



# 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](http://www.iecex.com)

Certificate No.: **IECEX SIM 04.0002** Issue No.: **0**

Status: **Current**

Date of Issue: **2004-09-24** Page **1** of **4**

Applicant: **European Safety Systems Ltd**  
Impress House  
Mansell Road  
ACTON LONDON W3 7QH  
**United Kingdom**

Electrical Apparatus: **BEx Range of Beacons**  
*Optional accessory:*

Type of Protection: **Ex d, DIP**

Marking: **See Schedule**

*Approved for issue on behalf of the IECEx  
Certification Body:*

Ashraf Chowdhury

*Position:*

Principial Engineer

*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](http://www.iecex.com).

Certificate issued by:

## Safety in Mines Testing and Research Station (Simtars)

2 Smith Street  
REDBANK QLD 4301  
Australia





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Manufacturer: **European Safety Systems Ltd**  
Impress House  
Mansell Road  
ACTON LONDON W3 7QH  
**United Kingdom**

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 manufacture'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:

<b>IEC 60079-0 : 2000</b> Edition: 3.1	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2001</b> Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
<b>IEC 61241-1-1 : 1999</b> Edition: 2	Electrical apparatus for use in the presence of combustible dust - Part 1-1: Electrical apparatus protected by enclosures and surface temperature limitation - Specification for apparatus

*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*

IECEX ATR:	File Reference:
<b>AU/SIM/04/0003</b>	<b>03/0220</b>



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## Schedule

### EQUIPMENT:

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

The BEx range of Beacons are used to provide visual warning signals. Each BEx Beacon has a cast aluminium alloy chamber and a bolt-on cover, a borosilicate glass flanged flashdome and a stainless steel guard. Variations to the internal components, and circuit, allow the Beacons to be operated at 24 Vdc, 115 Vac or 230 Vac, and flash intensities of 5, 10 and 15 joules. Two threaded entries are provided in the cover for the fitting of separately certified cable glands.

The BEx range of Beacons covered by this certificate is listed in Table 1.

**Table 1: BEx Range of Beacons**

Type / Model	Gas Group	Temperature class	IP rating	Input Supply /Electronic Assembly
BExBG05D	IIC	T5	IP67	230 Vac 55mA 115 Vac 140 mA 24 Vdc 300 mA
BExBG10D	IIC	T5	IP67	230 Vac 110 mA 115 Vac 250 mA 24 Vdc 660 mA
BExBG15D	IIC	T4	IP67	230 Vac 170 mA 115 Vac 360 mA 24 Vdc 860 mA

**CONDITIONS OF CERTIFICATION: NO**



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## EQUIPMENT(continued):

### Marking

Models: BExBG05D & BExBG10D

Ex d IIC T5 T<sub>a</sub> 55°C IP67

DIP A21 T<sub>A</sub> T5 IP67 (T<sub>amb</sub> -40°C to +55°C)

Model: BExBG15D

Ex d IIC T4 T<sub>a</sub> 55°C IP67

DIP A21 T<sub>A</sub> T4 IP67 (T<sub>amb</sub> -40°C to +55°C)

### MANUFACTURER'S DOCUMENTS

DRAWING No.	TITLE	REVISION	DATE
D 3448-01	BExBG--D (GLASS DOME) BEACON Ex 'd' UNITS FLAMEPROOF JOINT DETAIL	B	24-05-04
D 3448-02	BExBG15D and BexBG10D Ex 'd' (GLASS DOME) BEACONS INTERNAL ASSEMBLY	B	24-05-04
D 3448-03	BExBG05D (GLASS DOME) Ex 'd' BEACON INTERNAL ASSEMBLY	B	24-05-04
D 3448-04	BExBG--D Ex WELLGLASS FLANGED FLASHDOME	A	25-07-03
D 3448-05	BExBG--D Beacon Guard and Mounting Bracket Assembly	B	24-05-04
D 3489	BExBG BEACON GLASS DOME GUARD	A	25-07-03
PL3448-02	BExBG15D and BExDBG10D (SIMTARS) Ex 'd' GLASS DOME BEACON (15 and 10 Joule)	B	24-05-04
PL 3448-03	BExBG05D (SIMTARS) Ex 'd' GLASS DOME BEACON (5 Joule)	B	24-05-04
CD 3420	BExBG05D DC BEACONS BLOCK DIAGRAM	A	25-07-03
CD 3421	BExBG05D 230V and 115V AC BEACONS BLOCK DIAGRAM	A	25-07-03
CD 3422	BExBG15D and BExDBG10D DC BEACONS Ex 'd' BLOCK DIAGRAM	A	25-07-03
CD 3423	BExBG15D & BExDBG10D 230V and 115V AC BEACONS BLOCK DIAGRAM	A	25-07-03
D 3448-19	SIMTARS LABEL BExBG15D Ex 'd' BEACONS	B	07-06-04
D 3448-20	SIMTARS LABEL BExBG05D and BExBG10D Ex 'd' BEACONS	B	07-06-04

Annexe: