

(1) **EC-TYPE EXAMINATION CERTIFICATE**

(2) Equipment or protective system intended for use in potentially explosive atmospheres – Directive 94/9/EC

(3) EC-Type Examination Certificate Number: **KEMA 01ATEX2223**

(4) Equipment or protective system: **Electronic Sounder/Beacon Type BExCS110-05D, Loudspeaker/Beacon Type BExCL15-05D and Appello/Beacon Type BExCA110-05D.**

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

(6) Address: **Impress House, Mansell Road, Acton, London W3 7QH, England**

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

(8) KEMA Quality B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. 2010403.

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

EN 50014 : 1997

EN 50018 : 2000

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance with the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following:



II 2 G

EEx d IIB T4

Arnhem, 28 February 2002

KEMA Quality B.V.



T. Pijpker
Certification Manager

* This Certificate may only be reproduced in its entirety and without any change

(13)

SCHEDULE

(14)

to EC-Type Examination Certificate KEMA 01ATEX2223

(15) **Description**

The Electronic Sounder/Beacon Type BExCS110-05D, the Loudspeaker/Beacon Type BExCL15-05D and the Appello/Beacon Type BExCA110-05D, housed in aluminium enclosures in type of explosion protection flameproof enclosure "d", is used to provide acoustic signals and visual warning signals.

Ambient temperature range $-50\text{ }^{\circ}\text{C}$... $+55\text{ }^{\circ}\text{C}$.

Electrical data

Electronic Souncer/Beacon Type BExCS110-05D

Supply voltage	12 V DC	24 V DC	48 V DC	115 V AC	230 V AC
Sounder current (mA)	195	265	130	110	56
Beacon current (mA)	750	300	180	140	55

Loudspeaker/Beacon Type BExCL15-05D

Supply voltage	12 V DC	24 V DC	48 V DC	115 V AC	230 V AC
Beacon current (mA)	750	300	180	140	55

Loudspeaker Type	100 V line	8 Ohms	16 Ohms
Supply voltage (V)	100	10,95	15,49

Appello Speech Sounder/Beacon Type BExCA110-05D

Supply voltage	24 V DC	115 V AC	230 V AC
Appello current (mA)	480	90	45
Beacon current (mA)	300	140	55

Installation instructions

Suitable heat-resisting cables and cable glands, with a continuous operating temperature of at least $95\text{ }^{\circ}\text{C}$, shall be used when the ambient temperature exceeds $40\text{ }^{\circ}\text{C}$.

For external earthing or bonding connection a cable lug shall be used so that the conductor is secured against loosening and twisting and that contact pressure is permanently secured.

The cable entry devices and blanking elements shall be in type of explosion protection flameproof enclosure "d", suitable for the conditions of use and correctly installed.

Routine test

Routine tests according to Clause 16 of EN 50018 are not required since the type test has been made at a static pressure of four times the reference pressure.

(16) **Report**

KEMA No. 2010408.

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SCHEDULE

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to EC-Type Examination Certificate KEMA 01ATEX2223

(17) **Special condition for safe use**

None.

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

Covered by the standards listed at (9).

(19) **Test documentation**

1. EC-Type Examination Certificate KEMA 00ATEX2006 X
KEMA 99ATEX6312

dated

2. Description TDF 2403 (9 pages), issue A 10.01.2002

3. Drawing No.

D 2446-01, rev. A	20.12.2001
D 2446-02, rev. A	20.12.2001
D 2446-03, rev. A	20.12.2001
D 2446-04, rev. A	20.12.2001
D 2446-05, rev. A	20.12.2001
D 2446-06, rev. A	20.12.2001
D 2446-07, rev. A	04.01.2002
D 2446-08, rev. A	04.01.2002
D 2446-09, rev. A	04.01.2002
D 2446-04, rev. A	03.03.2000
D 2489, rev. B	04.01.2002
PL2446-02, rev. A	20.12.2001
PL2446-03, rev. A	20.12.2001
PL2446-04, rev. A	20.12.2001
PL2446-05, rev. A	20.12.2001
CD 2446-01, rev. A	04.01.2002
CD 2446-02, rev. A	04.01.2002
CD 2446-03, rev. A	04.01.2002
CD 2446-04, rev. A	04.01.2002
CD 2446-05, rev. A	04.01.2002
CD 2440-00, rev. A	04.01.2002
CD 2446-07, rev. A	04.01.2002

4. Samples

AMENDMENT 1

to EC-Type Examination Certificate KEMA 01ATEX2223

Manufacturer: **European Safety Systems Ltd.**

Address: **Impress House, Mansell Road, Acton, London W3 7QH, England**

Description

This amendment handles two changes.

First change :

In future the electronic sounder/beacon type BExCS110-05D may also be constructed in accordance with the documentation stated below.

The modification concerns an electronic provision for the operation of the sounder to be triggered by a telephone ringing signal.

