

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx BAS 05.0048X** Page 1 of 6

Issue No: 13 Status: Current

2023-08-14 Date of Issue:

Eaton MEDC Limited Applicant:

Unit B

Sutton Parkway Oddicroft Lane

Sutton-in-Ashfield NG17 5FB

United Kingdom

Equipment: A Type XB15 Xenon Beacon

Optional accessory:

Type of Protection: Flameproof, Optical Radiation, Dust Protection by Enclosure

Marking: For FB15:

Ex db IIC T* Gb; Ex tb IIIC T*°C Db (Tamb -55°C to + *°C) IP6X *See Schedule

Ex db op is IIC T* Gb; Ex tb op is IIIC T*°C Db (Tamb -55°C to + *°C) IP6X *See Schedule

Ex db op is IIC T* Gb; Ex tb op is IIIC T*°C Db (Tamb -55°C to + *°C) IP6X *See Schedule

R S Sinclair

Approved for issue on behalf of the IECEx

Certification Body:

Position: **Technical Manager**

Signature:

(for printed version)

14/8/2023 (for printed version)

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Certificate history: Issue 12 (2020-11-09)

Issue 11 (2018-10-17) Issue 10 (2017-05-30)

Issue 9 (2017-02-03) Issue 8 (2016-09-29)

Issue 7 (2015-10-19)

Issue 6 (2015-07-08)

Issue 5 (2013-11-01)

Issue 4 (2013-08-14)

Issue 3 (2013-02-28)

Certificate issued by:

SGS UK Limited Rockhead Business Park Staden Lane **Buxton, Derbyshire SK17 9RZ United Kingdom**





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Manufacturer: Eaton MEDC Limited

Unit B, Sutton Parkway Oddicroft Lane Sutton-in-Ashfield NG17 5FB United Kingdom

Manufacturing locations:

Eaton MEDC Limited Unit B, Sutton Parkway

Oddicroft Lane Sutton-in-Ashfield NG17 5FB 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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-1:2014 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:7.0

Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation

IEC 60079-28:2015 Edition:2

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

This Certificate **does not** indicate compliance with 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 Reports:

GB/BAS/ExTR13.0259/00 GB/BAS/ExTR15.0187/00 GB/BAS/ExTR15.0192/00 GB/BAS/ExTR15.0248/00 GB/BAS/ExTR16.0155/00 GB/BAS/ExTR17.0135/00 GB/BAS/ExTR20.0011/00 GB/BAS/ExTR22.0212/00

Quality Assessment Report:

GB/BAS/QAR06.0023/11

IECEx ATR: File reference:



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Type XB15 flameproof housing comprises a cylindrical enclosure, manufactured in glass reinforced polyester by compression moulding, complete with a borosilicate wellglass cemented into the centre of the cover. In addition the wellglass may be protected by an optional guard arrangement fixed to the cover.

The cover is mated to the enclosure base by a threaded joint which is then locked by a M4 x 10mm long steel grub screw.

Up to three M20 or M25 (or NPT equivalent) cable entries are provided in the side wall of the enclosure. Internal earthing facilities are provided alongside the internal component connections.

The XB15 Xenon Beacon may be rated at 24V d.c. 48V d.c. and up to 254V a.c. With a maximum power dissipation of 30 Watts. The XB15 fitted with a helical or 'U' shaped tube may have the alternative type designation SB9.

An alternative XB15 rated at 230/240V a.c. having a 15J 'U' shaped Xenon tube, Version 2 P.C.B. and 60, 80 or 120 flash rate, is fitted with a $12K\Omega$, 10W minimum end of line resistor. In this configuration it will be given the type designation XB15R.

The XB15 Xenon Beacon may also be used with alternative interior components which are designated the FB15 and LD15, and are further described below:

The Type FB15 Filament Lamp may be rated from 12V d.c. to 254V a.c. with a maximum power dissipation filament lamp of 60W or 100W. The filament lamp may be replaced by a 5W LED bulb.

