

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 13.0069X Issue No: 0 Certificate history:
Issue No. 0 (2015-02-02)

Status: **Current** Page 1 of 3

Date of Issue: **2015-02-02**

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

Electrical Apparatus: **Enclosures type GUE*, GUB* or GUBW***
Optional accessory:

Type of Protection: **d, d[ia], d[ib], tb, tb[ia] or tb[ib]**

Marking:
Ex d IIC T6 or T5 or T4 or T3 Gb
Ex d[ia] IIA or IIB or IIC Ga] IIC T6 or T5 or T4 or T3 Gb
Ex d[ib] IIA or IIB or IIC] IIC T6 or T5 or T4 or T3 Gb
Ex tb IIC T85°C or T100°C or T135°C or T200°C Db
Ex tb[ia Da] IIC T85°C or T100°C or T135°C or T200°C Db
Ex tb[ib] IIC T85°C or T100°C or T135°C or T200°C Db

Approved for issue on behalf of the IECEx
Certification Body:

Thierry HOUEIX

Position:

Ex Certification Officer

Signature:
(for printed version)

Date:

2015-02-02



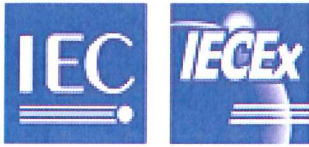
1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

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 COFRAC website www.cofrac.fr)

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



IECEX Certificate of Conformity

Certificate No: IECEX INE 13.0069X Issue No: 0
Date of Issue: 2015-02-02 Page 2 of 3
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 60079-1 : 2007-04 Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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:

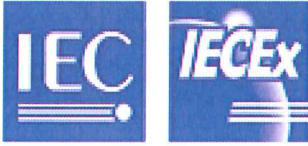
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[FR/INE/ExTR13.0069/00](#)

Quality Assessment Report:

[IT/CES/QAR09.0003/05](#)



IECEX Certificate of Conformity

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Issue No: 0

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The metallic enclosures made in aluminum alloy, stainless steel, carbon steel or cast iron are covered by the certificate IECEx INE 13.0082U.

These enclosures can have a blind cover or provided with a glass window. The enclosures can be fitted with tubes of maximum diameter 3" and maximum length 200 mm in order to assembly two flameproof enclosures separated by a certified sealing fitting in accordance with the drawing specified in the descriptive documents.

Enclosures could be fitted with accessories covered by a IECEx component certificates. The list of the components is defined in the technical documentation. The accessories covered by the component certificates IECEx INE 13.0073U could be fitted without their marking due to the fact that the drawings of these components are also listed in the certification file.

They can also contain 'IS' element covered by a separated certificate.

Three different types of batteries defined in the technical documentation could be installed inside the enclosure.

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

CONDITIONS OF CERTIFICATION: YES as shown below.

The width of the flameproof joints is superior to those specified in tables of IEC 60079-1 standard.

During the installation, the user will take into consideration that pilot light type EFL*PC* underwent only a shock corresponding to an energy of a low risk at 2 J.

Annex:

[IECEX INE 13.0069X-00_Annex.pdf](#)



IECEX Certificate of Conformity

Certificate No.: IECEX INE 13.0069X

Issue No.: 0

Page 1 of 6

Annexe: IECEX INE 13.0069X-00_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

For enclosure without intrinsic safety element:

These versions are intended to be used in range of ambient temperatures from:

-60°C or -40°C or -20°C to +40°C or +60°C or +80°C

Maximum supply voltage : 6.6 kVac or 750 Vdc

Maximum current : 2 000 A

Rated frequency : 0/50/60 Hz

Maximum dissipated powers are defined in the Table 1 for enclosures without window and Table 2 for enclosures with window(s).

For enclosure with intrinsic safety element:

These versions are intended to be used in range of ambient temperatures from:

-60°C or -40°C or -20°C to +40°C or +60°C

The ambient temperature must be in accordance with the IS components installed inside the enclosures (Barriers, terminals...)

Maximum supply voltage for Non 'IS' elements : 1000 Vac or Vdc

Maximum supply voltage for "IS" elements : 250 V

Maximum dissipated powers are defined in the Table 1 or 2 for enclosures with thermal probes.

Maximum dissipated powers are defined in the Table 3 for enclosures without thermal probes.

The maximum threshold of thermal probe shall be:

Ambient temperature of the enclosure	Ambient temperature of the IS element	Threshold of release of the thermal probe
40°C	≤ 60°C	55°C ± 5°C
	≤ 70°C	65°C ± 5°C
60°C	≤ 80°C	75°C ± 5°C



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Certificate No.: IECEX INE 13.0069X

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Annexe: IECEX INE 13.0069X-00_Annex.pdf

MARKING

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

A – Enclosures without intrinsic safety element:

FEAM

I - 20090 Trezzano sul Naviglio (MI)

GUE(*) or GUB(*) or GUBW(*)

IECEX INE 13.0069X

(Serial number)

Ex d IIC T(**) Gb

Ex tb IIIC T(**) Db IP66

... °C < Tamb < ... °C (***)

T.Cable : (****)

WARNINGS: DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

- (*) Type is completed by numbers and/or letters corresponding to size of the enclosure
- (**) Temperature class in accordance with Table 1 or 2 regarding to the maximum dissipated power
- (***) See parameters relating to the safety.
- (****) See Table 1 or 2

B - Enclosures with intrinsic safety element [ia]:

FEAM

I - 20090 Trezzano sul Naviglio (MI)

GUE(*) or GUB(*) or GUBW(*)

IECEX INE 13.0069X

(Serial number)

Ex d [ia IIA or IIB or IIC Ga] IIC T(**) Gb

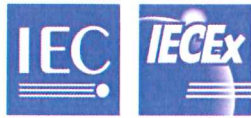
Ex tb [ia Da] IIIC T(**) Db IP66

... °C < Tamb < ... °C (***)

T.Cable : (****)

WARNINGS: DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

- (*) Type is completed by numbers and/or letters corresponding to size of the enclosure
- (**) Temperature class in accordance with Table 1 or 2 regarding to the maximum dissipated power
- (***) See parameters relating to the safety.
- (****) See Table 1, 2 or 3



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C - Enclosures with intrinsic safety element [ib]:

FEAM

I - 20090 Trezzano sul Naviglio (MI)

GUE(*) or GUB(*) or GUBW(*)

IECEX INE 13.0069X

(Serial number)

Ex d [ib IIA or IIB or IIC] IIC T(**) Gb

Ex tb [ib] IIIC T(**) Db IP66

... °C < Tamb < ... °C (***)

T.Cable : (****)

WARNINGS: DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

- (*) Type is completed by number and/or letters corresponding to size of the enclosure
- (**) Temperature class in accordance with Table 1 or 2 regarding to the maximum dissipated power
- (***) See parameters relating to the safety.
- (****) See Table 1, 2 or 3

