



1 **EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 EC - Type Examination Certificate Number: **BAS02ATEX1258X – Issue 1**

4 Equipment or Protective System: **Type XB8 Series Xenon Beacon**

5 Manufacturer: **Cooper MEDC Limited**

6 Address: **Colliery Road, Pinxton, Nottingham, NG16 6JF**

7 This re-issued certificate extends EC – Type Examination Certificate No. BAS02ATEX1258X to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to

8 The original certificate was issued by The Electrical Equipment Certification Service, Notified Body Number 0600, which retains responsibility for its original documentation. Baseefa, Notified Body Number 1180, is responsible only for the additional work relating to this re-issued certificate and any other supplementary certificate it has issued.

The examination and test results are recorded in confidential Report No's. **GB/BAS/ExTR10.0253/00**
GB/BAS/ExTR10.0254/00

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2009 EN 60079-11:2007

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign “X” is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include the following :

⊕ II 1G Ex ia IIC/IIB T4 (-55°C ≤ Ta ≤ +60°C) Ga

This certificate may only be reproduced in its entirety, without any change, schedule included.

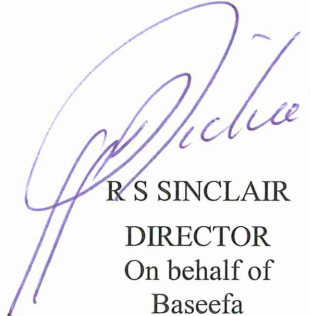
Baseefa Customer Reference No. **0676**

Project File No. **10/0307**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

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R S SINCLAIR
DIRECTOR
On behalf of
Baseefa



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Schedule

14

Certificate Number BAS02ATEX1285X – Issue 1

15 Description of Equipment or Protective System

The Type XB8 Series Xenon Beacon is designed to produce a visual flash at regular intervals.

The beacon comprises an electronic circuit and xenon flash tube encapsulated within a clear plastic lens. The lens assembly is mounted on a plastic base which contains a terminal block for external connections. There is provision for cable entries at three positions in the base.

The beacon may be energised at either 12V or 24V nominal and there is provision for remote control via volt-free contacts.

Terminal Parameters

Terminals 1 & 3 w.r.t. 2 & 4:

Type	Gas Group	Nominal supply (V)	U_i (V)	I_i (mA)	P_i (W)	C_i	L_i
XB8-12C	IIC	12	15.7	300	1.2	0.93 μ F at 12.6V	0
XB8-12B	IIB	12	15.7	300	1.2		
XB8-24C	IIC	24	28	120	0.84		
XB8-24B	IIB	24	28	171	1.195		

Terminals 7 & 8

Local link or remote volt-free contacts:

$$\begin{aligned}U_o &= 12.6V \\I_o &= 1.3mA \\P_o &= 4mW\end{aligned}$$

16 Report Number

GB/BAS/ExTR10.0253/00
GB/BAS/ExTR10.0254/00

17 Special Conditions for Safe Use

1. The plastic enclosure may present a potential electrostatic ignition risk and must not be rubbed or cleaned with a dry cloth.

18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings and Documents

New drawings submitted for this issue of certificate.

Number	Sheet	Issue	Date	Description
213-179	1 of 1	A	28-10-10	XB8 Xenon Beacon ATEX 60079 Certification GA
213-181	1 of 1	A	28-10-10	ATEX 60079 Certification Label XB8 Xenon Beacon



Current drawings also associated with this certificate.

Number	Sheet	Issue	Date	Description
213-102	1 of 1	C	28-03-02	Circuit Diagram XB8 Xenon Beacon
213-161 LO	1 of 1	A	03-04-02	XB8 Xenon Beacon PCB Layout
213-161 UP	1 of 1	A	03-04-02	XB8 Xenon Beacon PCB Layout
213-161 SS1	1 of 1	A	03-04-02	XB8 Xenon Beacon PCB Layout

20 Certificate History

Certificate No.	Date	Comments
BAS02ATEX1258X	23 July 2002	The release of the prime certificate. The associated test and assessment against the requirements of EN 50014:1997 + Amendments 1 & 2, EN 50020:1994 and EN 50284:1999 is documented in Test Report No. 02(C)0205
BAS02ATEX1258X Issue 1	4 November 2010	This issue of the certificate incorporates the previously issued primary certificate and confirms the current design meets the requirements of EN 60079-0:2009 and EN 60079-11:2007. This issue also incorporates the addition of alternative encapsulant types and other minor drawing changes.

For drawings applicable to each issue, see original of that issue.



EC-TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC

EC-Type Examination Certificate Number : **BAS02ATEX1258X**

Equipment or Protective System: **TYPE XB8 SERIES XENON BEACON**

Manufacturer: **MEDC LIMITED**

Address: **Pinxton, Nottingham, NG16 6JF**

This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

The Electrical Equipment Certification Service, notified body number 600 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report N°

02(C)0205 dated 9 July 2002

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014: 1997 + Amds 1 & 2 EN 50020: 1994 EN 50284: 1999
except in respect of those requirements listed at item 18 of the Schedule.

If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

This EC-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.

The marking of the equipment or protective system shall include the following:-

**Ex II 1 G EEx ia IIC T4 (-55°C ≤ T_a ≤ +60°C) or
EEx ia IIB T4 (-55°C ≤ T_a ≤ +60°C)**

This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: **EECS 0676/02/016**

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances.



Electrical Equipment Certification Service
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I M CLEARE
DIRECTOR
23 July 2002



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Schedule

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EC-TYPE EXAMINATION CERTIFICATE N° BAS02ATEX1258X

15

Description of Equipment or Protective System

The Type XB8 Series Xenon Beacon is designed to produce a visual flash at regular intervals.

