

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

ATEX Ex d	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
IECEX Ex d	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
UL Haz Locs	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
UL Ord Locs/Marine	Cert. no. SB128. Visual signal device
ULC Haz Locs	For ULC ordering codes and technical details please refer to the US data sheet
TR CU Ex d	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)
INMETRO Ex d	Ex db op is IIC T4/T5/T6 Gb, Ex tb op is IIIC T85°C/T100°C/T135°C Db
CCC Ex	Ex db IIC T4/T5/T6 Gb, Ex tb IIIC T85°C/T100°C/T135°C Db
GB (GuoBiao)	Ex db op is IIC T4/T5/T6 Gb, Ex tb op is IIIC T85°C/T100°C/T135°C Db
SIL	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)
EN54-23	LPCB: 1120b/01, CPR: 0832-CPR-F0761 (White) LPCB: 1120b/02, CPR: 0832-CPR-F0762 (Red)
CCCF	Chinese Compulsory Certification for Fire Systems (CCCF)

Specifications

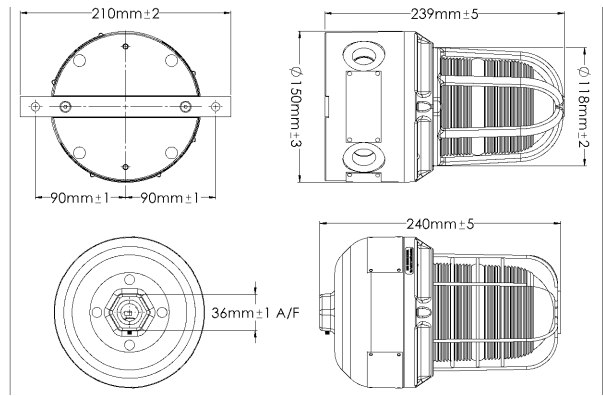
Material	Body: glass reinforced polyester Lens: borosilicate glass Backstrap: stainless steel 316 Wire guard (optional): stainless steel wire Cast guard (optional): aluminium LM25M
Finish	Natural black or painted to customer specification
Models	XB15 ATEX – available in direct mount version only XB15 UL – available in pipe and direct mount versions
Voltage	24, 48V d.c. - 110, 120, 230, 240, 254V a.c.
Tube energy	5, 10 & 15 Joule
Tube life	> 1 x 10 ⁶ flashes
Flash rate	60, 80, 120 fpm
Certified temp	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)
Weight	Pipe mount: 2.6kg; Direct mount: 3.0kg
Ingress protection	IP66 & IP67
Entries	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
Terminals	Direct mount: 12 x 2.5mm ² /14AWG. Pipe mount: 8 x 14AWG
Relay initiate	Operates with 24V d.c. initiate supplies only
Telephone initiate	Operates from telephone ringing voltage
Labels	Tag/duty label optional
Synchronization	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 ³)	Rating	Volume (m ³)
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