ROUTINE EXAMINATIONS AND TESTS

None



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TABLE 1: Maximum dissipated power for GUB without windows and with or without IS barrier protected by thermal probes (W)											
Temperature class :	T6/T85 °C		T5/T100 °C			T4/T135 °C			T3/T200 °C		
Ambient temperature:	+40 °C	+60 °C	+40 °C	+60 °C	+80 °C	+40 °C	+60 °C	+80 °C	+40 °C	+60 °C	+80 °C
GUE1	24	12	33	21	9	54	42	36	94	82	70
GUB0	35	17	48	30	13	79	61	52	137	119	102
GUB1	49	24	68	43	18	112	87	74	194	169	144
GUB23	91	45	126	80	33	208	162	137	360	314	267
GUB03	108	53	150	95	40	247	191	163	427	372	317
GUB4	240	114	333	207	81	553	427	366	963	837	711
GUB5	472	224	656	408	160	1088	840	720	1896	1648	1400
Allowed operators from IECEx INE 13.0073U	Operators with NBR, EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*		Operators with EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			Operators with EPDM, LSR or MVQ gaskets			Operators with LSR or MVQ gaskets		
Allowed accessories from IECEx TUN 12.0025U and 11.0038U and IECEx EXA 13.0001U (1)	All, excepted valves who are allowed only for dust application.								-		
Allowed accessories from IECEx EXA 14.0005U, IECEx EXA 14.0004U, and IECEx EXA 14.0006U.	Can be fitted on all GUB										
TCABLE	N/A		95 °C			130 °C			175 °C		

(1) The components covered by the certificate IECEx EXA 13.0001U can be only used in a minimum ambient temperature until -55 °C



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TABLE 2: Maximum dissipated power for GUB with windows and with or without IS barrier protected by thermal probes (W)											
Temperature class :	T6/T85 °C		T5/T100 °C			T4/T135 °C			T3/T200 °C		
Ambient temperature:	+40 °C	+60 °C	+40 °C	+60 °C	+80 °C	+40 °C	+60 °C	+80 °C	+40 °C	+60 °C	+80 °C
GUBW1	42	19	60	36	12	66	48	31	66	48	31
GUBW23	78	35	111	68	23	123	89	57	123	89	57
GUBW03	92	41	132	80	27	146	106	68	146	106	68
GUBW4	175	78	251	152	51	277	201	129	277	201	129
Allowed operators from IECEx INE 13.0073U	Operators with NBR, EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*		Operators with EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			Operators with EPDM, LSR or MVQ gaskets			Operators with EPDM, LSR or MVQ gaskets		
Allowed accessories from IECEx TUN 12.0025U and 11.0038U and IECEx EXA 13.0001U (1)	All, excepted valves who are allowed only for dust application.										
Allowed accessories from IECEx EXA 14.0005U, IECEx EXA 14.0004U, and IECEx EXA 14.0006U.	Can be fitted on all GUB										
TCABLE	N/A		95 °C			105 °C			105 °C		

(1) The components covered by the certificate IECEx EXA 13.0001U can be only used in a minimum ambient temperature until -55 °C



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TABLE 3 :

Maximum dissipated power for GUB with IS barrier without thermal probes protection

Type of enclosure	Ambient temperature of the intrinsic safety element	T6 for ambient (W)		Type of enclosure	Ambient temperature of the intrinsic safety element	T6 for ambient (W)	
		40 °C	60 °C			40 °C	60 °C
GUE1	60 °C	7	NC	GUB03/GUBW03	60 °C	33	NC
	70 °C	12	NC		70 °C	53	NC
	80 °C	16	7		80 °C	73	33
GUB0	60 °C	11	NC	GUB4/GUBW4	60 °C	57	NC
	70 °C	17	NC		70 °C	87	NC
	80 °C	23	11		80 °C	116	57
GUB1/GUBW1	60 °C	15	NC	GUB5	60 °C	112	NC
	70 °C	24	NC		70 °C	172	NC
	80 °C	33	15		80 °C	228	112
GUB23/GUBW23	60 °C	28	NC				
	70 °C	45	NC				
	80 °C	61	28				



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 13.0069X Issue No: 1 Certificate history:
Issue No. 1 (2019-02-04)
Issue No. 0 (2015-02-02)

Status: Current Page 1 of 4

Date of Issue: 2019-02-04

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

Equipment: Enclosures type GUB* or GUBW*
Optional accessory:

Type of Protection: db, db[ia], db[ib], db[ic], tb, tb[ia], tb[ib], tb[ic]

Marking:
Ex db IIC T6...T3 Gb
Ex db [ia IIA or IIB or IIC Ga] IIC T6...T3 Gb
Ex db [ib IIA or IIB or IIC] IIC T6...T3 Gb
Ex db [ic IIA or IIB or IIC Gc] IIC T6...T3 Gb

Ex tb IIIC T85°C...T200°C Db
Ex tb [ia Da] IIIC T85°C...T200°C Db
Ex tb [ib] IIIC T85°C...T200°C Db
Ex tb [ic Dc] IIIC T85°C...T200°C Db

Approved for issue on behalf of the IECEx
Certification Body:

Thierry HOUEIX

Position:

Ex Certification Officer

Signature:
(for printed version)



Date:

2019-02-04

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Certificate issued by:

INERIS
Institut National de l'Environnement Industriel
et des Risques, BP n2
Parc Technologique ALATA
France



IECEX Certificate of Conformity

Certificate No: IECEX INE 13.0069X

Issue No: 1

Date of Issue: 2019-02-04

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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 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 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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/ExTR13.0069/01](#)

Quality Assessment Report:

[IT/CES/QAR09.0003/10](#)



IECEX Certificate of Conformity

Certificate No: IECEx INE 13.0069X

Issue No: 1

Date of Issue: 2019-02-04

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The metallic enclosures made in aluminum alloy, stainless steel, carbon steel or cast iron are covered by the certificate IECEx INE 13.0082U.

These enclosures can have a blind cover or provided with a glass window. The enclosures can be fitted with tubes of maximum diameter 3" and maximum length 200 mm in order to assembly two flameproof enclosures separated by a certified sealing fitting in accordance with the drawing specified in the descriptive documents.

Enclosures could be fitted with accessories covered by a IECEx component certificates. The list of the components is defined in the technical documentation. The accessories covered by the component certificates IECEx INE 13.0073U could be fitted without their marking due to the fact that the drawings of these components are also listed in the certification file.

They can also contain 'IS' element covered by a separated certificate.

Three different types of batteries defined in the technical documentation could be installed inside the enclosure.

