

# XB15 range 5, 10 & 15 joule xenon beacons

Ex d, weatherproof



## Overview

These certified beacons have been designed for use in potentially explosive atmospheres and harsh environmental conditions. The enclosures are suitable for use offshore or onshore, where light weight combined with corrosion resistance is required.

The housings are manufactured completely from a UV stable, glass reinforced polyester. Stainless steel screws and mounting bracket are incorporated ensuring a totally corrosion-free product.

The model XB15 contains a supervisory diode and four wire lead connections for alarm applications.

Units can be painted to customer specification and supplied with identification labels.

As well as the standard worldwide certificates, EN54-23 and SIL1 are both now available.

As well as the XB15 being certified from -55°C to +70°C, the new control circuits have been designed to consistently energise at -55°C.

## Features

- Zones 1, 2, 21 & 22
- Exd IIC, T4/T5/T6
- ATEX certified, Ex II 2GD
- IECEx certified Gb, Db
- UL certified for USA and Canada:
  - Hazardous locations:
    - Class I, Div. 2, Groups A, B, C & D
    - Class II, Div 2 Groups F & G
    - Class I, Zone 1, AExd IIC T4/T5/T6
  - Ordinary locations: visual-signal device
  - Marine listed
- ULC certified to Canadian Safety Standards
- TR CU certified
- CCC Ex certified
- GB certified
- CCCF certified
- INMETRO certified
- CCOE certified
- IP66 & 67
- EN54-23 certified
- SIL 1 certified
- Certified temperature from -55°C to +70°C
- 5, 10 & 15J versions available
- Pipe mount or direct mount enclosure
- Corrosion-free GRP
- Four wire and supervisory diode
- Optional stainless steel backstrap
- Various lens colours
- Optional relay or telephone initiate
- Optional cast or wire lens guard
- Up to 3 x M20 or 3 x M25 entries
- LED version available (see data sheet for LD15)
- Improved inrush current characteristics
- Consistent extreme temperature start-up
- Automatic synchronization option



## Certifications

<b>ATEX Ex d</b>	Cert. no. Baseefa 04ATEX0009X Certified to: EN 60079-0, EN 60079-1, EN 60079-28, EN 60079-31 Ex II 2 GD Ex db op is IIC T4/T5/T6 Gb, Ex tb op is IIIC T85°C/T100°C/T135°C Db
<b>IECEX Ex d</b>	Cert. no. IECEX BAS 05.0048X Certified to: IEC 60079-0, IEC 60079-1, IEC 60079-28, IEC 60079-31 Ex db op is IIC T4/T5/T6 Gb, Ex tb op is IIIC T85°C/T100°C/T135°C Db
<b>UL Haz Locs</b>	Cert. no. E187894 Class I, Div 2, Groups A, B, C & D Class II, Div 2, Groups F & G Class I, Zones 1, AExd IIC T4/T5/T6
<b>UL Ord Locs/Marine</b>	Cert. no. SB128. Visual signal device
<b>ULC Haz Locs</b>	For ULC ordering codes and technical details please refer to the US data sheet
<b>TR CU Ex d</b>	1Ex db op is IIC T4/T5/T6 Gb X. Ex tb op is IIIC T85°C/T100°C/T135°C Db X Fire: TR EAEU 043/2017 (24Vdc only)
<b>INMETRO Ex d</b>	Ex db op is IIC T4/T5/T6 Gb, Ex tb op is IIIC T85°C/T100°C/T135°C Db
<b>CCC Ex</b>	Ex db IIC T4/T5/T6 Gb, Ex tb IIIC T85°C/T100°C/T135°C Db
<b>GB (GuoBiao)</b>	Ex db op is IIC T4/T5/T6 Gb, Ex tb op is IIIC T85°C/T100°C/T135°C Db
<b>SIL</b>	SIL1 certification to IEC61508. Cert. No. Sira FSP 12004 (All dc versions except telephone initiate) SIL1 certification to IEC61508. Cert. No. 20151123-4786980667 (All ac versions except telephone initiate)
<b>EN54-23</b>	LPCB: 1120b/01, CPR: 0832-CPR-F0761 (White) LPCB: 1120b/02, CPR: 0832-CPR-F0762 (Red)
<b>CCCF</b>	Chinese Compulsory Certification for Fire Systems (CCCF)

