



# 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](http://www.iecex.com)

Certificate No.:  issue No.:  Certificate history:

Status:

Date of Issue: **2010-02-02** Page 1 of 3

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

Electrical Apparatus: **Electronic Sounders**  
Optional accessory:

Type of Protection: **Ex d, Ex de, Ex tD**

Marking: **Ex d IIB or IIC T4 or  
Ex de IIB or IIC T4  
Ex tD A21 IP66 or IP67 T100°C or T115°C**

Approved for issue on behalf of the IECEx  
Certification Body:

T. Pijpker

Position:

Certification Manager

Signature:  
(for printed version)

  
2010-02-02

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:

**KEMA Quality B.V.**  
Utrechtseweg 310  
6812 AR Arnhem  
The Netherlands





# IECEX Certificate of Conformity

Certificate No.: IECEX KEM 10.0003

Date of Issue: 2010-02-02

Issue No.: 0

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

Manufacturing location(s):  
**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 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:

<b>IEC 60079-0 : 2004</b> Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2007-04</b> Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-7 : 2001</b> Edition: 3	Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'
<b>IEC 61241-0 : 2004</b> Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
<b>IEC 61241-1 : 2004</b> Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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:

NL/KEM/ExTR10.0006/00

Quality Assessment Report:

GB/SIR/QAR06.0020/01



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The Electronic Sounders types BExS110D, BExS120D, BExS110E, BExS120E, BExDS110D, BExDS120D, BExDS110E and BExDS120E, Loudspeakers types BExL15D, BExL25D, BExL15E, BExL25E, BExDL15D, BExDL25D, BExDL15E and BExDL25E, Appello Speech Sounders types BExA110D, BExA120D, BExA110E, BExA120E, BExDA110D, BExDA120D, BExDA110E and BExDA120E, Sontel types BExTS110D and BExDTS110D, Hootronic Sounder types BExH120D and BExDH120D, Monitored Loudspeaker types BExL25GD and BExDL25GD, housed in aluminium enclosures in type of protection flameproof enclosure "d", are used to provide acoustic signals. The Sounders, Loudspeakers and Appello Speech Sounders types BEx..E are provided with a terminal compartment in type of protection increased safety "e".  
For Electrical data and Marking see attachment.

### CONDITIONS OF CERTIFICATION: NO

## Annex 1 to Certificate IECEx KEM 10.0003

### Electrical data

Sounder type	Supply voltage	Supply current	Max. Supply power
BExS120D, BExS120E, BExDS120D, BExDS120E	12 / 24 / 48 Vdc or 110 / 115 / 230 Vac	850 / 800 / 420 mA or 200 / 180 / 90 mA	27 W
BExS110D, BExS110E, BExDS110D, BExDS110E	12 / 24 / 48 Vdc or 110 / 115 / 230 Vac	195 / 265 / 130 mA or 93 / 110 / 56 mA	27 W
BExL25D, BExL25E, BExDL25D, BExDL25E	70 / 100 V (line) or 14.14 / 20 V (L.I. versions: 8 / 16 Ohms)		25 W
BExL15D, BExL15E, BExDL15D, BExDL15E	70 / 100 V (line) or 10.95 / 15.49 V (L.I. versions: 8 / 16 Ohms)		15 W
BExA120D, BExA120E, BExDA120D, BExDA120E	24 Vdc or 115 / 230 Vac	480 mA or 90 / 45 mA	
BExA110D, BExA110E, BExDA110D, BExDA110E	24 Vdc or 115 / 230 Vac	480 mA or 90 / 45 mA	
BExTS110D, ExDTS110D	12 / 24 / 48 Vdc or 110 / 115 / 230 Vac	195 / 265 / 130 mA or 93 / 110 / 56 mA	27 W
BExH120D, BExDH120D	24 Vdc or 115 / 230 Vac	400 mA or 130 / 65 mA	
BExL25GD, BExDL25GD	100 V (line)		25 W

### Installation instructions

The manual provided with the equipment shall be followed in detail to assure safe operation.