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

SPECIFIC CONDITIONS OF USE: YES as shown below:

The width of the flameproof joints is superior to those specified in tables of IEC 60079-1 standard.
During the installation, the user will take into consideration that pilot light type EFL*PC* underwent only a shock corresponding to an energy of a low risk at 2 J.



IECEX Certificate of Conformity

Certificate No: IECEx INE 13.0069X

Issue No: 1

Date of Issue: 2019-02-04

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

For issue N°01 of certificate IECEx INE 13.0069X _

- Application of new version of standard IEC 60079-1:2014
- Ambient temperature of +50°C added on dissipated power and maximum threshold of thermal probe tables
- Possibility to mounting on enclosure the line bushings by Bartec covered by the component certificates : IECEx EPS 13.0045U and IECEx EPS 14.0020U.

Annex:

[IECEX INE 13.0069X-01_Annex.pdf](#)



IECEX Certificate of Conformity

Certificate No.: IECEX INE 13.0069X

Issue No.: 01

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Annex: IECEX INE 13.0069X-01_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

For enclosure without intrinsic safety element:

These versions are intended to be used in range of ambient temperatures from:
-60°C or -40°C or -20°C to +40°C or +50°C or +60°C or +80°C

Maximum supply voltage: 13 kVac or 750 Vdc
Maximum current: 2 000 A
Rated frequency: 0/50/60 Hz

Maximum dissipated powers are defined in the Table 1 for enclosures without window and Table 2 for enclosures with window(s).

For enclosure with intrinsic safety element:

These versions are intended to be used in range of ambient temperatures from:
-60°C or -40°C or -20°C to +40°C or +50°C or +60°C

The ambient temperature must be in accordance with the IS components installed inside the enclosures (Barriers, terminals...)

Maximum supply voltage for Non 'IS' elements: 1000 Vac or Vdc
Maximum supply voltage for "IS" elements: 250 V

Maximum dissipated powers are defined in the Table 1 or 2 for enclosures with thermal probes.
Maximum dissipated powers are defined in the Table 3 for enclosures without thermal probes.

The maximum threshold of thermal probe shall be:

Ambient temperature of the enclosure	Ambient temperature of the IS element	Threshold of release of the thermal probe
40°C	≤ 60°C	55°C ± 5°C
	≤ 70°C	65°C ± 5°C
50°C	≤ 60°C	55°C ± 5°C
	≤ 70°C	65°C ± 5°C
	≤ 80°C	75°C ± 5°C
60°C	≤ 70°C	65°C ± 5°C
	≤ 80°C	75°C ± 5°C

MARKING

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

A - Enclosures without intrinsic safety element:

- FEAM
- I – 20090 Trezzano Sul Naviglio
- GUB* - GUBW* (*)
- IECEX INE 13.0069X
- (Serial number)
- Ex db IIC T6...T3 Gb
- Ex tb IIIC T85°C...T200°C Db IP66
- ...°C < Tamb < ...°C (**)
- T.Cable : (***)
- Cable entry: see instructions
- WARNINGS: DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT



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B - Enclosures with intrinsic safety element :

- FEAM
- I – 20090 Trezzano Sul Naviglio
- GUB* - GUBW* (*)
- IECEX INE 13.0069X
- (Serial number)
- Ex db [ia IIA ou IIB ou IIC Ga] IIC T6...T3Gb
- Ex tb [ia Da] IIIC T85°C...T200°C Db IP66
- or
- E Ex db [ib IIA ou IIB ou IIC] IIC T6...T3Gb
- Ex tb [ib] IIIC T85°C...T200°C Db IP66
- or
- Ex db [ic IIA ou IIB ou IIC Gc] IIC T6...T3Gb
- Ex tb [ic Dc] IIIC T85°C...T200°C Db IP66
- ...°C < Tamb < ...°C (**)
- T.Cable : (***)
- Cable entry: see instructions
- WARNINGS: DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

(*) Type is completed by number and/or letters corresponding to size of the enclosure

(**) See parameters relating to the safety.

(***) See tables 1, 2 or 3

ROUTINE EXAMINATIONS AND TESTS

None: covered by the Ex component certificates IECEX INE 13.0082U.

For the line bushings covered by certificates IECEX EPS 13.0045U and IECEX EPS 14.0020U (if Tamb = -60°C)

In accordance with clause 16.6 of the EN 60079-1 standard, the equipment defined above that has undergone a static type test at 3 times the reference pressure under 48.6 bar, the routine overpressure test could be replaced by a batch test according the criteria specified in this clause. The samples of the production batch must have successfully passed an overpressure test, of a period comprised between 10 and 60 seconds under 18.6 bar.



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Certificate No.: IECEx INE 13.0069X

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TABLE 1:

Maximum dissipated power for GUB without windows and with or without IS barrier protected by thermal probes (W)

Temperature class	T6/T85°C			T5/T100°C			
	+40°C	+50°C	+60°C	+40°C	+50°C	+60°C	+80°C (2)
Ambient temperature							
GUB00	24	14	12	33	23	21	9
GUB0	35	21	17	48	35	30	13
GUB1	49	37	24	68	54	43	18
GUB23	91	55	45	126	89	80	33
GUB03	108	67	53	150	106	95	40
GUB4	240	175	114	333	274	207	81
GUB5	472	341	224	656	538	408	160
Allowed operators from IECEx INE 13.0072U	Operators with NBR, EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			Operators with EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			
Allowed accessories from IECEx TUN 12.0025U IECEX TUN 11.0038U IECEX EXA 13.0001U (1)	All, excepted valves who are allowed only for dust application.						
Allowed accessories from IECEx EXA 14.0004U IECEX EXA 14.0005U IECEX EXA 14.0006U	Can be fitted on all GUB						
Allowed bushing line from IECEx EPS 13.0045U IECEX EPS 14.0020U	Can be fitted on all GUB						
TCABLE	N/A			95°C			

Temperature class	T4/T135°C				T3/T200°C			
	+40°C	+50°C	+60°C	+80°C (2)	+40°C	+50°C	+60°C	+80°C (2)
Ambient temperature								
GUB00	54	48	42	30	94	89	82	70
GUB0	79	70	61	44	137	129	119	102
GUB1	112	100	87	62	194	182	169	144
GUB23	208	185	162	115	360	340	314	267
GUB03	247	219	191	136	427	3403	372	317
GUB4	553	491	427	302	963	898	837	711
GUB5	1088	966	840	594	1896	1771	1648	1400
Allowed operators from IECEx INE 13.0072U	Operators with EPDM, LSR or MVQ gaskets				Operators with LSR or MVQ gaskets			
Allowed accessories from IECEx TUN 12.0025U IECEX TUN 11.0038U IECEX EXA 13.0001U (1)	All, excepted valves who are allowed only for dust application.							
Allowed accessories from IECEx EXA 14.0004U IECEX EXA 14.0005U IECEX EXA 14.0006U	Can be fitted on all GUB							
Allowed bushing line from IECEx EPS 13.0045U IECEX EPS 14.0020U								
TCABLE	130°C				175°C			

- (1) The components covered by the certificate IECEx EXA 13.0001U can be only used in a minimum ambient temperature until -55°C.
- (2) Not allowed for enclosures with IS barrier.



