

XB15 range 5, 10 & 15 joule xenon beacons

Ex db, 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 SIL 2 are both now available.

As well as the XB15 being certified from -55°C to +85°C, the new control circuits have been designed to consistently energise at -55°C.

Features

- Zones 1, 2, 21 & 22
- Ex db IIC, T3/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
- CCC Ex certified
- GB certified
- CCCF certified
- INMETRO certified
- CCOE certified
- IP66 & 67
- EN54-23 certified
- SIL 2 certified
- Certified temperature from -55°C to +85°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 datasheet dsmc0028 for LD15)
- Improved inrush current characteristics
- Consistent extreme temperature start-up
- Automatic synchronization option



Certifications	
ATEX Ex db	Cert. no. Baseefa 04ATEX0009X Certified to: EN IEC 60079-0, EN 60079-1, EN 60079-31 Ex II 2 GD Ex db IIC T3/T4/T5/T6 Gb, Ex tb IIIC T200°C/T135°C/T100°C/T85°C Db
IECEx Ex db	Cert. no. IECEx BAS 05.0048X Certified to: IEC 60079-0, IEC 60079-1, IEC 60079-31 Ex db IIC T3/T4/T5/T6 Gb, Ex tb IIIC T200°C/T135°C/T100°C/T85°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. S8128. Visual signal device
ULC Haz Locs	For ULC ordering codes and technical details please refer to the US datasheet
INMETRO Ex db	Ex db IIC T3/T4/T5/T6 Gb, Ex tb IIIC T200°C/T135°C/T100°C/T85°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	SIL2 certified to IEC61508. Cert number FSP 12004.
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)

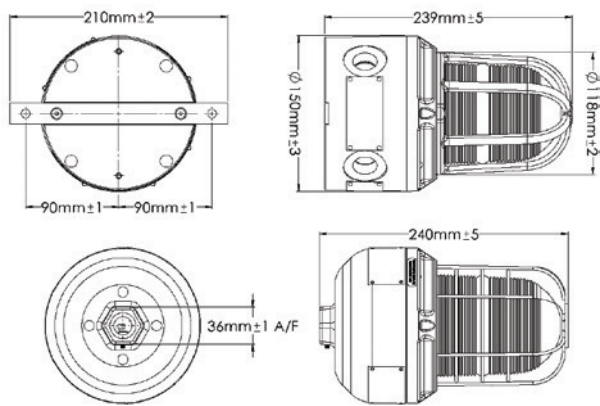
Specifications	
Material	Body: glass reinforced polyester Lens: borosilicate glass Backstrap: stainless steel 316 Wire guard (optional): stainless steel wire Cast guard (optional): aluminium LM25M
Finish	Natural black or painted to customer specification
Models	XB15 ATEX – available in direct mount version 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 ATEX, IECEx and INMETRO	15J: -55°C to +85°C (T3), -55°C to +70°C (T4) 10J: -55°C to +85°C (T3), -55°C to +80°C (T4), -55°C to +45°C (T5) 5J (DC Unit): -55°C to +85°C (T4), -55°C to +70°C (T5), -55°C to +55°C (T6) 5J (AC Unit): -55°C to +85°C (T4), -55°C to +55°C (T5), -55°C to +40°C (T6)
Certified temp UL, CCC Ex + GB	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)
Certified temp SIL 2	-50°C to +70°C
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"
Entries - 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
EOL Resistor	Customers may fit a monitoring resistor to DC units. The maximum total power dissipation through the resistor must be limited to 2W.

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																																																																						
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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 (m³)	Rating	Volume (m³)
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