### Marking

The relation between the type of Sounder, the ambient temperature range and the marking for gas and dust applications is given in the tables below.

GAS		
Ambient temp.	-50 to +55 °C	-50 to +70 °C
BExS110D	Ex d IIC T4	Ex d IIB T4
BExS120D	Ex d IIC T4	Ex d IIB T4
BExS110E	Ex de IIC T4	Ex de IIB T4
BExS120E	Ex de IIC T4	Ex de IIB T4
BExDS110D	Ex d IIC T4	Ex d IIB T4
BExDS120D	Ex d IIC T4	Ex d IIB T4
BExDS110E	Ex de IIC T4	Ex de IIB T4
BExDS120E	Ex de IIC T4	Ex de IIB T4
BExL15D	Ex d IIC T4	Ex d IIB T4
BExL25D	Ex d IIC T4	Ex d IIB T4
BExL15E	Ex de IIC T4	Ex de IIB T4
BExL25E	Ex de IIC T4	Ex de IIB T4
BExDL15D	Ex d IIC T4	Ex d IIB T4
BExDL25D	Ex d IIC T4	Ex d IIB T4
BExDL15E	Ex de IIC T4	Ex de IIB T4
BExDL25E	Ex de IIC T4	Ex de IIB T4
BExA110D	Ex d IIC T4	Ex d IIB T4

### Annex 1 to Certificate IECEx KEM 10.0003

GAS		
Ambient temp.	-50 to +55 °C	-50 to +70 °C
BExA120D	Ex d IIC T4	Ex d IIB T4
BExA110E	Ex de IIC T4	Ex de IIB T4
BExA120E	Ex de IIC T4	Ex de IIB T4
BExDA110D	Ex d IIC T4	Ex d IIB T4
BExDA120D	Ex d IIC T4	Ex d IIB T4
BExDA110E	Ex de IIC T4	Ex de IIB T4
BExDA120E	Ex de IIC T4	Ex de IIB T4
BExTS110D	Ex d IIC T4	Ex d IIB T4
BExDTS110D	Ex d IIC T4	Ex d IIB T4
BExH120D	Ex d IIC T4	Ex d IIB T4
BExDH120D	Ex d IIC T4	Ex d IIB T4
BExL25GD	Ex d IIC T4	Ex d IIB T4
BExDL25GD	Ex d IIC T4	Ex d IIB T4

DUST		
Ambient temp.	55 °C	70 °C
BExDS110D	Ex tD A21 IP67 T100	Ex tD A21 IP67 T115
BExDS120D	Ex tD A21 IP67 T100	Ex tD A21 IP67 T115
BExDS110E	Ex tD A21 IP66 T100	Ex tD A21 IP66 T115
BExDS120E	Ex tD A21 IP66 T100	Ex tD A21 IP66 T115
BExDL15D	Ex tD A21 IP67 T100	Ex tD A21 IP67 T115
BExDL25D	Ex tD A21 IP67 T100	Ex tD A21 IP67 T115
BExDL15E	Ex tD A21 IP66 T100	Ex tD A21 IP66 T115
BExDL25E	Ex tD A21 IP66 T100	Ex tD A21 IP66 T115
BExDA110D	Ex tD A21 IP67 T100	Ex tD A21 IP67 T115
BExDA120D	Ex tD A21 IP67 T100	Ex tD A21 IP67 T115
BExDA110E	Ex tD A21 IP66 T100	Ex tD A21 IP66 T115
BExDA120E	Ex tD A21 IP66 T100	Ex tD A21 IP66 T115
BExDTS110D	Ex tD A21 IP67 T100	Ex tD A21 IP67 T115
BExDH120D	Ex tD A21 IP67 T100	Ex tD A21 IP67 T115
BExDL25GD	Ex tD A21 IP67 T100	Ex tD A21 IP67 T115