IECEX Certificate of Conformity

Certificate No.: IECEX INE 13.0069X

Issue No.: 01

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Annex: IECEX INE 13.0069X-01_Annex.pdf

TABLE 2:

Maximum dissipated power for GUB with windows and with or without IS barrier protected by thermal probes (W)

Temperature class	T6/T85°C			T5/T100°C			
	+40°C	+50°C	+60°C	+40°C	+50°C	+60°C	+80°C (2)
GUBW1	42	30	19	60	40	36	12
GUBW23	78	55	35	111	74	68	23
GUBW03	92	67	41	132	106	80	27
GUBW4	175	125	78	251	166	152	51
Allowed operators from IECEX INE 13.0072U	Operators with NBR, EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			Operators with EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			
Allowed accessories from IECEX TUN 12.0025U IECEX TUN 11.0038U IECEX EXA 13.0001U (1)	All, excepted valves who are allowed only for dust application.						
Allowed accessories from IECEX EXA 14.0004U IECEX EXA 14.0005U IECEX EXA 14.0006U	Can be fitted on all GUB						
Allowed bushing line from IECEX EPS 13.0045U IECEX EPS 14.0020U	Can be fitted on all GUB						
TCABLE	N/A			95°C			

Temperature class	T4/T135°C				T3/T200°C			
	+40°C	+50°C	+60°C	+80°C (2)	+40°C	+50°C	+60°C	+80°C (2)
GUBW1	66	58	48	31	66	58	48	31
GUBW23	123	107	89	57	123	107	89	57
GUBW03	146	126	106	68	146	126	106	68
GUBW4	277	241	201	129	277	241	201	129
Allowed operators from IECEX INE 13.0072U	Operators with EPDM, LSR or MVQ gaskets				Operators with LSR or MVQ gaskets			
Allowed accessories from IECEX TUN 12.0025U IECEX TUN 11.0038U IECEX EXA 13.0001U (1)	All, excepted valves who are allowed only for dust application.							
Allowed accessories from IECEX EXA 14.0004U IECEX EXA 14.0005U IECEX EXA 14.0006U	Can be fitted on all GUB							
Allowed bushing line from IECEX EPS 13.0045U IECEX EPS 14.0020U	Can be fitted on all GUB							
TCABLE	105°C				105°C			

- (1) The components covered by the certificate IECEX EXA 13.0001U can be only used in a minimum ambient temperature until -55°C.
- (2) Not allowed for enclosures with IS barrier.



IECEX Certificate of Conformity

Certificate No.: IECEX INE 13.0069X

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TABLE 3:
Maximum dissipated power for GUB with intrinsic safety barrier without thermal probes

Type of enclosure	Ambient temperature of the intrinsic safety element	T6/T85°C for ambient (W)		
		+40°C	+50°C	+60°C
GUB00	60°C	7	NC	NC
	70°C	12	7	NC
	80°C	16	12	7
GUB0	60°C	11	NC	NC
	70°C	17	11	NC
	80°C	23	17	11
GUB1/GUBW1	60°C	15	NC	NC
	70°C	24	15	NC
	80°C	33	24	15
GUB23/GUBW23	60°C	28	NC	NC
	70°C	45	28	NC
	80°C	61	45	28
GUB03/GUBW03	60°C	33	NC	NC
	70°C	53	33	NC
	80°C	73	53	33
GUB4/GUBW4	60°C	57	NC	NC
	70°C	87	57	NC
	80°C	116	87	57
GUB5	60°C	112	NC	NC
	70°C	172	112	NC
	80°C	228	172	112



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Certificate No.: IECEX INE 13.0069X

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TABLE 4:

List of the components intended to be installed on the enclosures

Type of component	Certificate number	Editions of the standard
Enclosures	IECEX INE 13.0077U	IEC 60079-0: 2011 IEC 60079-1: 2014 IEC 60079-31: 2013
Operators	IECEX INE 13.0072U	IEC 60079-0: 2011 IEC 60079-1: 2014 IEC 60079-31: 2013
Accessories	IECEX TUN 12.0025U IECEX TUN 11.0038U IECEX EXA 13.0001U	IEC 60079-0: 2011 IEC 60079-1: 2007 (*) IEC 60079-31: 2008 (*)
Accessories	IECEX EXA 14.0004U IECEX EXA 14.0005U IECEX EXA 14.0006U	IEC 60079-0: 2011 IEC 60079-1: 2007 (*) IEC 60079-31: 2013
Line bushings	IECEX EPS 13.0045U	IEC 60079-0: 2011 IEC 60079-1: 2014
Line bushings	IECEX EPS 14.0020U	IEC 60079-0: 2011 IEC 60079-1: 2007 (*) IEC 60079-7: 2006 (*)

(*) Not concerned by the major technical changes of the last edition of the standards.



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

Certificate No.: **IECEX INE 13.0069X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 2 [Issue 1 \(2019-02-04\)](#)
[Issue 0 \(2015-02-02\)](#)
Date of Issue: 2021-12-22
Applicant: **BARTEC F.N. S.R.L.**
Via M. Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy
Equipment: **Enclosures type GUB* or GUBW***
Optional accessory:
Type of Protection: **db, db[ia], db[ib], db[ic], tb, tb[ia], tb[ib], tb[ic]**
Marking:
Ex db IIC T6...T3 Gb
Ex db [ia IIA or IIB or IIC Ga] IIC T6...T3 Gb
Ex db [ib IIA or IIB or IIC] IIC T6...T3 Gb
Ex db [ic IIA or IIB or IIC Gc] IIC T6...T3 Gb

Ex tb IIIC T85°C...T200°C Db
Ex tb [ia Da] IIIC T85°C...T200°C Db
Ex tb [ib] IIIC T85°C...T200°C Db
Ex tb [ic Dc] IIIC T85°C...T200°C Db

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

2021-12-22

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for sustainable development |



IECEX Certificate of Conformity

Certificate No.: **IECEX INE 13.0069X**

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Date of issue: 2021-12-22

Issue No: 2

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 60079-0:2011](#) Explosive atmospheres - Part 0: General requirements
Edition:6.0

[IEC 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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

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/ExTR13.0069/01](#)

[FR/INE/ExTR13.0069/02](#)

Quality Assessment Report:

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



IECEX Certificate of Conformity

Certificate No.: **IECEX INE 13.0069X**

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Date of issue: 2021-12-22

Issue No: 2

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The metallic enclosures made in aluminum alloy, stainless steel, carbon steel or cast iron are covered by the certificate IECEx INE 13.0082U.