The type designation of this electronic sounder will be: **SONTEL/BEACON Type BExCTS110-05D.**

Second change :

In future the loudspeaker/beacon type BExCL15-05D may also be constructed in accordance with the documentation stated below.

The modification concerns the use of an alternative line transformer which makes the loudspeakers suitable for a 70V signal.

All other data remain unchanged.

Electrical data

Sontel/Beacon Type BExCTS110-05D :

Supply voltage : 12/24/48 Vdc
230/115 Vac

Loudspeaker or Loudspeaker/Beacon Type BExCL15-05D :

Supply voltage : 70 V (line), 100 V (line) or 14.1/20 V (low impedance versions 8/16 Ohms)
Supply power : max. 15 W

Test documentation

		<u>dated</u>
1. Drawing No.	CD 2446-08 issue A	18.03.2003
	CD 2446-09 issue A	18.03.2003
	D 2446-08 issue B	07.04.2003
	D 2446-16 issue A	18.03.2003
	D 2446-17 issue A	18.03.2003
Parts lists	PL 2446-03 issue B	07.04.2003
	PL 2446-16 issue B (2 sheets)	18.03.2003

Arnhem, 10 June 2003
KEMA Quality B.V.

T. Pijker
Certification Manager



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AMENDMENT 2

to EC-Type Examination Certificate KEMA 01ATEX2223

Manufacturer: European Safety Systems Ltd.


Address: Impress House, Mansell Road, Acton, London W3 7QH, England

Description

In future The Electronic Sounder/Beacon Type BExDCS110-05D, the Loudspeaker/Beacon Type BExDCL15-05D, the Appello/Beacon Type BExDCA110-05D and the Sontel/Beacon Type BExDCTS110-05D may also be used in areas where combustible dust may be present.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 50281-1-1 : 1998.

The Electronic Sounder/Beacon, Loudspeaker/Beacon, Appello/Beacon and Sontel/Beacon are marked with:

 II 2 D T 100 °C

The maximum surface temperature of the enclosure T 100 °C is based on a maximum ambient temperature of 55 °C.

Installation instructions

For combustible dust applications, the cable entry device and blanking elements shall be in type of explosion protection increased safety "e" or flameproof enclosure "d" and shall have an IP 6X rating according to EN 60529.

All other data remain unchanged.

Test documentation

		<u>dated</u>
1. Drawing No.	D 2446-18, rev. A	
	D 2446-19, rev. A	
	D 2446-20, rev. A	
	D 2446-21, rev. A	
	D 2446-22, rev. A	04.06.2003

Arnhem, 20 August 2003
KEMA Quality B.V.



T. Pijpker
Certification Manager

AMENDMENT 3

to EC-Type Examination Certificate KEMA 01ATEX2223

Manufacturer: European Safety Systems Ltd.

Address: Impress House, Marsell Road, Acton, London W3 7QH, England

Description


In future, in accordance with the documentation stated below, the Electronic Sounder/Beacon, the Loudspeaker/Beacon and the Appello/Beacon may also be manufactured with a coloured prismatic lens over the glass dome, in order to increase the perceived light output.

The range of Electronic Sounder/Beacons, Loudspeaker/Beacons and Appello/Beacons Type BEx... has been extended with Sounder/LED Beacons Type BExCS110L1D and BExDCS110L1D. The LED units will all be fitted with a coloured prismatic lens.

The marking of the Electronic Sounder/Beacons Type BExCS110-05D, the Loudspeaker/Beacons Type BExCL15-05D, the Appello/Beacons Type BExCA110-05D and the Sounder/LED Beacons Type BExDCS110L1D shall include the following:

 II 2 G D EEx d IIB T4 T 100 °C IP 6X

The marking of the Sounder/LED Beacons Type BExCS110L1D shall include the following:

 II 2 G EEx d IIB T4

Ambient temperature range: -50 °C ... +55 °C.

The maximum surface temperature of the enclosure T 100 °C is based on a maximum ambient temperature of 55 °C.

Electrical data

Electronic Sounder/LED Beacons Type BExCS110L1D and BExDCS110L1D

Supply voltage	12 V DC	24 V DC	48 V DC	115 V AC	230 V AC
Sounder current (mA)	195	265	130	110	56
Beacon current (mA)	760	400	210	135	65

All other data remain unchanged.

AMENDMENT 3

to EC-Type Examination Certificate KEMA 01ATEX2223

Test documentationdated

1. Drawing No.	CD 2430, issue A)	
	CD 2431, issue A)	
	D 2446-27, issue A)	
	D 2446-28, issue A)	
	D 2446-29, issue A)	26.10.2005
	D 2446-30, issue A)	
)	
2. Parts list No.	PL 2446-02, issue B)	
	PL 2446-27, issue A)	

Amherst, 21 April 2006
KEMA Quality B.V.C.G. van Es
Certification Manager