



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 KEM 10.0003X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 4 Issue 3 (2019-02-14)
Date of Issue: 2021-10-04 Issue 2 (2015-07-01)
Applicant: **European Safety Systems Ltd.** Issue 1 (2015-04-24)
Impress House, Mansell Road, London W3 7QH Issue 0 (2010-02-02)
United Kingdom
Equipment: **Electronic Sounders and Speakers**
Optional accessory:
Type of Protection: **Ex db, Ex db eb and Ex tb**
Marking: Ex db IIB or IIC T4 Gb or
Ex db eb IIB or IIC T4 Gb
Ex tb IIIC T100 °C or T105 °C or T115 °C Db

Approved for issue on behalf of the IECEx
Certification Body:

L.G. van Schie

Position:

Certification Manager

Signature:
(for printed version)

Date:

2021-10-04

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Netherlands





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Manufacturer: **European Safety Systems Ltd.**
Impress 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

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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 Report:

[NL/KEM/ExTR10.0006/04](#)

Quality Assessment Report:

[GB/SIR/QAR06.0020/09](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Electronic Sounders, types BExS110D(-R)(-SIL), BExS110E(-R)(-SIL), BExS120D(-R)(-SIL), BExS120E(-R)(-SIL), BExDS110D(-R)(-SIL), BExDS110E(-R)(-SIL), BExDS120D(-R)(-SIL) and BExDS120E(-R)(-SIL),

Loudspeakers, types BExL15D(-R), BExL15E(-R), BExL25D(-R), BExL25E(-R), BExDL15D(-R), BExDL15E(-R), BExDL25D(-R) and BExDL25E(-R), Appello Speech Sounders, types BExA110D(-R), BExA110E(-R), BExA120D(-R), BExA120E(-R), BExDA110D(-R), BExDA110E(-R), BExDA120D(-R) and BExDA120E(-R), Sontel, types BExTS110D(-R) and BExDTS110D(-R), Hootronic Sounder, types BExH120D(-R) and BExDH120D(-R) and Monitored Loudspeaker, types BExL25GD(-R) and BExDL25GD(-R), are used to provide acoustic signals.

The type with Suffix D consists of an aluminum enclosure of type of flame protection enclosure "db".

The type with Suffix E consists of an electronic compartment made of aluminum, type of protection flameproof enclosures "db" and a terminal compartment made of aluminum, type of protection increased safety "eb".

Both types with suffix D and suffix E satisfy dust ignition protection by enclosure "tb".

All types have an optional variation with a radial horn, giving the addition of -R to the type designation, e.g. BExS110D-R.

The Sounder types, BExS110D, BExS110E, BExS120D, BExS120E, BExDS110D, BExDS110E, BExDS120D and BExDS120E 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.

The enclosure provides a degree of protection of IP66/IP67 per IEC 60079-0 and IEC 60529.

For details about electrical and thermal data and marking see Annex 1 to report no. NL/KEM/ExTR10.0006/04.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The enclosure 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 electrostatic charges on non-conducting surfaces.

Flameproof joints are not intended to be repaired.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Addition of an Ex e terminal compartment option in accordance with the standard: IEC 60079-7 : 2017

Annex:

[510035500-Annex 1 to ExTR10.0006.04.pdf](#)

* Note) A point, “.” is used as decimal separator.

Electrical data

Type	Supply voltage	Supply current	-SIL types
BExS120D(-R)(-SIL) BExS120E(-R)(-SIL) BExDS120D(-R)(-SIL) BExDS120E(-R)(-SIL)	12 / 24 / 48 Vdc or 110 / 115 / 230 Vac	850 / 800 / 420 mA or 200 / 180 / 90 mA	24 Vdc – 825 mA
BExS110D(-R)(-SIL) BExS110E(-R)(-SIL) BExDS110D(-R)(-SIL) BExDS110E(-R)(-SIL)	12 / 24 / 48 Vdc or 110 / 115 / 230 Vac	195 / 265 / 130 mA or 93 / 110 / 56 mA	24 Vdc – 290 mA
BExL25D(-R) BExL25E(-R) BExDL25D(-R) BExDL25E(-R)	70 / 100 V (line) or 14.14 / 20 V (L.I. versions: 8 / 16 Ohms)		N/A
BExL15D(-R) BExL15E(-R) BExDL15D(-R) BExDL15E(-R)	70 / 100 V (line) or 10.95 / 15.49 V (L.I. versions: 8 / 16 Ohms)		N/A
BExA120D(-R) BExA120E(-R) BExDA120D(-R) BExDA120E(-R)	24 Vdc or 115 / 230 Vac	480 mA or 90 / 45 mA	N/A
BExA110D(-R) BExA110E(-R) BExDA110D(-R) BExDA110E(-R)	24 Vdc or 115 / 230 Vac	480 mA or 90 / 45 mA	N/A
BExTS110D(-R) BExDTS110D(-R)	12 / 24 / 48 Vdc or 110 / 115 / 230 Vac	195 / 265 / 130 mA or 93 / 110 / 56 mA	N/A
BExH120D(-R) BExDH120D(-R)	24 Vdc or 115 / 230 Vac	400 mA or 130 / 65 mA	N/A
BExL25GD(-R) BExDL25GD(-R)	100 V (line)		N/A