These enclosures can have a blind cover or provided with a glass window. The enclosures can be fitted with tubes of maximum diameter 3" and maximum length 200 mm in order to assembly two flameproof enclosures separated by a certified sealing fitting in accordance with the drawing specified in the descriptive documents.

Enclosures could be fitted with accessories covered by a IECEx component certificates. The list of the components is defined in the technical documentation. The accessories covered by the component certificates IECEx INE 13.0073U could be fitted without their marking due to the fact that the drawings of these components are also listed in the certification file.

They can also contain 'IS' element covered by a separated certificate.

Three different types of batteries defined in the technical documentation could be installed inside the enclosure.

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

SPECIFIC CONDITIONS OF USE: YES as shown below:

The width of the flameproof joints is superior to those specified in tables of IEC 60079-1 standard.

During the installation, the user will take into consideration that pilot light type EFL*PC* underwent only a shock corresponding to an energy of a low risk at 2 J.



IECEX Certificate of Conformity

Certificate No.: **IECEX INE 13.0069X**

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Date of issue: 2021-12-22

Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

For issue N°02 of certificate IECEx INE 13.0069X

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

For issue N°01 of certificate IECEx INE 13.0069X

- Application of new version of standard IEC 60079-1:2014
- Ambient temperature of +50°C added on dissipated power and maximum threshold of thermal probe tables
- Possibility to mounting on enclosure the line bushings by Bartec covered by the component certificates : IECEx EPS 13.0045U and IECEx EPS 14.0020U.

Annex:

[IECEX INE 13.0069X-02_Annex.pdf](#)



IECEX Certificate of Conformity

Certificate No.: IECEx INE 13.0069X

Issue No.: 02

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Annex: IECEx INE 13.0069X-02_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

For enclosure without intrinsic safety element:

These versions are intended to be used in range of ambient temperatures from:
-60°C or -40°C or -20°C to +40°C or +50°C or +60°C or +80°C

Maximum supply voltage: 13 kVac or 750 Vdc
Maximum current: 2 000 A
Rated frequency: 0/50/60 Hz

Maximum dissipated powers are defined in the Table 1 for enclosures without window and Table 2 for enclosures with window(s).

For enclosure with intrinsic safety element:

These versions are intended to be used in range of ambient temperatures from:
-60°C or -40°C or -20°C to +40°C or +50°C or +60°C

The ambient temperature must be in accordance with the IS components installed inside the enclosures (Barriers, terminals...)

Maximum supply voltage for Non 'IS' elements: 1000 Vac or Vdc
Maximum supply voltage for "IS" elements: 250 V

Maximum dissipated powers are defined in the Table 1 or 2 for enclosures with thermal probes.

Maximum dissipated powers are defined in the Table 3 for enclosures without thermal probes.

The maximum threshold of thermal probe shall be:

Ambient temperature of the enclosure	Ambient temperature of the IS element	Threshold of release of the thermal probe
40°C	≤ 60°C	55°C ± 5°C
	≤ 70°C	65°C ± 5°C
50°C	≤ 60°C	55°C ± 5°C
	≤ 70°C	65°C ± 5°C
	≤ 80°C	75°C ± 5°C
60°C	≤ 70°C	65°C ± 5°C
	≤ 80°C	75°C ± 5°C

MARKING

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

A - Enclosures without intrinsic safety element:

- BARTEC FN (*)
- I – 20090 Trezzano Sul Naviglio
- GUB* - GUBW* (**)
- IECEx INE 13.0069X
- (Serial number)
- Ex db IIC T6...T3 Gb
- Ex tb IIIC T85°C...T200°C Db IP66
- ...°C < Tamb < ...°C (***)
- T.Cable : (****)
- Cable entry: see instructions
- WARNINGS: DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT



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B - Enclosures with intrinsic safety element:

- BARTEC FN (*)
- I – 20090 Trezzano Sul Naviglio
- GUB* - GUBW* (**)
- IECEx INE 13.0069X
- (Serial number)
- Ex db [ia IIA ou IIB ou IIC Ga] IIC T6...T3Gb
- Ex tb [ia Da] IIIC T85°C...T200°C Db IP66
- or
- E Ex db [ib IIA ou IIB ou IIC] IIC T6...T3Gb
- Ex tb [ib] IIIC T85°C...T200°C Db IP66
- or
- Ex db [ic IIA ou IIB ou IIC Gc] IIC T6...T3Gb
- Ex tb [ic Dc] IIIC T85°C...T200°C Db IP66
- ...°C < Tamb < ...°C (***)
- T.Cable : (****)
- Cable entry: see instructions
- WARNINGS: DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

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

(**) Type is completed by number and/or letters corresponding to size of the enclosure

(***) See parameters relating to the safety.

(****) See tables 1, 2 or 3

ROUTINE EXAMINATIONS AND TESTS

None: covered by the Ex component certificates IECEx INE 13.0082U.

For the line bushings covered by certificates IECEx EPS 13.0045U and IECEx EPS 14.0020U (if Tamb = -60°C)

In accordance with clause 16.6 of the EN 60079-1 standard, the equipment defined above that has undergone a static type test at 3 times the reference pressure under 48.6 bar, the routine overpressure test could be replaced by a batch test according the criteria specified in this clause. The samples of the production batch must have successfully passed an overpressure test, of a period comprised between 10 and 60 seconds under 18.6 bar.



IECEx Certificate of Conformity

Certificate No.: IECEx INE 13.0069X

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Annex: IECEx INE 13.0069X-02_Annex.pdf

TABLE 1:

Maximum dissipated power for GUB without windows and with or without IS barrier protected by thermal probes (W)

Temperature class	T6/T85°C			T5/T100°C			
	Ambient temperature	+40°C	+50°C	+60°C	+40°C	+50°C	+60°C
GUB00	24	14	12	33	23	21	9
GUB0	35	21	17	48	35	30	13
GUB1	49	37	24	68	54	43	18
GUB23	91	55	45	126	89	80	33
GUB03	108	67	53	150	106	95	40
GUB4	240	175	114	333	274	207	81
GUB5	472	341	224	656	538	408	160
Allowed operators from IECEx INE 13.0072U	Operators with NBR, EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			Operators with EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			
Allowed accessories from IECEx TUN 12.0025U IECEx TUN 11.0038U IECEx EXA 13.0001U (1)	All, excepted valves who are allowed only for dust application.						
Allowed accessories from IECEx EXA 14.0004U IECEx EXA 14.0005U IECEx EXA 14.0006U	Can be fitted on all GUB						
Allowed bushing line from IECEx EPS 13.0045U IECEx EPS 14.0020U	Can be fitted on all GUB						
TCABLE	N/A			95°C			

