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 ULD 14.0004X	Issue No: 0	Certificate history: Issue No. 0 (2015-03-03)
Status:	**Current**	Page 1 of 3	
Date of Issue:	**2015-03-03**		

Applicant: **European Safety Systems (E2S) Limited**
Units 18 & 20,
Impress House,
Mansell Road,
Acton,
London,
W3 7QH
United Kingdom

Electrical Apparatus: **Sounder D2xS1, and combined Sounder Beacon D2xC1**

Optional accessory:

Type of Protection: **Ex nA & Ex tc**

Marking:

Ex nA IIC T4/T2/T1 Gc
Ex tc IIIC T90°C/T110°C Dc

Approved for issue on behalf of the IECEx Certification Body: Jasmin Omerovic

Position: Program 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 the Official IECEx Website.

Certificate issued by:

UL International Demko A/S
Borupvang 5A,
DK-2750 Ballerup
Denmark

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Manufacturer: **European Safety Systems (E2S) Limited**
Units 18 & 20,
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 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-31 : 2008 Edition:1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*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:

DK/ULD/ExTR14.0009/00

Quality Assessment Report:

GB/SIR/QAR06.0020/05

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

D2xS1 (sounder) comprises an aluminium enclosure housing components to generate selectable tones. The enclosure is sealed with o-rings to prevent ingress of dust or water. Up to two M20 threaded entries may be provided for installation of appropriately certified cable entry devices by the end user.
D2xC1X05 (sounder beacon) is the same aluminium housing as the D2xS1, except on one end the beacon assembly is mounted. The lamp is protected by a lens and wire guard. The lens and retaining ring screws are sealed with o-rings to prevent ingress of dust or water. Additional electrical components associated with the operation of the 5 Joule beacon, are installed within the housing and reflected by the nomenclature with “AC or DC” followed by the voltage.
D2xC1X10 (sounder beacon) is the same aluminium housing as the D2xS1, except on one end the beacon assembly is mounted. The lamp is protected by a lens and wire guard. The lens and retaining ring screws are sealed with o-rings to prevent ingress of dust or water. Additional electrical components associated with the operation of the 10 Joule beacon, are installed within the housing and reflected by the nomenclature with “AC or DC” followed by the voltage.

See Annex for additional Nomenclature details.

CONDITIONS OF CERTIFICATION: YES as shown below:

End user shall adhere to the manufacturer’s installation and instruction when performing housekeeping to avoid the potential for hazardous electrostatic charges during cleaning, by using a damp cloth.

The D2xS1 alarm horn may only be installed with the fixing points of the housing secured to vertical surfaces (walls etc). Orientation on the surface is not restricted.

The equipment shall only be used in end use with appropriately certified cable entry devices and blanking plugs.

Annex:

Annex to IECEX ULD 14.0004X.pdf

Annex to IECEX ULD 14.0004X issue No. 0
ExTR no.: DK/ULD/ExTR14.0009/00

Nomenclature:

Model	Beacon energy (Joules)	Rated Voltage	Suffix
D2xS1 (Sounder)		115	Up to 4 alpha numeric characters, not associated with equipment certification
		230	
		24	
		48	
D2xC1X (sounder beacon)	05, 10	115	
		230	
		24	
		48	

Electrical Ratings:

Model	Electrical Ratings			
	DC	AC	Hz	Max. Amps, mA
D2xS1DC024	10-30	-	-	313
D2xS1DC048	38-58	-	-	218
D2xS1AC115	-	103.5-126.5	60	91
D2xS1AC230	-	207-253	50	72
D2xC1X05DC024	20-28	-	-	521
D2xC1X05DC048	42-58	-	-	328
D2xC1X05AC115	-	115-125	60	183
D2xC1X05AC230	-	215-250	50	77
D2xC1X10DC024	20-28	-	-	876
D2xC1X10DC048	42-58	-	-	475
D2xC1X10AC115	-	115-125	60	343
D2xC1X10AC230	-	215-250	50	115

Temperature range and class for each Model Series:

Equipment Group	Type of protection	Temperature Class	Associated Maximum Ambient Temperature
D2XS1	Ex nA IIC	T4 (<135°C)	-40°C ≤ Tamb ≤ +50°C
	Ex tc IIIC	T90°C	-40°C ≤ Tamb ≤ +50°C
D2XC1X05	Ex nA IIC	T2 (<300°C)	-40°C ≤ Tamb ≤ +50°C
	Ex tc IIIC	T90°C	-40°C ≤ Tamb ≤ +50°C
D2XC1X10	Ex nA IIC	T2 (<300°C)	-40°C ≤ Tamb ≤ +40°C
	Ex nA IIC	T1 (<450°C)	-40°C ≤ Tamb ≤ +50°C
	Ex tc IIIC	T110°C	-40°C ≤ Tamb ≤ +50°C