

(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 99ATEX6312**

(4) Equipment or protective system:
**Electronic Sounders Types BExS110D, BExS120D, BExS110E and BExS120E,
Loudspeakers types BExL25D, BExL15D, BExL25E and BExL15E and
Appello Speech Sounders types BExA110D, BExA120D, BExA110E and BExA120E.**

(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, 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. 96312.

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

EN 50014 : 1992 + prA1 EN 50018 : 1994 + prA1 EN 50019 : 1994 + prA1

(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 and construction of the specified equipment or protective system. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.

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

II 2 G EEx d IIC T4 or II 2 G EEx de IIC T4

Arnhem, 13 December 1999
by order of the Board of Directors of N.V. KEMA

C.M. Boschloo
Certification Manager

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

SCHEDULE

(13)

(14)

to EC-Type Examination Certificate KEMA 99ATEX6312

(15) **Description**

The Electronic Sounders Types BExS110D, BExS120D, BExS110E and BExS120E, the Loudspeakers types BExL25D, BExL15D, BExL25E and BExL15E and the Appello Speech Sounders types BExA110D, BExA120D, BExA110E and BExA120E, housed in aluminum enclosures in type of explosion protection flameproof enclosure "d", are used to provide acoustic signals.

The Sounders Types BExS110E and BExS120E, the Loudspeakers types BExL25E and BExL15E and the Appello Speech Sounders types BExA110E and BExA120E are provided with a terminal compartment in type of explosion protection increased safety "e".

Ambient temperature range -40 °C ... +55 °C.

Electrical data

Electronic Sounders Types BExS110D, BExS120D, BExS110E and BExS120E

Supply voltage	12/24/48 Vdc or 110/115/230 Vac
Supply power	max. 27 W

Loudspeakers types BExL25D, BExL15D, BExL25E and BExL15E

Supply voltage	100 V (Line) or 14.1/20 V (Low impedance versions: 8/16 Ohms)
Supply power	max. 25 W

Appello Speech Sounders types BExA110D, BExA120D, BExA110E and BExA120E

Supply voltage	24 Vdc or 115/230 Vac
Supply current	480 mA or 90/45 mA

Installation instructions

Suitable heat-resisting cables and cable glands, with an continuous operating temperature of at least 95 °C, shall be used when the ambient temperature exceeds 40°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 shall be of a suitable certified type EEx d for the Sounders in type of protection flameproof enclosure "d", or of a suitable certified type EEx e for the Sounders with the terminal compartment in type of protection increased safety "e".

Unused apertures shall be closed with suitable certified blanking elements.

Routine tests

The Electronic Sounders, Loudspeakers and Appello Speech Sounders with terminal compartments in type of explosion protection increased safety "e", must be submitted to a routine test according to Clause 7.1 of EN 50019.

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.

SCHEDULE

(13)

(14)

to EC-Type Examination Certificate KEMA 99ATEX6312

(16) **Report**

KEMA No. 96312

Essential Health and Safety Requirements

Essential Health and Safety Requirements not covered by standards listed at (9)	
Clause	Subject
1.0.5	Marking
1.0.6.b	Instructions

These Essential Health and Safety Requirements are examined and positively judged. The results are laid down in the report listed at (16).

(19) **Test documentation**

1. Certificate of Conformity KEMA No. Ex-97.E.4429

signed

2. Description (36 pages))

3. Drawing No. D 2444-09 issue B)

D 2444-10 issue B)

D 2444-11 issue B)

D 2445-11 issue B)

D 2445-12 issue B)

D 2445-13 issue B)

CD 2402 issue C)

CD 2404 issue C)

PL 2444-02 issue C)

PL 2444-03 issue C)

PL 2444-04 issue B)

PL 2444-05 issue B)

PL 2444-07 issue C)

PL 2445-02 issue C)

PL 2445-03 issue C)

PL 2445-06 issue B)

PL 2445-07 issue B)

PL 2445-09 issue C)

D 2457 issue A)

18.11.1999

AMENDMENT 1

to EC-Type Examination Certificate KEMA 99ATEX6312

Manufacturer:

European Safety Systems Ltd.
Impress House, Mansell Road, Acton,
London W3 7QH,
England

Description

In future the Electronic Sounders Type BExS110D 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 these Electronic Sounders will be: **SONTEL** type **BExTS110D**.

