# 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
- CCCF certified
- COST certified
- INMETRO certified
- CCOE certified

- IP66 & 67
- EN54-23 certified

**CROUSE-HINDS** 

- 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



Eaton is a registered trademark.

All other trademarks are property

of their respective owners



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

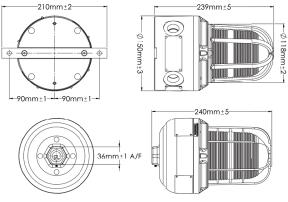
T: +44 (0) 1623 444 400 www.crouse-hinds.com/hac MEDCSales@Eaton.com © 2018 Eaton All Rights Reserved Printed in UK Publication No.DSMC0022/B February 2018

Please check here for latest version of the datasheet

All specifications, dimensions, weights and tolerances are nominal (typical) and Eaton reserve the right to vary all data without prior notice. No liability is accepted for any consequence of use.

| Certifications     |   |  |  |  |  |  |  |  |  |  |
|--------------------|---|--|--|--|--|--|--|--|--|--|
| ATEX Ex d          | Cert. no. Baseefa 04ATEX0009X<br>Certified to: EN60079-0, EN60079-1, EN60079-31<br>Ex II 2GD Ex db IIC T4/T5/T6 Gb, Ex tb IIIC T85°C/T100°C/T135°C Db   |  |  |  |  |  |  |  |  |  |
| IECEx Ex d         | Cert. no. IECEx BAS 05.0048X<br>Certified to: IEC60079-0, IEC60079-1, IEC60079-31<br>Ex db IICT4/T5/T6 Gb. Ex tb IIICT85°C/T100°C/T135°C Db   |  |  |  |  |  |  |  |  |  |
| UL Haz Locs        | Cert. no. E187894<br>Class I, Div 2, Groups A, B, C & D<br>Class II, Div 2, Groups F & G<br>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 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<br>Russian Fire Alarm approved  |  |  |  |  |  |  |  |  |  |
| INMETRO Ex d       | Ex d IIC T4/T5/T6 Gb, Ex tb IIIC T85°C/T100°C/T135°C Db   |  |  |  |  |  |  |  |  |  |
| CQST Ex d          | Ex db IIC T4/T5/T6 Gb<br>Ex tb IIIC T85°C/T100°C/T135°C Db  |  |  |  |  |  |  |  |  |  |
| SIL                | SIL1 certification to IEC61508. Cert. No. Sira FSP 12004<br>(All DC versions. Does not include telephone initiate version)<br>SIL1 certification to IEC61508. Cert. No. 20151123-4786980667<br>(All AC versions. Does not include telephone initiate version) |  |  |  |  |  |  |  |  |  |
| EN54-23            | LPCB: 1120b/01, CPR: 0832-CPR-F0761 (White)<br>LPCB: 1120b/02, CPR: 0832-CPR-F0762 (Red)  |  |  |  |  |  |  |  |  |  |
| CCCF               | Chinese Compulsary Certification for Fire Systems (CCCF)  |  |  |  |  |  |  |  |  |  |
| Specifications     |   |  |  |  |  |  |  |  |  |  |
| Material           | Body: glass reinforced polyester<br>Lens: borosilicate glass<br>Backstrap: stainless steel 316<br>Wire guard (optional): stainless steel wire<br>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 <sup>6</sup> flashes  |  |  |  |  |  |  |  |  |  |
| Flash rate         | 60, 80, 120 fpm   |  |  |  |  |  |  |  |  |  |
| Certified temp     | 15J: -55°C to +70°C (T4), -55°C to +40°C (T5)<br>10J: -55°C to +70°C (T4), -55°C to +55°C (T5), -55°C to +40°C (T6)<br>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<br>Optional: 1 x M20/M25, 3 x M20/M25 entries<br>UL version: Standard pipe: %" NPT  |  |  |  |  |  |  |  |  |  |
|                    | Standard direct: 2 x ¾" NPT<br>Optional direct: 1 x ½"/¾" NPT or 3 x ½"/¾"NPT<br>Dual UL/ATEX, UL/IECEx: Standard direct: 2 x ¾" NPT  |  |  |  |  |  |  |  |  |  |
| Terminals          | Direct mount: 12 x 2.5mm <sup>2</sup> /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   |  |  |  |  |  |  |  |  |  |
| Laneis             |   |  |  |  |  |  |  |  |  |  |

## General arrangement drawing (all dimensions in mm)



#### Electrical:

I

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

\*For 60Hz please refer to the US datasheet

#### Typical light output:

|                | 5]      | 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:

| Wh     | ite                      | Red    |             |  |  |  |  |
|--------|--------------------------|--------|-------------|--|--|--|--|
| Rating | Volume (m <sup>3</sup> ) | 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          |  |  |  |  |

## 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   | F   | Voltage   | Tube en   | ergy F                         | lashrate | Lens<br>colou  | .ens<br>uard         | Fixings   |        | Options |  | Finish   |  |
|---|---|---|---|---|--------------------------------|----------|--|----------------------|---|--------|---------|--|--|--|
| ATEX<br>ATEX<br>IECE:<br>Dual<br>UL<br>UL (o<br>UL M<br>TR CC<br>CQST<br>INME<br>Weat<br>Weat | +EN54-23<br>x<br>ATEX/UL<br>IECEX/UL<br>rdinary locations)<br>arine<br>J<br>r<br>r<br>r<br>r<br>r<br>r<br>r<br>r<br>r<br>r<br>r<br>r<br>r | Code<br>B<br>B54<br>J<br>UU<br>UW<br>UW<br>UW<br>G*<br>QF<br>DM†<br>W54 |   | Energy<br>5 Joule<br>10 Joule<br>15 Joule<br>EN54/CCCF<br>must be 15J           | Code<br>05<br>10<br>15†        |          | Lens (<br>Red<br>Blue<br>Green<br>Amber<br>Yellow<br>Clear<br>EN54 must<br>or clear<br>CCCF must | * OI<br>* No<br>+ Co | Fixing<br>Pipe mount<br>Direct mount<br>vithout backstrap<br>Direct mount with<br>wackstrap<br>nly available on UL j<br>t available for EN5-<br>ontact MEDC if 1/2"<br>quired | 4/CCCF |         | Finish<br>Natur<br>Red<br>Blue<br>Yellov<br>Greer<br>White<br>Speci<br>*Please | ral black<br>w<br>n<br>e<br>ial                  | Code<br>N<br>R<br>B<br>Y<br>G<br>W<br>S*   |
| as sta<br>†5 & 10   |   | 24\<br>48\<br>110<br>230<br>254<br>†EN54                                | / d.c. 0<br>/ d.c. (<br>)/ a.c. 1<br>)/ a.c 1<br>)/ a.c 2<br>)/ a.c 2<br>1/ a.c 2<br>4/CCCF mus | ode<br>24†<br>241<br>10<br>120<br>230<br>240<br>54*<br>t be 24Vdc<br>/UM/UW/AU/ | 60/n<br>80/n<br>120/<br>*EN54/ | nin 08   | *  |                      | 5   | Teleph | bel     | Code<br>N<br>T*<br>D*<br>R†<br>I‡<br>P   | AU/JU, o<br>†Suitable<br>initiate s<br>‡Not avai | specify. For EN54/UL/<br>one label only.<br>for 24V d.c<br>supplies only. Not CCCF<br>ilable on UL/UW/<br>/EN54/CCCF |