## Specifications

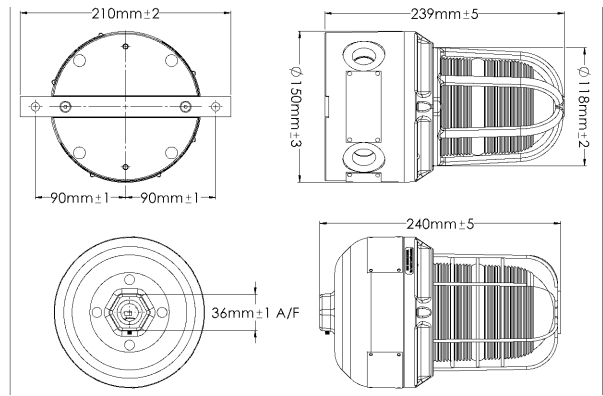
<b>Material</b>	Body: glass reinforced polyester Lens: borosilicate glass Backstrap: stainless steel 316 Wire guard (optional): stainless steel wire Cast guard (optional): aluminium LM25M
<b>Finish</b>	Natural black or painted to customer specification
<b>Models</b>	XB15 ATEX – available in direct mount version only XB15 UL – available in pipe and direct mount versions
<b>Voltage</b>	24, 48V d.c. - 110, 120, 230, 240, 254V a.c
<b>Tube energy</b>	5, 10 & 15 Joule
<b>Tube life</b>	> 1 x 10 <sup>6</sup> flashes
<b>Flash rate</b>	60, 80, 120 fpm
<b>Certified temp</b>	15J: -55°C to +70°C (T4), -55°C to +40°C (T5) 10J: -55°C to +70°C (T4), -55°C to +55°C (T5), -55°C to +40°C (T6) 5J: -55°C to +70°C (T5), -55°C to +55°C (T6)
<b>Weight</b>	Pipe mount: 2.6kg; Direct mount: 3.0kg
<b>Ingress protection</b>	IP66 & IP67
<b>Entries</b>	ATEX version: Standard: 2 x M20 Optional: 1 x M20/M25, 3 x M20/M25 entries UL version: Standard pipe: ¾" NPT Standard direct: 2 x ¾" NPT Optional direct: 1 x ½"/¾" NPT or 3 x ½"/¾" NPT Dual UL/ATEX, UL/IECEX: Standard direct: 2 x ¾" NPT
<b>Terminals</b>	Direct mount: 12 x 2.5mm <sup>2</sup> /14AWG. Pipe mount: 8 x 14AWG
<b>Relay initiate</b>	Operates with 24V d.c. initiate supplies only
<b>Telephone initiate</b>	Operates from telephone ringing voltage
<b>Labels</b>	Tag/duty label optional
<b>Synchronization</b>	Up to 6 beacons on a loop can synchronize without the need for an external controller. Beacons will need to be the same flashrate and need the A code in the options

## Ordering requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box

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## General arrangement drawing (all dimensions in mm)



### Electrical:

Nominal voltage @ 60fpm	d.c.		a.c. (50Hz*)				
	24V	48V	110V	120V	230V	240V	254V
Average current 5J (mA)	330	150	120	130	70	70	70
Average current 10J (mA)	650	320	190	210	110	120	120
Average current 15J (mA)	900	430	220	250	140	160	140

\*For 60Hz please refer to the US datasheet

### Typical light output:

	5J	10J	15J
Effective (Cd)	107	280	382
Peak (Cd)	173,000	342,000	520,000

### Multiplying factor for coloured lens:

Red	Blue	Amber	Green	Yellow
0.12	0.11	0.29	0.22	0.74

### EN54-23 rating:

White		Red	
Rating	Volume (m <sup>3</sup> )	Rating	Volume (m <sup>3</sup> )
C-3-32	2,413	C-3-16	603
C-6-31	4,529	C-6-6	170
C-9-12	1,018		
W-8-13	1,352	W-3-5	75