

Certificate No.:

IECEx Certificate of Conformity

Issue No: 2

Certificate history: Issue No. 2 (2015-07-01)

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Status:	Current	Page 1 of 5	Issue No. 1 (2015-04-24) Issue No. 0 (2010-02-02)
Date of Issue:	2015-07-01		,
Applicant:	European Safety Systems Ltd.		
	Impress House, Mansell Road		
	London W3 7QH		
	United Kingdom		
Electrical Apparatus:	Electronic Sounders		

Type of Protection: Ex d and Ex tb

Marking: Ex d IIB or IIC T4 Gb or

Ex tb IIIC T100°C or T115°C Db

Approved for issue on behalf of the IECEx M. Erdhuizen

Certification Body:

Optional accessory:

Position: Certification Manager

IECEx KEM 10.0003X

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:

DEKRA Certification B.V. Meander 1051 6825 MJ Arnhem The Netherlands





Certificate No: IECEx KEM 10.0003X Issue No: 2

Date of Issue: 2015-07-01 Page 2 of 5

Manufacturer: European Safety Systems Ltd.

Impress House, Mansell Road

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 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-1: 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:6

IEC 60079-31 : 2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

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 NL/KEM/ExTR10.0006/01 NL/KEM/ExTR10.0006/02

Quality Assessment Report:

GB/SIR/QAR06.0020/05



Certificate No: IECEx KEM 10.0003X Issue No: 2

Date of Issue: 2015-07-01 Page 3 of 5

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Electronic Sounders types BExS110D(-SIL), BExS120D(-SIL), BExDS110D(-SIL) and BExDS120D(-SIL), Loudspeakers types BExL15D, BExL25D, BExDL15D and BExDL25D, Appello Speech Sounders types BExA110D, BExA120D, BExDA110D and BExDA120D, 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.

All types can be provided with a so called Radial horn, giving the addition of -R to the type designation, e.g. BExS110D-R.

The Sounder types, BExS110D, BExS120D, BExDS110D and BExDS120D with a supply voltage of 24 Vdc, have an optional monitoring module.

For these the type designation is extended with -SIL, e.g. BExS110D-R-SIL

CONDITIONS OF CERTIFICATION: YES as shown below:

The types starting with BExD.. are provided with a horn of antistatic material. For the other types special precautions, as specified in the manual, shall be taken against electrostatic charging.



Certificate No: IECEx KEM 10.0003X Issue No: 2

Date of Issue: 2015-07-01 Page 4 of 5

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

Changes for issue 2:

- Upgrade to the following standard editions: IEC 60079-0 : 2011, IEC 60079-1 : 2007 and IEC 60079-31 : 2013
- Addition of a differently shaped, radial horn.
- Addition of alternative materials for the horns of the Ex tb certified Sounders.
- Removal of Ex e certified types.



Certificate No: IECEx KEM 10.0003X Issue No: 2

Date of Issue: 2015-07-01 Page 5 of 5

Additional information:

For Electrical data and Marking see Annex 1.

Annex:

216785000-ExTR10.0006.02-Annex1.pdf



Annex 1 to Certificate IECEx KEM 10.0003X

Electrical data

Sounder type	Supply voltage	Supply current	-SIL types
BExS120D, BExDS120D	12 / 24 / 48 Vdc or 110 / 115 / 230 Vac	850 / 800 / 420 mA or 200 / 180 / 90 mA	24 Vdc – 825 mA
BExS110D, BExDS110D	12 / 24 / 48 Vdc or 110 / 115 / 230 Vac	195 / 265 / 130 mA or 93 / 110 / 56 mA	24 Vdc – 290 mA
BExL25D, BExDL25D	70 / 100 V (line) or 14.14 / 20 V (L.I. versions: 8 / 16 Ohms)		N/A
BExL15D, BExDL15D	70 / 100 V (line) or 10.95 / 15.49 V (L.I. versions: 8 / 16 Ohms)		N/A
BExA120D, BExDA120D	24 Vdc or 115 / 230 Vac	480 mA or 90 / 45 mA	N/A
BExA110D, BExDA110D	24 Vdc or 115 / 230 Vac	480 mA or 90 / 45 mA	N/A
BExTS110D, ExDTS110D	12 / 24 / 48 Vdc or 110 / 115 / 230 Vac	195 / 265 / 130 mA or 93 / 110 / 56 mA	N/A
BExH120D, BExDH120D	24 Vdc or 115 / 230 Vac	400 mA or 130 / 65 mA	N/A
BExL25GD, BExDL25GD	100 V (line)		N/A

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(-SIL)	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExS120D(-SIL)	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExDS110D(-SIL)	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExDS120D(-SIL)	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExL15D	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExL25D	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExDL15D	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExDL25D	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExA110D	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExA120D	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExDA110D	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExDA120D	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExTS110D	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExDTS110D	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExH120D	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExDH120D	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExL25GD	Ex d IIC T4 Gb	Ex d IIB T4 Gb		
BExDL25GD	Ex d IIC T4 Gb	Ex d IIB T4 Gb		



Annex 1 to Certificate IECEx KEM 10.0003X

DUST				
Ambient temp.	55 °C	70 °C		
BExS110D(-SIL)	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExS120D(-SIL)	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExDS110D(-SIL)	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExDS120D(-SIL)	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExL15D	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExL25D	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExDL15D	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExDL25D	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExA110D	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExA120D	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExDA110D	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExDA120D	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExTS110D	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExDTS110D	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExH120D	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExDH120D	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExL25GD	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExDL25GD	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		