

IECEx Certificate of Conformity

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INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification Scheme for Explosive Atmospheres**

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

Certificate No.: IECEx KEM 10.0025X Issue No: 4

Issue No. 4 (2019-03-26)

Certificate history:

Status: Current Issue No. 3 (2016-04-14)

2019-03-26 Date of Issue:

Issue No. 2 (2015-11-03)

Applicant: European Safety Systems Ltd. Issue No. 1 (2012-05-08) Issue No. 0 (2010-04-16)

Impress House, Mansell Road, London W3 7QH

United Kingdom

Equipment: Sounder/Beacon Series BEx

Optional accessory:

Type of Protection: Ex db, Ex tb

Marking:

Ex db IIB T5...T4 Gb

Ex tb III C T70 °C...T125 °C Db

Approved for issue on behalf of the IECEx

Certification Body:

L.G. van Schie

Position: Certification Manager

Signature:

Date:

(for printed version)

2019-03-26

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 Amhem The Netherlands





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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 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 : 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

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/ExTR10.0034/04

Quality Assessment Report:

GB/SIR/QAR06.0020/07



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Sounder/Beacon Series BEx includes

Electronic Sounder/Beacons Types BExCS110-05D..., BExDCS110-05D...,

Loudspeaker/Beacons Types BExCL15-05D..., BExDCL15-05D...,

Apello/Beacons Types BExCA110-05D..., BExDCA110-05D...,

Sontel/Beacons Types BExCTS110-05D..., BExDCTS110-05D...

Vershoven Sounder/Beacons Types BExCTV110-05D..., BExDCTV110-05D...,

Sounder/LED Beacons Types BExCS110-L1D..., BExDCS110-L1D... and

Combined sounder/ LED beacon Type BExCS110-L2D...,

housed in aluminium enclosures in type of protection flameproof enclosure "d", are used to provide acoustic signals and visual warning signals.

All types can be provided with a smaller radial horn giving the suffix: -R to the type designation, e.g. BExCS110-05D-R.

The Beacons are provided with a glass dome. LED Beacon Types BExCS110-L1D, BExDCS110-L1D and BExCS110-L2D are provided with a plastic dome cover. Other Beacons are optionally provided with a plastic dome cover indicated by the suffix -P to the type designation; e.g. BExCS110-05D-R-P.

The enclosure provides a degree of protection of IP66/IP67 per IEC 60529.

For details about electrical and thermal data and marking see Annex 1 to this certificate.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The enclosure 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.

Flameproof joints are not intended to be repaired.



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

Assessment in accordance with newer edition of standards.

Annex:

510023200-Annex 1.pdf



Annex 1 to: Certificate of Conformity IECEx KEM 10.0025X EU-Type Examination Certificate KEMA 01ATEX2223 X, issue 6

Report NL/KEM/ExTR10.0034/04

Electrical data

Electronic Sounder/Beacons Types BExCS110-05D and BExDCS110-05D:

Supply voltage	12 Vdc	24 Vdc	48 Vdc	115 Vac	230 Vac
Sounder Current [mA]	195	265	130	110	56
Beacon Current [mA]	750	300	180	140	55

Loudspeaker/Beacons Types BExCL15-05D and BExDCL15-05D:

Supply voltage	12 Vdc	24 Vdc	48 Vdc	115 Vac	230 Vac	
Beacon Current [mA]	750	300	180	140	55	

Loudspeaker Type	100 V line	8 Ohms	16 Ohms	70 V line
Supply voltage [V]	100	10,95	15,49	70

Apello/Beacons Types BExCA110-05D and BExDCA110-05D:

Supply voltage	24 Vdc	115 Vac	230 Vac
Apello Current [mA]	480	90	45
Beacon Current [mA]	300	140	55

Sontel/Beacons Types BExCTS110-05D and BExDCTS110-05D:

Supply voltage	12 Vdc	24 Vdc	48 Vdc	115 Vac	230 Vac
Sounder Current [mA]	195	265	130	110	56
Beacon Current [mA]	750	300	180	140	55

Vershoven Sounder/Beacons Types BExCTV110-05D and BExDCTV110-05D:

Supply voltage	12 Vdc	24 Vdc	48 Vdc	115 Vac	230 Vac
Sounder Current [mA]	195	265	130	110	56
Beacon Current [mA]	750	300	180	140	55

