

CERTIFICATE

(1) EC-Type Examination

(2) **Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC**

(3) EC-Type Examination Certificate Number: **KEMA 00ATEX2006 X** Issue Number: **5**

(4) Equipment: **Electronic Beacons, Types BExBG05D(-P)(-SIL), BExBG10D(-P)(-SIL), BExBG15D(-P)(-SIL), BExBG21D(-P), BExTBG05D(-P), BExBGL1D and BExBGL2D**

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

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

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

(8) DEKRA Certification 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 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 test report number NL/KEM/ExTR10.0005/03.

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

EN 60079-0 : 2012 + A11

EN 60079-1 : 2007

EN 60079-31 : 2014

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment 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 according to the Directive 94/9/EC. Further requirements of the directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

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



II 2 G Ex d IIC T6...T3 Gb
II 2 D Ex tb IIIC T60 °C...T200 °C Db

This certificate is issued on 14 April 2016 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

DEKRA Certification B.V.



R. Schuller
Certification Manager

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(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 00ATEX2006 X**

Issue No. 5

(15) **Description**

Electronic Beacons, Types BExBG05D(-P)(-SIL), BExBG10D(-P)(-SIL), BExBG15D(-P)(-SIL), BExBG21D(-P), BExTBG05D(-P), BExBGL1D and BExBGL2D, housed in aluminium enclosures in type of protection flameproof enclosure “d” and dust ignition protection by enclosure “tb”, are used to provide visual warning signals.

The Beacons are provided with a glass dome.

LED Beacon Types BExBGL1D and BExBGL2D are provided with a plastic dome cover.

Other Beacons are optionally provided with a plastic dome cover indicated by the suffix -P to the type designation; e.g. BExBG21D-P.

Electronic Beacons, Types BExBG05D, BExBG10D and BExBG15D, with a supply voltage of 24 Vdc have an optional monitoring module. For these the type designation is extended with -SIL.

The enclosure provides a degree of protection of IP66/IP67 per EN 60529 and EN 60079-0.

For details about electrical data and marking see Annex 1 to this certificate.

Installation instructions

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

(16) **Test Report**

No. NL/KEM/ExTR10.0005/03.

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

In case of repair, contact the manufacturer for information on the dimensions of the flameproof joints.

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.

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

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. NL/KEM/ExTR10.0005/03.

Annex 1 to NL/KEM/ExTR10.0005/03

Annex 1 to Certificate of Conformity IECEx KEM 10.0002X, issue 3

Annex 1 to EC-Type Examination Certificate KEMA 00ATEX2006 X, issue 5

Electrical data

Beacon type	Supply voltage	Voltage range	Supply current	..-SIL types
BExBG05D(-SIL) BExBG05D-P(-SIL)	12 / 24 / 48 Vdc or 115 / 230 Vac	-	750 / 300 / 180 mA or 140 / 55 mA	24 Vdc – 325 mA
BExBG10D(-SIL) BExBG10D-P(-SIL)	12 / 24 / 48 Vdc or 115 / 230 Vac	-	1.45 A / 660 mA / 340 mA or 250 / 110 mA	24 Vdc – 685 mA
BExBG15D(-SIL) BExBG15D-P(-SIL)	24 / 48 Vdc or 115 / 230 Vac	-	860 / 480 mA or 360 / 170 mA	24 Vdc – 885 mA
BExTBG05D, BExTBG05D-P	115 / 230 Vac	-	140 / 55 mA	N/A
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	N/A
BExBG21D, BExBG21D-P	24 / 48 Vdc or 115 / 230 Vac	-	1.2 A / 600 mA or 560 / 280 mA	N/A
BExBGL2D	24 Vdc or 115 / 230 Vac	18-54 Vdc or 103.5-126 Vac / 207-253 Vac	240 mA or 85 mA / 48 mA	N/A

Marking

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

Ambient temp.	GAS					
	-50 °C to +40 °C	-50 °C to +45 °C	-50 °C to +50 °C	-50 °C to +55 °C	-50 °C to +60 °C	-50 °C to +70 °C
BExBG05D(-SIL)	Ex d IIC T6 Gb			Ex d IIC T5 Gb		Ex d IIC T4 Gb
BExBG10D(-SIL)	Ex d IIC T5 Gb					Ex d IIC T4 Gb
BExBG15D(-SIL)	Ex d IIC T5 Gb					Ex d IIC T4 Gb
BExBG21D				Ex d IIC T4 Gb		Ex d IIC T3 Gb
BExTBG05D	Ex d IIC T6 Gb			Ex d IIC T5 Gb		Ex d IIC T4 Gb
BExBGL1D	Ex d IIC T5 Gb					Ex d IIC T4 Gb
BExBG05D-P(-SIL)		Ex d IIC T5 Gb				Ex d IIC T4 Gb
BExBG10D-P(-SIL)			Ex d IIC T4 Gb			Ex d IIC T4 Gb
BExBG15D-P(-SIL)			Ex d IIC T4 Gb			Ex d IIC T3 Gb

Annex 1 to ExTR NL/KEM/ExTR10.0005/03

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GAS						
Ambient temp.	-50 °C to +40 °C	-50 °C to +45 °C	-50 °C to +50 °C	-50 °C to +55 °C	-50 °C to +60 °C	-50 °C to +70 °C
BExBG21D-P						Ex d IIC T3 Gb
BExTBG05D-P		Ex d IIC T5 Gb				Ex d IIC T4 Gb
BExBGL2D					Ex d IIC T6 Gb	Ex d IIC T5 Gb

DUST			
Ambient temp.	-50 °C to + 40 °C	-50 °C to +55 °C	-50 °C to +70 °C
BExBG05D(-SIL)	Ex tb IIIC T85 °C Db	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db
BExBG10D(-SIL)	Ex tb IIIC T95 °C Db	Ex tb IIIC T110 °C Db	Ex tb IIIC T125 °C Db
BExBG15D(-SIL)	Ex tb IIIC T95 °C Db	Ex tb IIIC T110 °C Db	Ex tb IIIC T125 °C Db
BExBG21D		Ex tb IIIC T135 °C Db	Ex tb IIIC T200 °C Db
BExTBG05D	Ex tb IIIC T85 °C Db	Ex tb IIIC T100 °C Db	Ex tb IIIC T115 °C Db
BExBGL1D	Ex tb IIIC T95 °C Db	Ex tb IIIC T105 °C Db	Ex tb IIIC T120 °C Db
BExBG05D-P(-SIL)	Ex tb IIIC T90 °C Db	Ex tb IIIC T105 °C Db	Ex tb IIIC T120 °C Db
BExBG10D-P(-SIL)	Ex tb IIIC T120 °C Db	Ex tb IIIC T135 °C Db	Ex tb IIIC T150 °C Db
BExBG15D-P(-SIL)	Ex tb IIIC T120 °C Db	Ex tb IIIC T135 °C Db	Ex tb IIIC T150 °C Db
BExBG21D-P	Ex tb IIIC T150 °C Db	Ex tb IIIC T165 °C Db	Ex tb IIIC T180 °C Db
BExTBG05D-P	Ex tb IIIC T90 °C Db	Ex tb IIIC T105 °C Db	Ex tb IIIC T120 °C Db
BExBGL2D	Ex tb IIIC T60 °C Db	Ex tb IIIC T75 °C Db	Ex tb IIIC T90 °C Db