



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 SIR 04.0038X** issue No.:4

Status: **Current**

Date of Issue: **2015-02-23** Page 1 of 4

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

Electrical Apparatus: **IS-A105N and IS-D105 Sounders**
Optional accessory:


Type of Protection: **Intrinsically safe**

Marking: **Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +60°C)**

Approved for issue on behalf of the IECEx Certification Body: **C Ellaby**

Position: **Deputy Certification Manager**

Signature:
(for printed version)



2015-02-23

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

SIRA Certification Service
Rake Lane
Eccleston
Chester
CH4 9JN
United Kingdom

sira
CERTIFICATION





IECEx Certificate of Conformity

Certificate No.: IECEx SIR 04.0038X

Date of Issue: 2015-02-23

Issue No.: 4

Page 2 of 4

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

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 60079-11 : 2011 Edition: 6.0 | Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i" |
| IEC 60079-26 : 2014-10 Edition: 3.0 | Explosive atmospheres – Part 26: Equipment with Equipment Protection Level (EPL) Ga |

*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:

GB/SIR/ExTR06.0033/00
GB/SIR/ExTR13.0281/00

GB/SIR/ExTR09.0189/00
GB/SIR/ExTR15.0022/00

GB/SIR/ExTR13.0136/00

Quality Assessment Report:

GB/SIR/QAR06.0020/00



IECEx Certificate of Conformity

Certificate No.: IECEx SIR 04.0038X

Date of Issue: 2015-02-23

Issue No.: 4

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The IS-A105N Sounders are designed to provide an audible warning when activated. They consist of a printed circuit board assembly and an inductive sounder transducer; these are mounted in an IP66, flame retardant ABS. External connections are made to terminals mounted on the printed circuit board via a cable entry device mounted in the wall of the enclosure. The equipment has the following parameters:

Terminals "+" w.r.t "-"

$U_i = 28 \text{ V}$

$I_i = 93 \text{ mA}$

$P_i = 660 \text{ mW}$

$C_i = 0$

$L_i = 0$

Terminals "S2" and "S3" w.r.t. Terminal "-"

$U_i = 28 \text{ V}$

$I_i = 0$

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The equipment shall only be supplied via Terminals + w.r.t. Terminals – from a barrier having a maximum open circuit voltage U_o that is $\leq 28 \text{ V}$ and a maximum short circuit current I_o that is $\leq 93 \text{ mA}$, where I_o is resistively limited. The barrier shall be ATEX certified by a notified body.
2. The total capacitance connected to terminals + wrt – (i.e. the capacitance of the cable plus any other capacitance) shall not exceed 83 nF .
3. The enclosure of the IS-A105N Sounder is non-conducting and may generate an ignition-capable level of electrostatic charges under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions that 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.
4. The equipment has an ingress protection rating of IP66; however, if it has been supplied without a cable entry device, then the user shall ensure that the device that is fitted will provide an ingress protection that is appropriate to the environment in which it is installed i.e. IP20 or better.
5. The enclosure of the IS-D105 Sounder is manufactured from cast aluminium. In rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered during installation, particularly if the equipment is installed in an area requiring Equipment Protection Level Ga.



IECEx Certificate of Conformity

Certificate No.: IECEx SIR 04.0038X

Date of Issue: 2015-02-23

Issue No.: 4

Page 4 of 4

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

| | |
|---|---|
| Issue 1 – this Issue introduced the following change: | |
| 1. | Following appropriate re-assessment to demonstrate compliance with the requirements of the latest standards, the documents originally listed in section 9, IEC 60079-0:2000 Edition 3.1 and IEC 60079-11:1999 Edition 4, were replaced by those currently listed, the markings were updated accordingly. |
| Issue 2 – this Issue introduced the following change: | |
| 1. | The use of a cast aluminium enclosure material and an alternative to the existing plastic material was approved. The conditions of Certification are amended to reflect this change. |
| Issue 3 – this Issue introduced the following changes: | |
| 1. | It was clarified that the cast aluminium enclosure versions that were first recognised in Issue 2 of the certificate are known as the model IS-D105 Sounder thereby differentiating them from the original model IS-A105N which has a plastic enclosure; it should be noted that the safety parameters applied to IS-D105 are the same as that for the IS-A105N as specified in the Description of Equipment, however, to account for the new model, the Conditions of Certification were reviewed and revised accordingly. |
| Issue 4 – this Issue introduced the following change: | |
| 1. | Following appropriate assessment to demonstrate compliance with the latest technical knowledge, the documents previously listed, IEC 60079-0:2004 Ed 4.0, IEC 60079-11:2006 Ed 5.0 and IEC 60079-26:2006 were replaced by IEC 60079-0:2011 Ed 6, IEC 60079-11:2011 Ed 6 and IEC 60079-26:2014 Ed 3.0 |