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**

Certificate history:
Issue 0 (2013-08-07)

Status: **Current**

Issue No: 1

Date of Issue: 2020-07-08

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

Equipment: **GNEx Series Sounder/Loudspeaker**

Optional accessory:

Type of Protection: **Flameproof db**

Marking: Ex db II* T* Gb
Ta = -60°C to +*
* Refer to the description

Approved for issue on behalf of the IECEx Certification Body: **Neil Jones**

Position: **Certification Manager**

Signature:
(for printed version)

Date:

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:

SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden, Deeside, CH5 3US
United Kingdom

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Certificate No.: **IECEx SIR 13.0029X**

Date of issue: 2020-07-08 Issue No: 1

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

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

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

Quality Assessment Report:

GB/SIR/QAR06.0020/08

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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 external earthing facilities may be 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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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
This issue, Issue 1, recognises the following change; refer to the certificate annex to view a comprehensive history:

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.

Annex:

IECEx SIR 13.0029X Annexe Issue 1.pdf

The equipment has the following gas groups, temperature classes and ambient temperature ranges:

Type (Description)	Option (Rating)	Gas group	Temp. class	Ambient temp.
GNExS1*****	GNExS1DC024 (10 – 30 V dc)	IIC	T4	-XX°C to +50°C
(110 dB Small Sounder)	GNExS1DC048 (48 V dc)	IIC	T3	-XX°C to +70°C
	GNExS1AC230 (100 – 260 V ac/dc)	IIB	T6	-XX°C to +50°C
		IIB	T5	-XX°C to +65°C
		IIB	T4	-XX°C to +70°C
GNExS2*****	GNExS2DC024 (10 – 30 V dc)	IIC	T4	-XX°C to +50°C
(117 dB Small Sounder)	GNExS2DC048 (48 V dc)	IIC	T3	-XX°C to +58°C
	GNExS2AC230 (100 – 260 V ac)	IIB	T6	-XX°C to +50°C
		IIB	T5	-XX°C to +58°C
GNExL1****	GNExL1V100 (100/70 V Line)	IIC	T4	-XX°C to +50°C
(15 W Loudspeaker)	GNExL1R016 (16 Ohm)	IIC	T3	-XX°C to +70°C
	GNExL1R008 (8 Ohm)	IIB	T6	-XX°C to +50°C
		IIB	T5	-XX°C to +65°C
		IIB	T4	-XX°C to +70°C
GNExL2****	GNExL2V100 (100/70 V Line)	IIC	T4	-XX°C to +50°C
(25 W Loudspeaker)	GNExL2R016 (16 Ohm)	IIC	T3	-XX°C to +65°C
	GNExL2R008 (8 Ohm)	IIB	T6	-XX°C to +50°C
		IIB	T5	-XX°C to +65°C

The equipment may be marked for a low ambient of either -20°C, -50°C or -60°C dependent upon the routine pressure test applied.

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. 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.

Full certificate change history

Issue 1 – this Issue introduced the following change:

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.

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