



[1]

UNITED KINGDOM CONFORMITY ASSESSMENT
UK-TYPE EXAMINATION CERTIFICATE

[2]

**Product or Protective System Intended for use in Potentially Explosive Atmospheres
UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1**

[3] UK-Type Examination Certificate No.: **UL22UKEX2637X Rev. 0**

[4] Product: **Electronic Beacon/Beacon, Types BExCBG05-05D, BExCBGL2-L2D and BExCBGL2-05D**

[5] Manufacturer: **European Safety Systems Ltd.**

[6] Address: **Impress House, Mansell Road, London, W3 7QH, United Kingdom**

[7] This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8] UL International (UK) Ltd, Approved Body number 0843, in accordance with Regulation 44 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended by UKSI 2019:696), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential report **NL/KEM/ExTR10.0032/03**.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN 60079-1:2014



EN 60079-31:2014

Except in respect of those requirements listed at section 19 of the schedule to this certificate.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the Schedule to this certificate.

[11] This UK-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the product shall include the following:

 **II 2 G Ex db IIB T6...T4 Gb**
 **II 2 D Ex tb IIIC T65°C...T130°C Db**

Certification Officer
Andrew Moffat

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the UKEx Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Regulations. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2022-08-31

Approved Body UL International (UK) Ltd Unit 1-3 Horizon Kingsland Business Park Wade Road, Basingstoke RG24 8AH, UK
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Schedule UK-TYPE EXAMINATION CERTIFICATE No. UL22UKEX2637X Rev. 0

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Description of Product

Electronic Beacon/Beacon, Types BExCBG05-05D, BExCBGL2-L2D and BExCBGL2-05D, housed in aluminium enclosures in type of protection flameproof enclosure "db" and ignition protection "tb", are used to provide visual warning signals.

The Beacon/Beacons are provided with a glass dome. Types BExCBGL2-L2D and BExCBGL2-05D are provided with a plastic dome cover. Type BExCBG05D is optionally provided with a plastic dome cover indicated by the suffix -P to the type designation; BExCBG05-05D-P.

The optical radiation output of the product with respect to explosion protection, according to Schedule 1 clause 16 of the Regulation 2016 No. 1107 (as amended by UKSI 2019:696) is not covered in this certificate.

Temperature range

The relation between the double beacon, the ambient temperature range and the marking for gas and dust applications is given in the tables below.

GAS			
Ambient temp. range	-50 °C to +40 °C	-50 °C to +55 °C	-50 °C to +70 °C
BExCBG05-05D	-	Ex db IIB T5 Gb	Ex db IIB T4 Gb
BExCBG05-05D-P	-	-	Ex db IIB T4 Gb
BExCBGL2-L2D	-	Ex db IIB T6 Gb	Ex db IIB T5 Gb
BExCBGL2-05D	Ex db IIB T5 Gb	-	Ex db IIB T4 Gb

DUST			
Ambient temp. range	-50 °C to +40 °C	-50 °C to 55 °C	-50 °C to 70 °C
BExCBG05-05D	-	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db
BExCBG05-05D-P	-	Ex tb IIIC T115 °C Db	Ex tb IIIC T130 °C Db
BExCBGL2-L2D	Ex tb IIIC T65 °C Db	Ex tb IIIC T80 °C Db	Ex tb IIIC T95 °C Db
BExCBGL2-05D	Ex tb IIIC T95 °C Db	Ex tb IIIC T110 °C Db	Ex tb IIIC T125 °C Db

Electrical data

Beacon type	Supply voltage	Voltage range	Supply current
BExCBG05-05D, BExCBG05-05D-P	12 / 24 / 48 Vdc or 115 / 230 Vac	-	750 / 300 / 180 mA or 140 / 55 mA
BExCBGL2-L2D	24 Vdc or 115 / 230 Vac	18-54 Vdc or 103.5-126 Vac / 207-253 Vac	480 mA or 170 / 96 mA
BExCBGL2-05D	24 / 48 Vdc or 115 / 230 Vac	20-28 Vdc / 42-54 Vdc or 103.5-126 Vac / 207-253 Vac	520 / 283 mA or 170 / 89 mA

Routine tests

None

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Test Report No. (associated with this certificate issue)

The test report no. is provided under item no. [8] on page 1 of this UK-Type Examination Certificate.

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Specific conditions of use:

- Flameproof joints are not intended to be repaired.
- The enclosure may generate an ignition-capable level of electrostatic charges under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions that might cause a build-up of electrostatic charges on non-conducting surfaces.

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Schedule

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- [18] Conditions of certification:
None
- [19] Essential Health and Safety Requirements (Regulations Schedule 1)
In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.
- Additional information
The products have in addition passed the tests for Ingress Protection to IP66/67 in accordance with EN60529:1991+A1:2000+A2:2013.
- The manufacturer shall inform the approved body concerning all modifications to the technical documentation as described in Annex III to UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1.

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Schedule
UK-TYPE EXAMINATION CERTIFICATE No.
UL22UKEX2637X Rev. 0

[20] Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
BExCBG Combined unit flameproof joint detail	D2447-01	D	13/12/18
BExCB05-05D Beacon /Beacon combined unit internal assembly	D2447-02	B	30/10/09
BExCB05-05D Beacon /Beacon combined unit guard assembly	D2447-03	A	20/12/01
BExBG--D and BExBG--E Ex WELLGLASS FLANGED FLASHDOME	D2448-04	A	03/03/00
BExBG BEACON GLASS DOME GUARD	D2489	B	04/01/02
BExCBG05-05D DC Beacon / Beacon block diagram	CD2447-01	A	04/01/02
BExCBG05-05D AC Beacon / Beacon block diagram	CD2447-02	A	04/01/02
BExC COMBINED DC BEACON BLOCK DIAGRAM	CD2446-02	A	04/01/02
BExC COMBINED AC BEACON BLOCK DIAGRAM	CD2446-04	A	04/01/02
BEx Beacon guard and lens flash dome assembly	D2448-40	A	05/06/2015
BExCCBG05-05D Instruction sheet (3 pages)	IS2466-SC	E	18/02/2019
BExCCBG05-05D Parts list	PL2447-02-SC	C	07/12/18
CIRCUIT/BLOCK DIAGRAM BEx L2 LED BEACON	D201-00-001-CD-SC	A	27/10/2015
BExCBGL2-L2D Parts List	D201-00-501-BM-SC	B	07/12/18
BExCBGL2-L2D Double beacon combined unit internal assembly	D201-00-501-SC	A	02-11-15
BExCBGL2-05D Parts List	D201-00-601-BM-SC	B	07/12/18
BExCBGL2-05D Double beacon combined unit internal assembly	D201-00-601-SC	A	02/11/15
Instructions - BExCBGL2-L2D	D201-00-501-IS-SC-UK	A	24/08/2022
Instructions - BExCBGL2-05D	D201-00-601-IS-SC-UK	A	24/08/2022
Instructions - BExCBG05-05D or BExCBG05-05D-P	IS2466-SC-UK	A	24/08/2022
Label drawing - GAS / DUST LABEL (UKEx) BExCBGL2-L2D & BExCBGL2-05D Ex 'd' BEACON/ BEACON	D201-00-501-SC-UK	A	24/08/2022
Label drawing - GAS / DUST LABEL (UKEx) BExCCBG05-05D Ex 'd' BEACON / BEACON	D2447-07-SC-UK	A	26/08/2022