 7J on the metallic parts and 4J on the window.
- These Ex Components get the degrees of protection IP66 (with an additional protection plug required for Enclosures ESX150110 and ESX 200180) or IP65 for enclosures ESX150110 and ESX 200180 without protection plug according to the IEC 60529 standard.

The markings may be omitted if the Ex Component manufacturer is also intended to be the holder of the equipment certificate.



IECEX Certificate of Conformity

Certificate No.: **IECEX INE 13.0102U**

Page 4 of 4

Date of issue: 2021-12-23

Issue No: 3

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Purpose of the Issue 3:

- Change of the name and address of the applicant and manufacturer
- Update of the marking plates

Purpose of the Issue 2:

- Introduction of the new type of silicone gasket for enclosures type ESX.
- Introduction of new type of fixing brackets and internal frame for enclosures type ESX.
- Introduction of new type of hinges system for ESX enclosures.
- Application of the last edition of the standards listed in the certificate.

Purpose of the Issue 1:

- Extension of the maximum operating temperature from +100°C to +180°C for enclosures ESA – ESX (excepted for enclosures ESX closed by key lock)
- Introduction of 2 new versions of ESX enclosures : ESX150110 and ESX 200180
- Update of the thickness of ESA enclosures
- Application of the standard IEC 60079-31:2013

Annex:

[IECEX INE 13.0102U-03_Annex.pdf](#)



IECEX Certificate of Conformity

Certificate No.: IECEx INE 13.0102U

Issue No.: 03

Page 1 of 1

Annex: IECEx INE 13.0102U-03_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

None

MARKING

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

- BARTEC FN (*)
- I – 20090 Trezzano Sul Naviglio (MI)
- ESA... or ESX... (**)
- IECEx INE 13.0102U
- (Serial number)
- Ex eb IIC Gb
- Ex tb IIIC Db IP66 or IP65

(*) Optional Brands “BARTEC FEAM” or “BARTEC NASP” can be added in the marking with the sentence “manufactured by BARTEC FN”

(**) The type is completed by numbers and/or letters in accordance with the manufacturing variations.

ROUTINE EXAMINATIONS AND TESTS

None