

CERTIFICATE

(1) EU-Type Examination

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **KEMA 01ATEX2223 X** Issue Number: **6**

(4) Product: **Sounder/Beacon Series BEx**

(5) Manufacturer: **European Safety Systems Ltd.**

(6) Address: **Impress House, Mansell Road, London W3 7QH, United Kingdom**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report number NL/KEM/ExTR10.0034/04.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0 : 2012 + A11 : 2013 EN 60079-1 : 2014 EN 60079-31 : 2014
EN IEC 60079-0 : 2018

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:



II 2 G Ex db IIB T5...T4 Gb
II 2 D Ex tb IIIC T70 °C...T125 °C Db

Date of certification: 26 March 2019

DEKRA Certification B.V.



L.G. van schie
 Certification Manager

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(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 01ATEX2223 X**

Issue No. 6

(15) **Description**

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 "db" and dust ignition protection by enclosure "tb", 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 EN 60529.

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

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

No. NL/KEM/ExTR10.0034/04.

(17) **Specific conditions of use**

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.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Test Report No. NL/KEM/ExTR10.0034/04.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 01ATEX2223 X**

Issue No. 6

(20) **Certificate history**

- Issue 1 - 201040800 Initial certificate
- Addendum - 209011400 Increase of the ambient temperature to +70 °C for all types
Removal of the prismatic lens of the non-LED versions
- Issue 2 - 213023400 Assessment in accordance with newer edition of standards:
EN 60079-0 : 2006, EN 60079-1 : 2007 EN 61241-0 : 2006 and
EN 61241-1 : 2004
- Issue 3 - 214799900 Addition of Sounder/Beacons Types
Instruction manuals update
Drawing CD 2446-09 updates
- Issue 4 - 216791900 Assessment in accordance with newer edition of standards:
EN 60079-0 : 2012 and EN 60079-31 : 2014
Addition of a differently shaped, smaller horn, type designation with
additional -R
Addition of alternative materials for the horns of the Ex tb certified
Sounder/Beacons
Addition of the type with a plastic lens cap, type designation ending
with -P
- Issue 5 - 510005000 Addition of Combined Sounder/LED Beacons,
Types BExCS110-L2D
- Issue 6 - 510023200 Assessment in accordance with newer edition of standards:
EN IEC 60079-0 : 2018 and EN 60079-1 : 2014

**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