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 LCIE 16.0026X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 2	Issue 1 (2018-06-14) Issue 0 (2016-08-19)
Date of Issue:	2021-06-30		
Applicant:	**SIB – Solutions Industry & Building** 25 rue Théophile Somborn Boulay-Moselle 57220 **France**		
Equipment:	**Cable glands - Type: CG d ***		
Optional accessory:			
Type of Protection:	**Ex db ; Ex eb ; Ex tb**		
Marking:	Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db *For full marking, see the Annex*		

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

Position: **Certification Officer**

Signature: (for printed version)

Date: 2021-06-30

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:

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

IECEx Certificate of Conformity

Manufacturer: **SIB – Solutions Industry & Building**
25 rue Théophile Somborn
Boulay-Moselle 57220
France

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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
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/LCIE/ExTR16.0036/00 FR/LCIE/ExTR18.0041/00 FR/LCIE/ExTR21.0031/00

Quality Assessment Report:

FR/LCI/QAR10.0003/13

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The cable glands type CG d *, made of brass or stainless steel, are intended to be fitted on “Ex d”, “Ex e” or “Ex t” enclosures.
The sealing rings are made of either Neoprene or Viton.
The cable glands type "CG d 1F" are designed for non-armoured cables.
The "CG d 4F STD" type is designed for armoured cables.
The cable glands type "CG d 4F DEL" have an additional O-ring compared to the "CG d 4F STD" type.

Full equipment description, range details and ratings are detailed in the Annex.

SPECIFIC CONDITIONS OF USE: YES as shown below:
For the models N° 4 to N° 8:

- For the "CG d 1F" type, the user shall ensure adequate clamping of the cable to ensure that pulling is not transmitted to the terminations.
- The installation shall guarantee that the cable glands CG d 1F of size ISO M12 & 1/4" NPT will be only exposed to a low risk of mechanical danger.
- Service operating temperature ranges:
  -60 °C ≤ $T_{service}$ ≤ +80 °C, with sealing ring(s) in Neoprene (black color);
  -20 °C ≤ $T_{service}$ ≤ +200 °C, with sealing ring(s) in Viton (red color).

For the models N° 9 to N° 16:

- For the "CG d 1F" type, the user shall ensure an adequate clamping of the cable to ensure that pulling is not transmitted to the terminations.
- Service operating temperature range:
  -60 °C ≤ $T_{service}$ ≤ +80 °C, with sealing ring in Neoprene (black color).

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Issue 01:

- Normative update according to IEC 60079-7, Ed. 5.0 standard.
- Addition of models N° 9 to N° 16 for all types. For these new models only sealing rings in neoprene can be used.

Issue 02:

- Normative update according to IEC 60079-0, Ed. 7.0 and IEC 60079-7, Ed. 5.1 standards.
- Update of the applicant's/manufacturer's name.

Annex:

Annex 01 to certificate IECEx LCIE 16.0026X issue 2.pdf

Annex 01 to Certificate
IECEx LCIE 16.0026X issue 2

MARKING

Complete marking:

SIB - Solutions Industry & Building
Address: …
Type: CG d * (1)
Model : N° … ; Thread type & size (2)
Serial number: …
Year of construction: …
Ex db IIC Gb
Ex eb IIC Gb
Ex tb IIIC Db
IECEx LCIE 16.0026X
-xx °C ≤ $T_{service}$ ≤ +xx °C (3)

Allowed reduced marking:

SIB
Type : CG d * (1)
Model : N° … ; Thread type & size (2)
Ex db / eb IIC Gb
Ex tb IIIC Db
IECEx LCIE 16.0026X

(1) Completed as per the type.
(2) The model includes a N° (= 4 to 16), and the thread type and its size (with the pitch for ISO metric).
(3) $T_{service}$ depending on the material of sealing rings:
-60 °C ≤ $T_{service}$ ≤ +80 °C, Neoprene (all models);
-20 °C ≤ $T_{service}$ ≤ +200 °C, Viton (only for models N° 4 to 8).

RANGE DETAILS

Type designation:

CG d *

1F	=	Cable gland for non-armoured cable
4F STD	=	Cable gland for armoured cable
4F DEL	=	Cable gland for armoured cable with additional O-ring

Model designation: it includes the N° and the thread type with its size (with the pitch for ISO metric).

Type	Model			Model		
	N° (1)	ISO	NPT	N° (1)	ISO	NPT
CG d 1F	4	M12 x 1.5	1/4"	10	M50 x 1,5	1"1/2
		M16 x 1.5	3/8"	11	M63 x 1,5	2''
		--	1/2"	12	M63 x 1,5	2''
	5	M16 x 1.5	3/8"		M75 x 1,5	2''1/2
		M20 x 1.5	1/2"	13	M75 x 1,5	2''1/2
		M25 x 1.5	3/4"		M80 x 2	--
	6	M20 x 1.5	1/2"	14	M80 x 2	--
		M25 x 1.5	3/4"		M90 x 2	3''
	7	M25 x 1.5	3/4"	15	M90 x 2	3''
		M32 x 1.5	1"		M100 x 2	3''1/2
	8	M32 x 1.5	1"	16	M100 x 2	3''1/2
		M40 x 1.5	1"1/4			
	9	M40 x 1,5	1"1/4			
		M50 x 1,5	1"1/2			

(1) The "N°" relates to the characteristics of cables specified in the instructions

Type	Model			Model		
	N° (1)	ISO	NPT	N° (1)	ISO	NPT
CG d 4F STD & CG d 4F DEL	5	M12 x 1.5	1/4"	11	M50 x 1,5	1"1/2
		M16 x 1.5	3/8"	12	M50 x 1,5	1"1/2
		M20 x 1.5	1/2"		M63 x 1,5	2''
	6	M16 x 1.5	3/8"	13	M63 x 1,5	2''
		M20 x 1.5	1/2"		M75 x 1,5	2''1/2
		M25 x 1.5	3/4"	14	M75 x 1,5	2''1/2
	7	M20 x 1.5	1/2"		M80 x 2	--
		M25 x 1.5	3/4"	15	M80 x 2	--
	8	M25 x 1.5	3/4"		M90 x 2	3''
		M32 x 1.5	1"	16	M90 x 2	3''
	9	M32 x 1,5	1''		M100 x 2	3''1/2
		M40 x 1,5	1"1/4			
	10	M40 x 1,5	1"1/4			
		M50 x 1,5	1"1/2			

(1) The "N°" relates to the characteristics of cables specified in the instructions

RATINGS

See the range details above.

ROUTINE TESTS

None.

APPARATUS OVERVIEW

CG d 1F

CG d 4F STD

CG d 4F DEL