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 10.0002 issue No.:0 Certificate history:

Status: **Current**

Date of Issue: **2010-02-02** Page 1 of 3

Applicant: **European Safety Systems Ltd.**
Impress House, Mansell Road
Acton, London W3 7QH
United Kingdom

Electrical Apparatus: **Electronic Beacons**
Optional accessory:

Type of Protection: **Ex d, Ex de, Ex tD**

Marking: **Ex d IIC T3 to T6 or**
Ex de IIC T4 to T6
Ex tD A21 IP66 or IP67 T85°C to T200°C

Approved for issue on behalf of the IECEx Certification Body: T. Pijpker

Position: Certification Manager

Signature:
(for printed version)

Date: 2010-02-02

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:

KEMA Quality B.V.
Utrechtseweg 310
6812 AR Arnhem
The Netherlands

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Manufacturer:

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

Manufacturing location(s):

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

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 60079-7 : 2001 Edition: 3	Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'
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/ExTR10.0005/00

Quality Assessment Report:
GB/SIR/QAR06.0020/01

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

The Electronic Beacons types BExBG05D, BExBG05E, BExBG10D, BExBG10E, BExBG15D, BExBG15E, BExBG21D, BExTBG05D, BExBGL1D, housed in aluminium enclosures in type of protection flameproof enclosure "d", are used to provide visual warning signals. The Beacons types BExB..E are provided with a terminal compartment in type of protection increased safety "e".

For Electrical data and Marking see attachment.

CONDITIONS OF CERTIFICATION: NO

Annexe: ANNEX 1 to IECEx KEM 10.0002.doc

KEMA

Annex 1 to Certificate IECEx KEM 10.0002

Electrical data

Beacon type	Supply voltage	Supply current
BExBG05D, BExBG05E	12 / 24 / 48 Vdc or 115 / 230 Vac	750 / 300 / 180 mA or 140 / 55 mA
BExBG10D, BExBG10E	12 /24 / 48 Vdc or 115 / 230 Vac	1.45 A / 660 mA / 340 mA or 250 / 110 mA
BExBG15D, BExBG15E	24 / 48 Vdc or 115 / 230 Vac	860 / 480 mA or 360 / 170 mA
BExTBG05D	115 / 230 Vac	140 / 55 mA
BExBGL1D	10-50 Vdc or 10-35 Vac or 115 / 230 Vac	400 mA (24 Vdc) or 812 mA (20 Vac) or 135 / 65 mA
BExBG21D	24 / 48 Vdc or 115 / 230 Vac	1,2 A / 600 mA or 560 / 280 mA

Installation instructions

The manual provided with the equipment shall be followed in detail to assure safe operation.

Marking

The relation between the type of 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 +55 °C	-50 °C to +70 °C
BExBG05D	Ex d IIC T6	Ex d IIC T5	Ex d IIC T4
BExBG05E	Ex de IIC T6	Ex de IIC T5	Ex de IIC T4
BExBG10D	Ex d IIC T5		Ex d IIC T4
BExBG10E	Ex de IIC T5		Ex de IIC T4
BExBG15D	Ex d IIC T5		Ex d IIC T4
BExBG15E	Ex de IIC T5		Ex de IIC T4
BExBG21D		Ex d IIC T4	Ex d IIC T3
BExTBG05D	Ex d IIC T6	Ex d IIC T5	Ex d IIC T4
BExBGL1D	Ex d IIC T5		Ex d IIC T4

DUST			
Ambient temp.	40 °C	55 °C	70 °C
BExBG05D	Ex tD A21 IP67 T85	Ex tD A21 IP67 T100	Ex tD A21 IP67 T115
BExBG05E	Ex tD A21 IP66 T85	Ex tD A21 IP66 T100	Ex tD A21 IP66 T115
BExBG10D	Ex tD A21 IP67 T95	Ex tD A21 IP67 T110	Ex tD A21 IP67 T125
BExBG10E	Ex tD A21 IP66 T95	Ex tD A21 IP66 T110	Ex tD A21 IP66 T125
BExBG15D	Ex tD A21 IP67 T95	Ex tD A21 IP67 T110	Ex tD A21 IP67 T125
BExBG15E	Ex tD A21 IP66 T95	Ex tD A21 IP66 T110	Ex tD A21 IP66 T125
BExBG21D		Ex tD A21 IP67 T135	Ex tD A21 IP67 T200
BExTBG05D	Ex tD A21 IP67 T85	Ex tD A21 IP67 T100	Ex tD A21 IP67 T115
BExBGL1D	Ex tD A21 IP67 T95	Ex tD A21 IP67 T105	Ex tD A21 IP67 T120