Electrical data

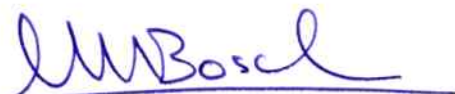
Power supply 110 Vac, 93 mA, or
115 Vac, 110 mA, or
230 Vac, 56 mA.

All other data remain unchanged.


Test documentation

1. Description (4 pages))	<u>signed</u>
)	
2. Drawings No. D 2444-21, issue A)	15.08.2000
D 2444-22, issue A)	
CD 2426, issue A)	
PL 2444-21, issue A)	

Arnhem, 21 August 2000
by order of the Board of Directors of N.V. KEMA



C.M. Boschloo
Certification Manager

Code:  II 2 G EEx d IIC T4

[2005561]

AMENDMENT 2

to EC-Type Examination Certificate KEMA 99ATEX6312

Manufacturer: European Safety Systems Ltd.

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

Description

In future the Electronic Sounders Types BExS110D, BExS120D, BExS110E and BExS120E, Loudspeakers types BExL25D, BExL15D, BExL25E and BExL15E and Appello Speech Sounders types BExA110D, BExA120D, BExA110E and BExA120E and Sontel type BExTS110D may also be used for an minumum ambient temperature of -50 °C.

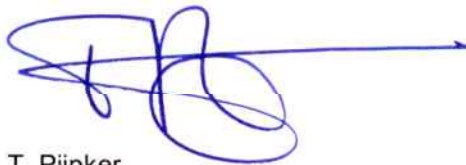
All other data remain unchanged.

Test documentation

		<u>dated</u>
1. Drawing No. D 2444-09, rev. C)	
D 2444-10, rev. C)	
D 2444-11, rev. C)	
D 2444-22, rev. B)	13.02.2002
D 2445-11, rev. C)	
D 2445-12, rev. C)	
D 2445-13, rev. C)	

2. Samples

Arnhem, 18 March 2002
KEMA Quality B.V.



T. Pijpker
Certification Manager

AMENDMENT 3

to EC-Type Examination Certificate KEMA 99ATEX6312

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 type BExS110D 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 these electronic sounders will be: **SONTEL** Type **BExTS110D**.

Second change :

In future the loudspeakers type BExL25D, BExL15D, BExL25E and BExL15E may also be constructed in accordance with the documentation stated below.

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

All other data remain unchanged.

Electrical data

Sontel BExTS110D :

Supply voltage : 12/24/48 Vdc, 110/115/230 Vac

Supply power : max. 27 W

Loudspeakers types BExL25D, BExL15D, BExL25E and BExL15E :

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

Supply power : max. 25 W

Test documentation

		<u>dated</u>
1. Drawing No.	CD 2429, issue A	18.03.2003
	D 2444-10, issue D	07.04.2003
	D 2444-21, issue B	18.03.2003
	D 2444-22, issue C	18.03.2003
	D 2445-12, issue D	07.04.2003
2. Parts lists	PL2444-04, issue C	07.04.2003
	PL2444-21, issue B	18.03.2003
	PL2445-06, issue C	07.04.2003

Arnhem, 10 June 2003

KEMA Quality B.V.



T. Pijpker
Certification Manager

[2028941]

AMENDMENT 4

to EC-Type Examination Certificate KEMA 99ATEX6312

Manufacturer: European Safety Systems Ltd.

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

Description

In future the Electronic Sounders Types BExDS110D, BExDS120D, BExDS110E and BExDS120E, Loudspeakers types BExDL25D, BExDL15D, BExDL25E and BExDL15E and Appello Speech Sounders types BExDA110D, BExDA120D, BExDA110E and BExDA120E and Sontel type BExDTS110D 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 Sounders 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

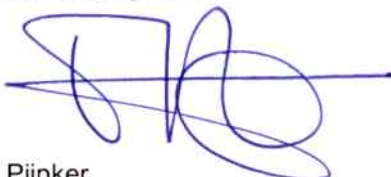
For combustible dust applications, the cable entry device and blanking elements shall be in type of explosion protection increased safety "e" or flameproof enclosure "d" and shall have an IP 6X rating according to EN 60529.

All other data remain unchanged.

Test documentation

	<u>dated</u>
1. Drawing No. D2444-26, rev. A)	
D2444-27, rev. A)	
D2444-28, rev. A)	
D2444-29, rev. A)	04.06.2003
D2444-30)	
D2445-24, rev. A)	
D2445-25, rev. A)	
D2445-26, rev. A)	

Arnhem, 20 August 2003
KEMA Quality B.V.



T. Pijpker
Certification Manager