

### 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 N Italy	aviglio (MI)		
Electrical Apparatus: Optional accessory:	Enclosures type ESA*** AND ESX***			
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		
This certificate and schedule may only be reproduced in full.     This certificate is not transferable and remains the property of the issuing body.     The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.				
Certificate issued by:				
Institut Nationa	INERIS al de l'Environnement Ind et des Risques	ustriel	MEDIC	
Parc 1	BP n2 Technologique AI ATA	II	<b>NERIS</b>	

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)

BP n2
Parc Technologique ALATA
F-60550 Verneuil-En-Halatte
France



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)

Italv

#### 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 Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-31 : 2008 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

Edition: 1

IEC 60079-7: 2006-07 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition: 4

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:** 



### of Conformity

Certificate No.:	IECEx INE 13.0102U			
Date of Issue:	2014-01-31	Issue No.: 0		
		Page 3 of 4		
	Schedu	ule		
EQUIPMENT: Equipment and systems covered	d by this certificate are as follow	s:		
increased safety "e" for gas a	tmospheres and protected by	tainless steel for the type ESX are protected by enclosure "tb" for dust atmospheres. according to the IEC 60529 standard.		
SCHEDULE OF LIMITATIONS These components have bee	n assessed to be used with a	n 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				



### of Conformity

Certificate No.: IECEx INE 13.0102U

2014-01-31 Date of Issue: Issue No.: 0

Page 4 of 4

#### Additional information:

#### **PARAMETERS RELATING TO THE SAFETY**

None

#### **MARKING**

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

- I 20090 TREZZANO SUL NAVIGLIO (MI) ESA\*\*\* or ESX\*\*\* (1)
- IECEx INE 13.0102Ú
- 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.



### 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:

Issue No. 1 (2016-03-01)

Status:

Current

Page 1 of 5

Issue No. 0 (2014-01-31)

Date of Issue:

2016-03-01

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:

Signature:

(for printed version)

Date:

Ex Certification Officer

2016-03-01

- 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.

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 COFRAC website www.cofrac.fr)

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





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

Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-31: 2013

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

Edition:2

IEC 60079-7: 2006-07

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition:4

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:** 



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



Certificate No:

IECEx INE 13.0102U

Issue No: 1

Date of Issue:

2016-03-01

Page 4 of 5

#### 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



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:

- ·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.



Issue No: 2

### 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:

Issue 1 (2016-03-01) Issue 0 (2014-01-31)

Status: Current

Date of Issue: 2020-07-28

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:

Signature:

Date:

(for printed version)

Head of Equipment and Corporate Services Unit

Olivier COTTIN

2020.07.28

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 www.iecex.com or use of this QR Code.



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



Certificate No.: IECEx INE 13.0102U Page 2 of 5

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

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

IEC 60079-7:2017 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:** 



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.



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



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:

- FFAM
- 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



### 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 4

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

Certification Officer Digitally signed by Thierry HOUEIX

Signé électroniquement

T Digitally signed by
Thierry HOUEIX
Ex Certification Officer
Déléqué Certification

2021-12-23

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 www.iecex.com or use of this QR Code.



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



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:



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.



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



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