Temperature class	T4/T135°C				T3/T200°C			
	Ambient temperature	+40°C	+50°C	+60°C	+80°C (2)	+40°C	+50°C	+60°C
GUB00	54	48	42	30	94	89	82	70
GUB0	79	70	61	44	137	129	119	102
GUB1	112	100	87	62	194	182	169	144
GUB23	208	185	162	115	360	340	314	267
GUB03	247	219	191	136	427	3403	372	317
GUB4	553	491	427	302	963	898	837	711
GUB5	1088	966	840	594	1896	1771	1648	1400
Allowed operators from IECEx INE 13.0072U	Operators with EPDM, LSR or MVQ gaskets				Operators with LSR or MVQ gaskets			
Allowed accessories from IECEx TUN 12.0025U IECEx TUN 11.0038U IECEx EXA 13.0001U (1)	All, excepted valves who are allowed only for dust application.							
Allowed accessories from IECEx EXA 14.0004U IECEx EXA 14.0005U IECEx EXA 14.0006U	Can be fitted on all GUB							
Allowed bushing line from IECEx EPS 13.0045U IECEx EPS 14.0020U								
TCABLE	130°C				175°C			

(1) The components covered by the certificate IECEx EXA 13.0001U can be only used in a minimum ambient temperature until -55°C.
 (2) Not allowed for enclosures with IS barrier.



IECEX Certificate of Conformity

Certificate No.: IECEx INE 13.0069X

Issue No.: 02

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Annex: IECEx INE 13.0069X-02_Annex.pdf

TABLE 2:

Maximum dissipated power for GUB with windows and with or without IS barrier protected by thermal probes (W)

Temperature class	T6/T85°C			T5/T100°C			
	+40°C	+50°C	+60°C	+40°C	+50°C	+60°C	+80°C (2)
GUBW1	42	30	19	60	40	36	12
GUBW23	78	55	35	111	74	68	23
GUBW03	92	67	41	132	106	80	27
GUBW4	175	125	78	251	166	152	51
Allowed operators from IECEx INE 13.0072U	Operators with NBR, EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			Operators with EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			
Allowed accessories from IECEx TUN 12.0025U IECEX TUN 11.0038U IECEX EXA 13.0001U (1)	All, excepted valves who are allowed only for dust application.						
Allowed accessories from IECEx EXA 14.0004U IECEX EXA 14.0005U IECEX EXA 14.0006U	Can be fitted on all GUB						
Allowed bushing line from IECEx EPS 13.0045U IECEX EPS 14.0020U	Can be fitted on all GUB						
TCABLE	N/A			95°C			

Temperature class	T4/T135°C				T3/T200°C			
	+40°C	+50°C	+60°C	+80°C (2)	+40°C	+50°C	+60°C	+80°C (2)
GUBW1	66	58	48	31	66	58	48	31
GUBW23	123	107	89	57	123	107	89	57
GUBW03	146	126	106	68	146	126	106	68
GUBW4	277	241	201	129	277	241	201	129
Allowed operators from IECEx INE 13.0072U	Operators with EPDM, LSR or MVQ gaskets				Operators with LSR or MVQ gaskets			
Allowed accessories from IECEx TUN 12.0025U IECEX TUN 11.0038U IECEX EXA 13.0001U (1)	All, excepted valves who are allowed only for dust application.							
Allowed accessories from IECEx EXA 14.0004U IECEX EXA 14.0005U IECEX EXA 14.0006U	Can be fitted on all GUB							
Allowed bushing line from IECEx EPS 13.0045U IECEX EPS 14.0020U	Can be fitted on all GUB							
TCABLE	105°C				105°C			

- (1) The components covered by the certificate IECEx EXA 13.0001U can be only used in a minimum ambient temperature until -55°C.
- (2) Not allowed for enclosures with IS barrier.



IECEX Certificate of Conformity

Certificate No.: IECEx INE 13.0069X

Issue No.: 02

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Annex: IECEx INE 13.0069X-02_Annex.pdf

TABLE 3:

Maximum dissipated power for GUB with intrinsic safety barrier without thermal probes

Type of enclosure	Ambient temperature of the intrinsic safety element	T6/T85°C for ambient (W)		
		+40°C	+50°C	+60°C
GUB00	60°C	7	NC	NC
	70°C	12	7	NC
	80°C	16	12	7
GUB0	60°C	11	NC	NC
	70°C	17	11	NC
	80°C	23	17	11
GUB1/GUBW1	60°C	15	NC	NC
	70°C	24	15	NC
	80°C	33	24	15
GUB23/GUBW23	60°C	28	NC	NC
	70°C	45	28	NC
	80°C	61	45	28
GUB03/GUBW03	60°C	33	NC	NC
	70°C	53	33	NC
	80°C	73	53	33
GUB4/GUBW4	60°C	57	NC	NC
	70°C	87	57	NC
	80°C	116	87	57
GUB5	60°C	112	NC	NC
	70°C	172	112	NC
	80°C	228	172	112



IECEX Certificate of Conformity

Certificate No.: IECEx INE 13.0069X

Issue No.: 02

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Annex: IECEx INE 13.0069X-02_Annex.pdf

TABLE 4:

List of the components intended to be installed on the enclosures

Type of component	Certificate number	Editions of the standard
Enclosures	IECEX INE 13.0077U	IEC 60079-0: 2011 IEC 60079-1: 2014 IEC 60079-31: 2013
Operators	IECEX INE 13.0072U	IEC 60079-0: 2011 IEC 60079-1: 2014 IEC 60079-31: 2013
Accessories	IECEX TUN 12.0025U IECEX TUN 11.0038U IECEX EXA 13.0001U	IEC 60079-0: 2011 IEC 60079-1: 2007 (*) IEC 60079-31: 2008 (*)
Accessories	IECEX EXA 14.0004U IECEX EXA 14.0005U IECEX EXA 14.0006U	IEC 60079-0: 2011 IEC 60079-1: 2007 (*) IEC 60079-31: 2013
Line bushings	IECEX EPS 13.0045U	IEC 60079-0: 2011 IEC 60079-1: 2014
Line bushings	IECEX EPS 14.0020U	IEC 60079-0: 2011 IEC 60079-1: 2007 (*) IEC 60079-7: 2006 (*)

(*) Not concerned by the major technical changes of the last edition of the standards.



