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 SIR 13.0029X**

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Certificate history:
Issue 2 (2025-06-26)
Issue 1 (2020-07-08)
Issue 0 (2013-08-07)

Status: **Current**

Issue No: 3

Date of Issue: 2025-11-07

Applicant: **European Safety Systems Ltd**
Impress House
Mansell Road
Acton
London
W3 7QH
United Kingdom

Equipment: **GNEx Series Sounder/Loudspeaker**

Optional accessory:

Type of Protection: **Flameproof "db"**

Marking: Ex db II* T* Gb
Ta = -*°C to +*°C
* Refer to the description

Approved for issue on behalf of the IECEx Certification Body: **Michelle Halliwell**

Position: **Senior Director of Operations**

Signature:
(for printed version)

Date:
(for printed version)

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:

CSA Group Testing UK Ltd
Unit 6, Hawarden Industrial Park
Hawarden, Deeside CH5 3US
United Kingdom

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Manufacturer: **European Safety Systems Ltd**
Impress House
Mansell Road
Acton
London
W3 7QH
United Kingdom

Manufacturing locations: **European Safety Systems Ltd**
Impress House
Mansell Road
Acton
London
W3 7QH
United Kingdom

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 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

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:

GB/SIR/ExTR13.0217/00 GB/SIR/ExTR20.0127/00 GB/SIR/ExTR25.0061/00
GB/SIR/ExTR25.0112/00

Quality Assessment Report:

GB/SIR/QAR06.0020/13

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

The GNEx Series Sounder/Loudspeaker consists of a GRP, flameproof enclosure which contains a pressure unit that generates sound, control circuitry and terminals for connection to external circuits. The enclosure has a pressed metal wire element which is cemented into the enclosure for the transmission of sound from the enclosure. The enclosure has a threaded lid for access and cable entry is via up to two, M20 x 1.5 threaded entries. Internal earthing facilities are provided, additionally an external earthing facility is provided.

Refer to the annexe for additional information,

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The enclosure is non-conducting and, under certain extreme conditions, may generate an ignition-capable level of electrostatic charges. The user shall ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.
2. Flameproof joints, General requirements - joints shall not be repaired or modified in any way.

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Equipment (continued):

Conditions of Manufacture

1. Each enclosure shall be subjected to a routine overpressure test at a pressure as detailed on drawing number D157-99-001-SC, with respect to the lower ambient temperature rating of the equipment. The routine pressure test shall be applied for at least 10 seconds as required by IEC 60079-1:2014 Ed.7/ISH1:2020 clause 16.1. There shall be no permanent deformation or damage to the enclosure and there shall be no leakage through the enclosure wall.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Issue 1 – this Issue introduced the following changes:

1. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-0:2011 Ed.6 was replaced by EN IEC 60079-0:2018 and IEC 60079-1:2007 Ed.6 was replaced by IEC 60079-1:2014 Ed.7, the marking was changed accordingly. As a result, an additional Specific of Use was added and the Conditions of Manufacture were amended.

Issue 2 – this Issue introduced the following changes:

1. To allow a revised PCBA design including revision of electrical ratings.
2. To allow an optional SIL diagnostics board including revision of electrical ratings.
3. To allow the introduction of alternative horn types.
4. To remove the 48Vdc sounder.
5. To correct a typographical error in the applicant address.
6. To update the conditions of manufacture.

Issue 3 – this Issue introduced the following changes:

1. To allow a change of cementing material.

Annex:

IECEx SIR 13.0029X Annexe Issue 3_1.pdf

EQUIPMENT (continued)

The equipment has the following gas groups, temperature classes and ambient temperature ranges which are dependent upon the routine pressure test applied.

*Temperature class, gas group and ambient temperature range is indicated in the table below:

Type (Description)	Option (Rating)	Gas group	Temp. class	Ambient temp.
GNExS1R GNExS1F Sounder	GNExS1RDC024-A (10 – 60Vdc) GNExS1RDC024-S (20 – 28Vdc) GNExS1FDC024-A (10 – 60Vdc) GNExS1FDC024-S (20 – 28Vdc) GNExS1RAC230-A (100 – 260Vac) GNExS1FAC230-A (100 – 260Vac)	IIC	T4	-20°C to +50°C -50°C to +50°C -60°C to +50°C
		IIC	T3	-20°C to +70°C -50°C to +70°C -60°C to +70°C
		IIB	T6	-20°C to +50°C -50°C to +50°C -60°C to +50°C
		IIB	T5	-20°C to +65°C -50°C to +65°C -60°C to +65°C
		IIB	T4	-20°C to +70°C -50°C to +70°C -60°C to +70°C
GNExS2R GNExS2F GNExS2H Sounder	GNExS2RDC024-A (10 – 60Vdc) GNExS2RDC024-S (20 – 28Vdc) GNExS2FDC024-A (10 – 60Vdc) GNExS2FDC024-S (20 – 28Vdc) GNExS2HDC024-A (10 – 60Vdc) GNExS2HDC024-S (20 – 28Vdc) GNExS2RAC230-A (100 – 260Vac) GNExS2FAC230-A (100 – 260Vac) GNExS2HAC230-A (100 – 260Vac)	IIC	T4	-20°C to +50°C -50°C to +50°C -60°C to +50°C
		IIC	T3	-20°C to +58°C -50°C to +58°C -60°C to +58°C
		IIB	T6	-20°C to +50°C -50°C to +50°C -60°C to +50°C
		IIB	T5	-20°C to +58°C -50°C to +58°C -60°C to +58°C
GNExL1R GNExL1F Loudspeaker	GNExL1RV100 (100/70V Line) GNExL1FV100 (100/70V Line) GNExL1RR016 (16 Ohm) GNExL1FR016 (16 Ohm) GNExL1RR008 (8 Ohm) GNExL1FR008 (8 Ohm)	IIC	T4	-20°C to +50°C -50°C to +50°C -60°C to +50°C
		IIC	T3	-20°C to +70°C -50°C to +70°C -60°C to +70°C
		IIB	T6	-20°C to +50°C -50°C to +50°C -60°C to +50°C
		IIB	T5	-20°C to +65°C -50°C to +65°C -60°C to +65°C
		IIB	T4	-20°C to +70°C -50°C to +70°C -60°C to +70°C

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Unit 6 Hawarden Industrial Park,
Hawarden Deeside CH5 3US, UK.

Type (Description)	Option (Rating)	Gas group	Temp. class	Ambient temp.
GNExL2R GNExL2F GNExL2H Loudspeaker	GNExL2RV100 (100/70V Line) GNExL2FV100 (100/70V Line) GNExL2HV100 (100/70V Line)	IIC	T4	-20°C to +50°C -50°C to +50°C -60°C to +50°C
	GNExL2RR016 (16 Ohm) GNExL2FR016 (16 Ohm) GNExL2HR016 (16 Ohm)	IIC	T3	-20°C to +65°C -50°C to +65°C -60°C to +65°C
	GNExL2RR008 (8 Ohm) GNExL2FR008 (8 Ohm) GNExL2HR008 (8 Ohm)	IIB	T6	-20°C to +50°C -50°C to +50°C -60°C to +50°C
		IIB	T5	-20°C to +65°C -50°C to +65°C -60°C to +65°C

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