Thermal data

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

GAS			
Ambient temperature	-50 °C to +55 °C	-50 °C to +60 °C	-50 °C to +70 °C
BExS110D(-R)(-SIL)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExS110E(-R)(-SIL)	Ex db eb IIC T4 Gb	Ex db eb IIB T4 Gb	
BExS120D(-R)(-SIL)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExS120E(-R)(-SIL)	Ex db eb IIC T4 Gb	Ex db eb IIB T4 Gb	
BExDS110D(-R)(-SIL)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExDS110E(-R)(-SIL)	Ex db eb IIC T4 Gb	Ex db eb IIB T4 Gb	
BExDS120D(-R)(-SIL)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExDS120E(-R)(-SIL)	Ex db eb IIC T4 Gb	Ex db eb IIB T4 Gb	
BExL15D(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExL15E(-R)	Ex db eb IIC T4 Gb	Ex db eb IIB T4 Gb	
BExL25D(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExL25E(-R)	Ex db eb IIC T4 Gb	Ex db eb IIB T4 Gb	
BExDL15D(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExDL15E(-R)	Ex db eb IIC T4 Gb	Ex db eb IIB T4 Gb	
BExDL25D(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExDL25E(-R)	Ex db eb IIC T4 Gb	Ex db eb IIB T4 Gb	
BExA110D(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExA110E(-R)	Ex db eb IIC T4 Gb	Ex db eb IIB T4 Gb	
BExA120D(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExA120E(-R)	Ex db eb IIC T4 Gb	Ex db eb IIB T4 Gb	
BExDA110D(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExDA110E(-R)	Ex db eb IIC T4 Gb	Ex db eb IIB T4 Gb	
BExDA120D(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExDA120E(-R)	Ex db eb IIC T4 Gb	Ex db eb IIB T4 Gb	
BExTS110D(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExDTS110D(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExH120D(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExDH120D(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExL25GD(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb
BExDL25GD(-R)	Ex db IIC T4 Gb		Ex db IIB T4 Gb



DUST			
Ambient temperature	-50 °C to +55 °C	-50 °C to +60 °C	-50 °C to +70 °C
BExS110D(-R)(-SIL)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExS110E(-R)(-SIL)	Ex tb IIIC T100 °C Db	Ex tb IIIC T105 °C Db	
BExS120D(-R)(-SIL)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExS120E(-R)(-SIL)	Ex tb IIIC T100 °C Db	Ex tb IIIC T105 °C Db	
BExDS110D((-R)(-SIL)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExDS110E(-R)(-SIL)	Ex tb IIIC T100 °C Db	Ex tb IIIC T105 °C Db	
BExDS120D(-R)(-SIL)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExDS120E(-R)(-SIL)	Ex tb IIIC T100 °C Db	Ex tb IIIC T105 °C Db	
BExL15D(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExL15E(-R)	Ex tb IIIC T100 °C Db	Ex tb IIIC T105 °C Db	
BExL25D(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExL25E(-R)	Ex tb IIIC T100 °C Db	Ex tb IIIC T105 °C Db	
BExDL15D(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExDL15E(-R)	Ex tb IIIC T100 °C Db	Ex tb IIIC T105 °C Db	
BExDL25D(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExDL25E(-R)	Ex tb IIIC T100 °C Db	Ex tb IIIC T105 °C Db	
BExA110D(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExA110E(-R)	Ex tb IIIC T100 °C Db	Ex tb IIIC T105 °C Db	
BExA120D(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExA120E(-R)	Ex tb IIIC T100 °C Db	Ex tb IIIC T105 °C Db	
BExDA110D(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExDA110E(-R)	Ex tb IIIC T100 °C Db	Ex tb IIIC T105 °C Db	
BExDA120D(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExDA120E(-R)	Ex tb IIIC T100 °C Db	Ex tb IIIC T105 °C Db	
BExTS110D(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExDTS110D(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExH120D(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExDH120D(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExL25GD(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db
BExDL25GD(-R)	Ex tb IIIC T100 °C Db		Ex tb IIIC T115 °C Db