The Type LD15 LED Beacon may be rated up to 48V d.c. with a maximum power dissipation of 13.5W. In addition the LD15 LED may be manufactured with A.C. Electronics with a rated voltage up to 254V a.c.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1. Painting and surface finishes, other than those applied by the manufacturer, are not permitted
- 2. In order to maintain the dust tight integrity of the enclosures (IP6X), the threads of cable entry devices and stopping plugs shall be sealed in accordance with the applicable code of practice for flameproof installation.



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Equipment (continued):

For all variants listed above the enclosures may be fitted with a terminal block with up to 12 ways and rated up to 25A

Beacon Type and variation	Lamp Rating Power/ Energy	*Temperature Class
XB15 Fitted with Version 1 or 2 electronics (Version 1 electronics available as 15 Joules only) 10 Joules 5 Joules	15 Joules	T5/T100°C (T _{amb} -55°C to +40°C)
		T4/T135°C (T _{amb} -55°C to +55°C)
		T4/T135°C (T _{amb} -55°C to +70°C)
	10 Joules	T6/T85°C (T _{amb} -55°C to +40°C)
		T5/T100°C (T _{amb} -55°C to +55°C)
		T4/T135°C (T _{amb} -55°C to +70°C)
	T6/T85°C (T _{amb} -55°C to +40°C)	
	5 Joules	T6/T85°C (T _{amb} -55°C to +55°C)
		T5/T100°C (T _{amb} -55°C to +70°C)
XB15 Fitted with HN 2647 (G)(H) helical form Xenon tube	15 Joules	T5/T100°C (T _{amb} -55°C to +40°C)
		T4/T135°C (T _{amb} -55°C to +55°C)
		T4/T135°C (T _{amb} -55°C to +70°C)
	10 Joules	T6/T85°C (T _{amb} -55°C to +40°C)
		T5/T100°C (T _{amb} -55°C to +55°C)
		T4/T135°C (T _{amb} -55°C to +70°C)
	5 Joules	T6/T85°C (T _{amb} -55°C to +40°C)
		T6/T85°C (T _{amb} -55°C to +55°C)
		T5/T100°C (T _{amb} -55°C to +70°C)
XB15R 240V a.c. Fitted with end of line resistor of value 12KW 10W minimum. 'U' Shaped Xenon tube Version 2 Electronic P.C.B.	15 Joules, Flash rate 60	T5/T100°C (Tamb -55°C to +40°C)
		T4/T135°C (T _{amb} -55°C to +55°C)
		T4/T135°C (Tamb -55°C to +70°C)
	15 Joules, Flash rate 80	T5/T100°C (Tamb -55°C to +40°C)



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		T4/T135°C (T _{amb} -55°C to +55°C)
		T4/T135°C (Tamb -55°C to +70°C)
15 Joules, Flash rate 120		T5/T100°C (Tamb -55°C to +40°C)
	15 Joules, Flash rate 120	T4/T135°C (T _{amb} -55°C to +55°C)
	T4/T135°C (Tamb -55°C to +70°C)	
FB15	60W or 5W LED Bulb	T4/T135°C (T _{amb} -55°C to +55°C)
	6000 OF SW LED Build	T3/T200°C (T _{amb} -55°C to +70°C)
	100W	T3/T200°C (T _{amb} -55°C to +40°C)
LD15 Voltage Type d.c.		T6/T85°C (T _{amb} -55°C to +55°C)
	13.5W	T5/T100°C (Tamb -55°C to +70°C)
LD15 Voltage Type a.c.		T6/T85°C (Tamb -55°C to +40°C)
	110/254V	T6/T85°C (Tamb -55°C to +55°C)
		T5/T100°C (Tamb -55°C to +70°C)



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 13.1

Assessment against IEC 60079-0:2017 Ed 7

ExTR: GB/BAS/ExTR22.0212/00 File Reference: 22/0315