



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

| | | | |
|-----------------------|--|-------------|--|
| Certificate No.: | IECEx KEM 10.0025X | Issue No: 1 | Certificate history: Issue No. 1 (2012-05-08) Issue No. 0 (2010-04-16) |
| Status: | Current | Page 1 of 5 | |
| Date of Issue: | 2012-05-08 | | |
| Applicant: | European Safety Systems Ltd. Impress House, Mansell Road Acton, London W3 7QH United Kingdom | | |
| Electrical Apparatus: | Electronic Sounder/Beacon | | |
| Optional accessory: | | | |
| Type of Protection: | Ex d, Ex tD | | |
| Marking: | Ex d IIB T4 Ex tD A21 IP6X T100°C or T115°C | | |

Approved for issue on behalf of the IECEx
Certification Body:

T. Pijpker

Position:

Certification Manager

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.
Utrechtseweg 310
6812 AR Arnhem

The Netherlands[
All testing,
inspection, auditing and certification activities of the former KEMA
Quality are an integral part of the DEKRA Certification
Group.]





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Manufacturer: **European Safety Systems Ltd.**
Impress House, Mansell Road
Acton, 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 : 2004 Edition:4.0 | Electrical apparatus for explosive gas atmospheres - Part 0: General requirements |
| IEC 60079-1 : 2007-04 Edition:6 | Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" |
| IEC 61241-0 : 2004 Edition:1 | Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements |
| IEC 61241-1 : 2004 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/ExTR10.0034/00](#)

[NL/KEM/ExTR10.0034/01](#)

Quality Assessment Report:

[GB/SIR/QAR06.0020/03](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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 and Sounder/LED Beacons Types BExCS110L1D and BExDCS110L1D, housed in aluminium enclosures in type of protection flameproof enclosure "d", are used to provide acoustic signals and visual warning signals.

For Electrical data and Marking, see attachment.

CONDITIONS OF CERTIFICATION: YES as shown below:

In case of repair, contact the manufacturer for information on the dimensions of the flameproof joints.



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

A) The range of Electronic Sounder/Beacons has been extended with:

1. Vershoven Sounder/Beacons Types BExCTV110-05D, BExDCTV110-05D
(new telephone initiator board supplied by Vershoven, same electrical data as previous certified Sontel/Beacons Types BExCTS110-05D and BExDCTS110-05D)
2. Alternative version of Sontel/Beacons Types BExCTS110-05D, BExDCTS110-05D
(new telephone initiator board built by E2S, electrical data unchanged)

B) Update of instruction manuals

C) Update BExCTS110-05D AC Sontel/Beacon Block Diagram (drawing CD 2446-09)

Above changes do not affect the Ex d construction or the temperature ratings.



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Additional information:

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Annex:

[Annex to KEM10.0025X Iss1.pdf](#)

Annex 1 to Certificate of Conformity IECEx KEM 10.0025X, issue 1

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 BExCS110L1D and BExDCS110L1D:

| | | | | | |
|----------------------|--------|--------|--------|---------|---------|
| 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 |

Marking

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.

Annex 1 to Certificate of Conformity IECEx KEM 10.0025X, issue 1

| GAS | |
|---------------|------------------|
| Ambient temp. | -50 °C to +70 °C |
| BExCS110-05D | Ex d IIB T4 |
| BExCL15-05D | Ex d IIB T4 |
| BExCA110-05D | Ex d IIB T4 |
| BExCTS110-05D | Ex d IIB T4 |
| BExCTV110-05D | Ex d IIB T4 |
| BExCS110L1D | Ex d IIB T4 |

| DUST | | |
|----------------|---------------------|---------------------|
| Ambient temp. | 55 °C | 70 °C |
| BExDCS110-05D | Ex tD A21 IP6X T100 | Ex tD A21 IP6X T115 |
| BExDCL15-05D | Ex tD A21 IP6X T100 | Ex tD A21 IP6X T115 |
| BExDCA110-05D | Ex tD A21 IP6X T100 | Ex tD A21 IP6X T115 |
| BExDCTS110-05D | Ex tD A21 IP6X T100 | Ex tD A21 IP6X T115 |
| BExDCTV110-05D | Ex tD A21 IP6X T100 | Ex tD A21 IP6X T115 |
| BExDCS110L1D | Ex tD A21 IP6X T100 | Ex tD A21 IP6X T115 |