Sounder/LED Beacons Types BExCS110-L1D and BExDCS110-L1D:

Supply voltage	12 Vdc	24 Vdc	48 Vdc	115 Vac	230 Vac
Sounder Current [mA]	195	265	130	110	56
Beacon Current [mA]	760	400	210	135	65

Combined sounder/ LED beacon Type BExCS110-L2D:

Supply voltage	24 Vdc	48 Vdc	115 Vac	230 Vac
Voltage range	18-30 Vdc	36-54 Vdc	103.5-126 Vac	207-253 Vac
Sounder/Beacon Current [mA]	503	260	174	95



Annex 1 to: Certificate of Conformity IECEx KEM 10.0025X
EU-Type Examination Certificate KEMA 01ATEX2223 X, issue 6
Report NL/KEM/ExTR10.0034/04

Marking and temperature ratings

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

GAS						
	Ambient temp.	-50 °C to +40 °C	-50 °C to +50 °C	-50 °C to +70 °C		
BExCS110-05D(-R)	BExDCS110-05D(-R)		Ex db IIB T5 Gb	Ex db IIB T4 Gb		
BExCL15-05D(-R)	BExDCL15-05D(-R)		Ex db IIB T5 Gb	Ex db IIB T4 Gb		
BExCA110-05D(-R)	BExDCA110-05D(-R)		Ex db IIB T5 Gb	Ex db IIB T4 Gb		
BExCTS110-05D(-R)	BExDCTS110-05D(-R)		Ex db IIB T5 Gb	Ex db IIB T4 Gb		
BExCTV110-05D(-R)	BExDCTV110-05D(-R)		Ex db IIB T5 Gb	Ex db IIB T4 Gb		
BExCS110L1D(-R)	BExDCS110L1D(-R)		Ex db IIB T5 Gb	Ex db IIB T4 Gb		
BExCS110-05D(-R)-P	BExDCS110-05D(-R)-P	Ex db IIB T5 Gb		Ex db IIB T4 Gb		
BExCL15-05D(-R)-P	BExDCL15-05D(-R)-P	Ex db IIB T5 Gb		Ex db IIB T4 Gb		
BExCA110-05D(-R)-P	BExDCA110-05D(-R)-P	Ex db IIB T5 Gb		Ex db IIB T4 Gb		
BExCTS110-05D(-R)-P	BExDCTS110-05D(-R)-P	Ex db IIB T5 Gb		Ex db IIB T4 Gb		
BExCTV110-05D(-R)-P	BExDCTV110-05D(-R)-P	Ex db IIB T5 Gb		Ex db IIB T4 Gb		
BExCS110-L2D(-R)			Ex db IIB T5 Gb	Ex db IIB T4 Gb		
		DUST				
	Ambient temp.	-50 °C to +40 °C	-50 °C to +55 °C	-50 °C to +70 °C		
BExCS110-05D(-R)	BExDCS110-05D(-R)		Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExCL15-05D(-R)	BExDCL15-05D(-R)		Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExCA110-05D(-R)	BExDCA110-05D(-R)		Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExCTS110-05D(-R)	BExDCTS110-05D(-R)		Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExCTV110-05D(-R)	BExDCTV110-05D(-R)		Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExCS110L1D(-R)	BExDCS110L1D(-R)		Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db		
BExCS110-05D(-R)-P	BExDCS110-05D(-R)-P		Ex tb IIIC T110 °C Db	Ex tb IIIC T125 °C Db		
BExCL15-05D(-R)-P	BExDCL15-05D(-R)-P		Ex tb IIIC T110 °C Db	Ex tb IIIC T125 °C Db		
BExCA110-05D(-R)-P	BExDCA110-05D(-R)-P		Ex tb IIIC T110 °C Db	Ex tb IIIC T125 °C Db		
BExCTS110-05D(-R)-P	BExDCTS110-05D(-R)-P		Ex tb IIIC T110 °C Db	Ex tb IIIC T125 °C Db		
BExCTV110-05D(-R)-P	BExDCTV110-05D(-R)-P		Ex tb IIIC T110 °C Db	Ex tb IIIC T125 °C Db		
BExCS110-L2D(-R)		Ex tb IIIC T70 °C Db	Ex tb IIIC T85 °C Db	Ex tb IIIC T100 °C Db		