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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Certificate No.: **IECEx INE 13.0069X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 3 [Issue 2 \(2021-12-22\)](#)
Date of Issue: 2022-09-06 [Issue 1 \(2019-02-04\)](#)
[Issue 0 \(2015-02-02\)](#)
Applicant: **BARTEC F.N. S.R.L.**
Via M. Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy
Equipment: **Enclosures type GUB* or GUBW***
Optional accessory:
Type of Protection: **db, db[ia], db[ib], db[ic], tb, tb[ia], tb[ib], tb[ic]**
Marking: Ex db IIC T6...T3 Gb
Ex db [ia IIA or IIB or IIC Ga] IIC T6...T3 Gb
Ex db [ib IIA or IIB or IIC] IIC T6...T3 Gb
Ex db [ic IIA or IIB or IIC Gc] IIC T6...T3 Gb

Ex tb IIIC T85°C...T200°C Db
Ex tb [ia Da] IIIC T85°C...T200°C Db
Ex tb [ib] IIIC T85°C...T200°C Db
Ex tb [ic Dc] IIIC T85°C...T200°C Db

Approved for issue on behalf of the IECEx
Certification Body:

Position:

Signature:
(for printed version)

Date:
(for printed version)



Thierry HOUEIX

Ex Certification Officer

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

2022-09-06

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IECEX Certificate of Conformity

Certificate No.: **IECEX INE 13.0069X**

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Date of issue: 2022-09-06

Issue No: 3

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

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 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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

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 Report:

[FR/INE/ExTR13.0069/03](#)

Quality Assessment Report:

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



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The metallic enclosures made in aluminum alloy, stainless steel, carbon steel or cast iron are covered by the certificate IECEx INE 13.0082U.

These enclosures can have a blind cover or provided with a glass window. The enclosures can be fitted with tubes of maximum diameter 3" and maximum length 200 mm in order to assembly two flameproof enclosures separated by a certified sealing fitting in accordance with the drawing specified in the descriptive documents.

Enclosures could be fitted with accessories covered by a IECEx component certificates. The list of the components is defined in the technical documentation. The accessories covered by the component certificates IECEx INE 13.0073U could be fitted without their marking due to the fact that the drawings of these components are also listed in the certification file.

They can also contain 'IS' element covered by a separated certificate.

Three different types of batteries defined in the technical documentation could be installed inside the enclosure.

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

SPECIFIC CONDITIONS OF USE: YES as shown below:

The width of the flameproof joints is superior to those specified in tables of IEC 60079-1 standard.

During the installation, the user will take into consideration that pilot light type EFL*PC* underwent only a shock corresponding to an energy of a low risk at 2 J.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

For issue N°03 of certificate IECEx INE 13.0069X

- Application of the standards IEC 60079-0:2017
- Addition of warning label "WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS"

For issue N°02 of certificate IECEx INE 13.0069X

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

For issue N°01 of certificate IECEx INE 13.0069X

- Application of new version of standard IEC 60079-1:2014
- Ambient temperature of +50°C added on dissipated power and maximum threshold of thermal probe tables
- Possibility to mounting on enclosure the line bushings by Bartec covered by the component certificates : IECEx EPS 13.0045U and IECEx EPS 14.0020U.

Annex:

[IECEX INE 13.0069X-03_Annex.pdf](#)



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PARAMETERS RELATING TO THE SAFETY

For enclosure without intrinsic safety element:

These versions are intended to be used in range of ambient temperatures from:
-60°C or -40°C or -20°C to +40°C or +50°C or +60°C or +80°C

Maximum supply voltage: 13 kVac or 750 Vdc
Maximum current: 2 000 A
Rated frequency: 0/50/60 Hz

Maximum dissipated powers are defined in the Table 1 for enclosures without window and Table 2 for enclosures with window(s).

For enclosure with intrinsic safety element:

These versions are intended to be used in range of ambient temperatures from:
-60°C or -40°C or -20°C to +40°C or +50°C or +60°C

The ambient temperature must be in accordance with the IS components installed inside the enclosures (Barriers, terminals...)

Maximum supply voltage for Non 'IS' elements: 1000 Vac or Vdc
Maximum supply voltage for "IS" elements: 250 V

Maximum dissipated powers are defined in the Table 1 or 2 for enclosures with thermal probes.
Maximum dissipated powers are defined in the Table 3 for enclosures without thermal probes.

The maximum threshold of thermal probe shall be:

Ambient temperature of the enclosure	Ambient temperature of the IS element	Threshold of release of the thermal probe
40°C	≤ 60°C	55°C ± 5°C
	≤ 70°C	65°C ± 5°C
50°C	≤ 60°C	55°C ± 5°C
	≤ 70°C	65°C ± 5°C
	≤ 80°C	75°C ± 5°C
60°C	≤ 70°C	65°C ± 5°C
	≤ 80°C	75°C ± 5°C

MARKING

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

A - Enclosures without intrinsic safety element:

- BARTEC FN ⁽¹⁾
- I – 20090 Trezzano Sul Naviglio
- GUB* - GUBW* ⁽²⁾
- IECEx INE 13.0069X
- (Serial number)
- Ex db IIC T6...T3 Gb
- Ex tb IIIC T85°C...T200°C Db IP66
- ...°C < Tamb < ...°C ⁽³⁾
- T.Cable : ⁽⁴⁾
- Cable entry: see instructions
- WARNINGS:
 - DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT
 - POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTIONS ⁽⁵⁾



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B - Enclosures with intrinsic safety element:

- BARTEC FN ⁽¹⁾
- I – 20090 Trezzano Sul Naviglio
- GUB* - GUBW* ⁽²⁾
- IECEx INE 13.0069X
- (Serial number)
- Ex db [ia IIA ou IIB ou IIC Ga] IIC T6...T3Gb
- Ex tb [ia Da] IIIC T85°C...T200°C Db IP66
- or
- E Ex db [ib IIA ou IIB ou IIC] IIC T6...T3Gb
- Ex tb [ib] IIIC T85°C...T200°C Db IP66
- or
- Ex db [ic IIA ou IIB ou IIC Gc] IIC T6...T3Gb
- Ex tb [ic Dc] IIIC T85°C...T200°C Db IP66
- ...°C < Tamb < ...°C ⁽³⁾
- T.Cable : ⁽⁴⁾
- Cable entry: see instructions
- WARNINGS:
DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT
POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTIONS ⁽⁵⁾

- (1) Optional Brands "BARTEC FEAM" or "BARTEC NASP" can be added in the marking with the sentence "manufactured by BARTEC FN"
- (2) Type is completed by number and/or letters corresponding to size of the enclosure
- (3) See parameters relating to the safety.
- (4) See tables 1, 2 or 3.
- (5) Warning to be added when thickness of not conductive paint applied on the enclosure is > 2 mm (Group IIB) or > 0.2 mm (Group IIC).

ROUTINE EXAMINATIONS AND TESTS

None: covered by the Ex component certificates IECEx INE 13.0082U.

