

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

IECEx LCI 10.0008X Certificate No.: Page 1 of 4

Issue No: 3 Status: Current

Date of Issue: 2022-04-01

Applicant: SIB - Solutions Industry & Building

25 rue Théophile Somborn Boulay-Moselle 57220

France

Equipment: Plastic cable glands - Type: EC x (SIB-TEC)

Optional accessory:

Type of Protection: Ex eb; Ex tb

Ex eb IIC Gb Marking: Ex tb IIIC Db

(refer to Annex for full marking)

Approved for issue on behalf of the IECEx Certification Body:

Julien GAUTHIER

Position: **Certification Officer**

Signature:

(for printed version)

(for printed version)

LABORATOIRE CENTRAL DES INDUSTRIES ELECTRIQUES S.A.S au capital de 15.745.984 € RCS Nanterre B 408 363 174

E 33 avenue du Général Leclere F - 92266 FONTENAY AUX ROSE 2022-04-01

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Certificate history: Issue 2 (2015-05-07)

Issue 1 (2010-10-14) Issue 0 (2010-05-11)

Certificate issued by:

Laboratoire Central des Industries Electriques (LCIE) 33 Avenue du General Leclerc Fontenay-aux-Roses FR-92260 **France**





IECEx Certificate of Conformity

Certificate No.: IECEx LCI 10.0008X Page 2 of 4

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Manufacturer: SIB Solutions Industry & Building

25 rue Théophile Somborn

BOULAY 57220

France

Manufacturing SIB Solutions Industry & Building

locations: 25 rue Théophile Somborn

BOULAY 57220

France

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/LCI/ExTR10.0011/00 FR/LCI/ExTR10.0011/01 FR/LCIE/ExTR22.0025/00

Quality Assessment Report:

FR/LCI/QAR10.0003/13



IECEx Certificate of Conformity

Certificate No.: IECEx LCI 10.0008X Page 3 of 4

Date of issue: 2022-04-01 Issue No: 3

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The plastic cable glands type EC x model SIB-TEC, made of polyamide PA 6 or PA 66, are intended to be fitted on enclosures with type of protection "Ex e" or "Ex t" with non-armoured circular cables.

These cable glands can also be used for "Ex i" intrinsically safe circuits and shall be blue-coloured in this case.

The clamping of the cable is realized by a sealing ring in neoprene.

The cable glands can be mounted either with a brass locknut or with a plastic locknut for specific cases.

Cable glands with ISO metric or PG thread have a flat seal to guarantee the IP when they are mounted on an enclosure.

The external thread of the cable glands can be:

- ISO metric pitch 1.5 (ISO 965-1 and ISO 965-3);
- NPT (ANSI/ASME B1.20.1);
- PG (DIN 40430) only for Ex eb application.

Refer to Annex for range details.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to Annex for full Specific Conditions of Use.



IECEx Certificate of Conformity

Certificate No.: IECEx LCI 10.0008X Page 4 of 4

Date of issue: 2022-04-01 Issue No: 3

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1:

• Correction of the service temperature range of sizes M40 to M63 and PG36 to PG48 in PA 66 following a clerical error.

Issue 2:

- Normative update according to IEC 60079-0 Ed 6.0 and IEC 60079-31 Ed. 1 standards.
- · Update of marking.
- Update of the applicant's/manufacturer's name.

Issue 3:

- Normative updates according to IEC 60079-0 Ed. 7.0, IEC 60079-7 Ed. 5.1 and IEC 60079-31 Ed. 2 standards.
- Decrease of the maximum service temperature: from +95 °C to +90 °C.
- Update of the applicant's/manufacturer's name.
- Update of the specific conditions of use.

Annex:

Annex 01 to certificate IECEx LCI 10.0008X issue 3.pdf



Annex 01 to Certificate IECEx LCI 10.0008X issue 3



MARKING

Complete marking:

SIB - Solutions Industry & Building

Address: ... Type: EC x

Model: Thread type & size (1)

Serial number: ... Year of construction: ...

Ex eb IIC Gb Ex tb IIIC Db (2) IECEx LCI 10.0008X

 $-xx °C \le T_{service} \le +xx °C$ (3)

Allowed reduced marking:

SIB

Type: EC x

Model: Thread type & size (1)

Ex eb IIC Gb Ex tb IIIC Db ⁽²⁾ IECEx LCI 10.0008X

- (1) The model corresponds to the thread type and its size (with the pitch for ISO metric).
- (2) Ex tb marking does not apply to cable glands with PG thread.
- (3) See the range details below.

RANGE DETAILS

Size of cable gland (external thread)			Service temperatures depending on the polyamide on which the cable gland body is made of		Material of locknut	Risk of mechanical danger
ISO metric	PG	NPT	PA 66	PA 6		
M12 x 1.5	7		-20 °C to +80 °C			
M16 x 1.5	9	3/8"	-35 °C to +90 °C			
M16 x 1.5	11		-35 °C to +90 °C			
M20 x 1.5	13	1/2"	-35 °C to +90 °C		Droop	
M20 x 1.5	16		-35 °C to +90 °C		Brass	
M25 x 1.5			-35 °C to +90 °C			
M25 x 1.5	21	3/4"	-35 °C to +90 °C			Low
M32 x 1.5	29	1"	-35 °C to +90 °C			(4 joules)
M40 x 1.5	36		-35 °C to +90 °C	-35 °C to +90 °C	See notes a & b	
M50 x 1.5	42		-35 °C to +90 °C	-35 °C to +90 °C	See notes a & b	
M63 x 1.5	48		-35 °C to +90 °C	-35 °C to +90 °C	See notes b & c	

^a Locknut in brass when the body of the cable gland is made of PA 66.

RATINGS

See the range details above.

^b Locknut in PA 6 25% fiberglass when the body of the cable gland is made of PA 6.

^c Locknut in brass or in PA 66 when the body of the cable gland is made of PA 66.



Annex 01 to Certificate IECEx LCI 10.0008X issue 3



FULL SPECIFIC CONDITIONS OF USE

- a. Service temperature ranges:
 - -20 °C ≤ T_{service} ≤ +80 °C for cable glands of size M12 and PG7.
 - -35 °C ≤ T_{service} ≤ +90 °C for the range of EC x (SIB-TEC) cable glands, except for sizes M12 and PG7.
- b. The installation shall guarantee that the cable glands will be only exposed to a low risk of mechanical danger.
- c. For cable glands in PA 6 of sizes M40 to M63 and PG36 to PG48: the use of a locknut in brass is not allowed. Only PA 6 25% fiberglass locknuts can be used.
- d. For cable glands of sizes M40 to M63 and PG36 to PG48: because it may be a potential electrostatic charging hazard under certain extreme circumstances, clean only with a damp cloth.
- e. The mounting instructions of the manufacturer shall be followed.