

# 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

- Zone 1 and Zone 2 use
- 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 IIB & IIC\* T4/T5/T6
  - Ordinary locations: visual-signal device
  - Marine listed
- ULC certified to Canadian Safety Standards
- TR CU certified
- CCCF certified
- CQST 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

\*Not applicable for Canada



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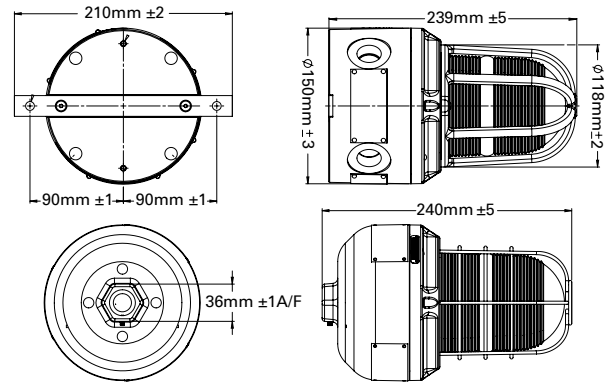
## Certifications

<b>ATEX Ex d</b>	Cert. no. Baseefa 04ATEX0009X Certified to: EN60079-0, EN60079-1, EN60079-31 Ex II 2GD Ex db IIC T4/T5/T6 Gb, Ex tb IIIC T85°C/T100°C/T135°C Db
<b>IECEX Ex d</b>	Cert. no. IECEX BAS 05.0048X Certified to: IEC60079-0, IEC60079-1, IEC60079-31 Ex db IIC T4/T5/T6 Gb, Ex tb 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 IIB & IIC* T4/T5/T6 (*Not applicable for Canada)
<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 d IIC T4/T5/T6 Gb, Ex tb IIIC T85°C/T100°C/T135°C Db Russian Fire Alarm approved
<b>INMETRO Ex d</b>	Ex d IIC T4/T5/T6 Gb, Ex tb IIIC T85°C/T100°C/T135°C Db
<b>CQST Ex d</b>	Ex db IIC T4/T5/T6 Gb Ex tb IIIC T85°C/T100°C/T135°C Db
<b>SIL</b>	SIL1 certification to IEC61508. Cert. No. Sira FSP 12004 (All DC versions and UL AC versions. Does not include telephone initiate version) SIL1 certification to IEC61508. Cert. No. 20151123-4786980667 (All AC versions except UL AC. Does not include telephone initiate version)
<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 (UL AC 15J only)
<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

## General arrangement drawing (all dimensions in mm)



### Electrical:

Nominal voltage @ 60fpm	DC		AC				
	24V	42V	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) (except UL AC)	900	430	220	250	140	160	140
Average current 15J (mA) (only UL AC)	-	-	400	400	200	200	170

### 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

## 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

Model	Certification	Voltage	Tube energy	Flashrate	Lens colour	Lens guard	Fixings	Options	Finish		
XB15											
<b>Certification</b> ATEX B ATEX+EN54-23 B54 IECEX J Dual ATEX/UL AU† Dual IECEX/UL JU† UL UL† UL (ordinary locations) UW† UL Marine UM† TR CU G*† CQST Q CQST/CCCF QF INMETRO DM† Weatherproof W Weatherproof +EN54-23 W54 *Russian Fire Approved as standard †5 & 10 J only available on 24 & 48Vdc		<b>Energy</b> 5 Joule 05 10 Joule 10 15 Joule 15† †EN54/CCCF & UM must be 15J		<b>Flashrate</b> 60/min 06* 80/min 08 120/min 12 *EN54/CCCF must be 60/min		<b>Lens</b> Red R*† Blue B Green G Amber A Yellow Y Clear C *EN54 must be red or clear †CCCF must be red		<b>Fixing</b> Pipe mount P*† Direct mount without backstrap D† Direct mount with backstrap B† *Only available on UL listings *Not available for EN54/CCCF †Contact MEDC if 1/2" NPT is required		<b>Finish</b> Natural black N Red R Blue B Yellow Y Green G White W Special S* *Please specify	
<b>Voltage</b> 24V d.c. 024† 48V d.c. 048 110V a.c. 110 120V a.c. 120 230V a.c. 230 240V a.c. 240 254V a.c. 254 †EN54/CCCF must be 24Vdc		<b>Option</b> None N Tag label T* Duty label D* Relay initiate R† Telephone initiate I† Blanking plug P *Please specify. For EN54/UL, one label only. No tag/duty available for AU/JU †Suitable for 24V d.c. initiate supplies only. Not CCCF ‡Not available on UL/UW/UM/SIL/EN54/CCCF									