For the line bushings covered by certificates IECEx EPS 13.0045U and IECEx EPS 14.0020U (if Tamb = -60°C)

In accordance with clause 16.6 of the IEC 60079-1 standard, the equipment defined above that has undergone a static type test at 3 times the reference pressure under 48.6 bar, the routine overpressure test could be replaced by a batch test according the criteria specified in this clause. The samples of the production batch must have successfully passed an overpressure test, of a period comprised between 10 and 60 seconds under 18.6 bar.



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TABLE 1:

Maximum dissipated power for GUB without windows and with or without IS barrier protected by thermal probes (W)

Temperature class	T6/T85°C			T5/T100°C			
	Ambient temperature	+40°C	+50°C	+60°C	+40°C	+50°C	+60°C
GUB00	24	14	12	33	23	21	9
GUB0	35	21	17	48	35	30	13
GUB1	49	37	24	68	54	43	18
GUB23	91	55	45	126	89	80	33
GUB03	108	67	53	150	106	95	40
GUB4	240	175	114	333	274	207	81
GUB5	472	341	224	656	538	408	160
Allowed operators from IECEx INE 13.0073U	Operators with NBR, EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			Operators with EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			
Allowed accessories from IECEx EXA 14.0004U IECEX EXA 14.0006U	Can be fitted on all GUB						
Allowed bushing line from IECEx EPS 13.0045U IECEX EPS 14.0020U	Can be fitted on all GUB – Only threaded type of bushings are allowed						
TCABLE	N/A			95°C			

Temperature class	T4/T135°C				T3/T200°C			
	Ambient temperature	+40°C	+50°C	+60°C	+80°C (1)	+40°C	+50°C	+60°C
GUB00	54	48	42	30	94	89	82	70
GUB0	79	70	61	44	137	129	119	102
GUB1	112	100	87	62	194	182	169	144
GUB23	208	185	162	115	360	340	314	267
GUB03	247	219	191	136	427	3403	372	317
GUB4	553	491	427	302	963	898	837	711
GUB5	1088	966	840	594	1896	1771	1648	1400
Allowed operators from IECEx INE 13.0073U	Operators with EPDM, LSR or MVQ gaskets				Operators with LSR or MVQ gaskets			
Allowed accessories from IECEx EXA 14.0004U IECEX EXA 14.0006U	Can be fitted on all GUB							
Allowed bushing line from IECEx EPS 13.0045U IECEX EPS 14.0020U	Not allowed to use-							
TCABLE	130°C				175°C			

(1) Not allowed for enclosures with IS barrier.



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TABLE 2:

Maximum dissipated power for GUB with windows and with or without IS barrier protected by thermal probes (W)

Temperature class	T6/T85°C			T5/T100°C			
	+40°C	+50°C	+60°C	+40°C	+50°C	+60°C	+80°C (1)
GUBW1	42	30	19	60	40	36	12
GUBW23	78	55	35	111	74	68	23
GUBW03	92	67	41	132	106	80	27
GUBW4	175	125	78	251	166	152	51
Allowed operators from IECEx INE 13.0072U	Operators with NBR, EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			Operators with EPDM, LSR or MVQ gaskets and pilots lights EFL*PC*			
Allowed accessories from IECEx EXA 14.0004U IECEX EXA 14.0006U	Can be fitted on all GUB						
Allowed bushing line from IECEx EPS 13.0045U IECEX EPS 14.0020U	Can be fitted on all GUB – Only threaded type of bushings are allowed						
TCABLE	N/A			95°C			

Temperature class	T4/T135°C				T3/T200°C			
	+40°C	+50°C	+60°C	+80°C (1)	+40°C	+50°C	+60°C	+80°C (1)
GUBW1	66	58	48	31	66	58	48	31
GUBW23	123	107	89	57	123	107	89	57
GUBW03	146	126	106	68	146	126	106	68
GUBW4	277	241	201	129	277	241	201	129
Allowed operators from IECEx INE 13.0072U	Operators with EPDM, LSR or MVQ gaskets				Operators with LSR or MVQ gaskets			
Allowed accessories from IECEx EXA 14.0004U IECEX EXA 14.0006U	Can be fitted on all GUB							
Allowed bushing line from IECEx EPS 13.0045U IECEX EPS 14.0020U	Not allowed to use-							
TCABLE	105°C				105°C			

(1) Not allowed for enclosures with IS barrier.



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TABLE 3:
Maximum dissipated power for GUB with intrinsic safety barrier without thermal probes

Type of enclosure	Ambient temperature of the intrinsic safety element	T6/T85°C for ambient (W)		
		+40°C	+50°C	+60°C
GUB00	60°C	7	NC	NC
	70°C	12	7	NC
	80°C	16	12	7
GUB0	60°C	11	NC	NC
	70°C	17	11	NC
	80°C	23	17	11
GUB1/GUBW1	60°C	15	NC	NC
	70°C	24	15	NC
	80°C	33	24	15
GUB23/GUBW23	60°C	28	NC	NC
	70°C	45	28	NC
	80°C	61	45	28
GUB03/GUBW03	60°C	33	NC	NC
	70°C	53	33	NC
	80°C	73	53	33
GUB4/GUBW4	60°C	57	NC	NC
	70°C	87	57	NC
	80°C	116	87	57
GUB5	60°C	112	NC	NC
	70°C	172	112	NC
	80°C	228	172	112



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TABLE 4:

List of the components intended to be installed on the enclosures

Type of component	Manufacturer	Certificate number	Editions of the standard
Enclosures type GUB	BARTEC FN	IECEX INE 13.0082U (Issue 02)	IEC 60079-0 : 2011 (*) IEC 60079-1 : 2014 IEC 60079-31 : 2013
Operators type PM10X, EFI*, EFP*, EFL*PC* and EFPL3	BARTEC FN	IECEX INE 13.0073U (Issue 03)	IEC 60079-0 : 2011 (*) IEC 60079-1 : 2014 IEC 60079-31 : 2013
Breathing and draining valve type ECD****	FEAM	IECEX EXA 14.0004U (Issue 01)	IEC 60079-0 : 2011 (*) IEC 60079-1 : 2007 (*) IEC 60079-31 : 2013
Breathing and draining valve type ECD****	FENEX	IECEX EXA 14.0006U (Issue 01)	IEC 60079-0 : 2011 (*) IEC 60079-1 : 2007 (*) IEC 60079-31 : 2013
Line bushing	BARTEC	IECEX EPS 13.0045U (Issue 02)	IEC 60079-0 : 2017 IEC 60079-1 : 2014
Line bushing	BARTEC	IECEX EPS 14.0020U (Issue 01)	IEC 60079-0 : 2017 IEC 60079-1 : 2014

(*) Not concerned by the major technical changes of the last edition of the standard.