The beacon comprises an electronic circuit and xenon flash tube on a printed circuit board which is encapsulated into a clear plastic lens. The lens assembly is mounted on a plastic base which contains a terminal block for external conductors. There is provision for cable entries at three positions in the base.

The beacon may be energised at either 24V or 12V nominal voltage. There is provision for remote control via volt-free contacts.

The enclosure provides a Degree of Protection of at least IP20.

Intrinsic Safety is assured by limitation of input voltage, current and power, internal limitation of voltage, limitation of capacitance, infallible resistors, infallible segregation and encapsulation.

The range of beacons and intrinsic safety parameters (Terminals 1 & 3 w.r.t. 2 & 4) are as follows:-

Type No	Nominal Supply Voltage V	Apparatus Group	U_i V	I_i mA	P_i W	C_i	L_i
XB8-24C	24	IIC	28	120	0.84	0.93 μ F at 12.6V	0
XB8-24B	24	IIB	28	171	1.2		
XB8-12C	12	IIC	15.7	300	1.2		
XB8-12B	12	IIB	15.7	300	1.2		

Terminals 7 and 8 for connections to local link or to remote voltage free contacts $U_o = 12.6V$, $I_o = 1.3$ mA, $P_o = 4mW$.

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Report No

02(C)0205

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Special Conditions for Safe Use

The apparatus enclosure is made from plastic material which presents a possible electrostatic hazard. The apparatus must only be cleaned with a damp cloth.



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Schedule

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EC-TYPE EXAMINATION CERTIFICATE N° BAS02ATEX1258X

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Essential Health and Safety Requirements

ESSENTIAL HEALTH & SAFETY REQUIREMENTS not covered by standards listed in Section 9		
Clause	Subject	Compliance
1.1.3	Changes in characteristics of materials and combinations thereof	Report No 02(C)0205 Clause 5.1.1.3
1.2.2	Components for incorporation or replacement	Report No 02(C)0205 Clause 5.1.2.2
1.2.5	Additional means of protection	Report No 02(C)0205 Clause 5.1.2.5
1.4.2	Withstanding attack by aggressive substances	Report No 02(C)0205 Clause 5.1.4.2

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DRAWINGS

Number	Sheet	Issue	Date	Description
213-160		A	28.02.02	General Assembly
213-102		C	28.03.02	Circuit
213-161 SS		A	28.03.02	PCB Component Layout
213-161 UP		A	28.03.02	PCB Upper Copper Layer
213-161 LO		A	28-03-02	PCB Lower Copper Layer

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BASEEFA List Keywords
2INDICAT

1 **EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 EC - Type Examination Certificate Number: **BAS02ATEX1258X – Issue 2**

4 Equipment or Protective System: **Type XB8 Series Xenon Beacon**

5 Manufacturer: **Cooper MEDC Limited**

6 Address: **Colliery Road, Pinxton, Nottingham, NG16 6JF**

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Baseefa, Notified Body number 1180, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No's. **GB/BAS/ExTR13.0245/00**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2009 EN 60079-11:2007

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include the following :

⊕ II 1G Ex ia IIC/IIB T4 Ga (-55°C ≤Ta ≤+60°C)

Baseefa Customer Reference No. **0676**

Project File No. **13/0789**

This document is issued by the Company subject to its General Conditions for Certification Services accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and the Supplementary Terms and Conditions accessible at <http://www.baseefa.com/terms-and-conditions.asp>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. It does not necessarily indicate that the equipment may be used in particular industries or circumstances. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, schedule included, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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R S SINCLAIR
GENERAL MANAGER

On behalf of SGS Baseefa Limited

13 **Schedule**

14 **Certificate Number BAS02ATEX1258X – Issue 2**

15 **Description of Equipment or Protective System**

The Type XB8 Series Xenon Beacon is designed to produce a visual flash at regular intervals.

The beacon comprises an electronic circuit and xenon flash tube encapsulated within a clear plastic lens. The lens assembly is mounted on a plastic base which contains a terminal block for external connections. There is provision for cable entries at three positions in the base.

The beacon may be energised at either 12V or 24V nominal and there is provision for remote control via volt-free contacts.

Terminal Parameters

Terminals 1 & 3 w.r.t. 2 & 4:

Type	Gas Group	Nominal supply (V)	U_i (V)	I_i (mA)	P_i (W)	C_i	L_i
XB8-12C	IIC	12	15.7	300	1.2	0.68 μ F at 12.6V	0
XB8-12B	IIB	12	15.7	300	1.2		
XB8-24C	IIC	24	28	120	0.84		
XB8-24B	IIB	24	28	171	1.195		

Terminals 7 & 8

Local link or remote volt-free contacts:

$$U_o = 12.6V$$

$$I_o = 1.3mA$$

$$P_o = 4mW$$

16 **Report Number**

GB/BAS/ExTR13.0245/00

17 **Specific Conditions of Use**

1. The plastic enclosure may present a potential electrostatic ignition risk and must not be rubbed or cleaned with a dry cloth.

18 **Essential Health and Safety Requirements**

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings and Documents

New drawings submitted for this issue of certificate.

Number	Sheet	Issue	Date	Description
213-102	1 of 1	D	24-09-13	Circuit Diagram XB8 Xenon Beacon

This drawing is common to and held with IECEx BAS 10.0111.

Current drawings also associated with this certificate.

Number	Sheet	Issue	Date	Description
213-179	1 of 1	A	28-10-10	XB8 Xenon Beacon ATEX 60079 Certification GA
213-181	1 of 1	A	28-10-10	ATEX 60079 Certification Label XB8 Xenon Beacon
213-161 LO	1 of 1	A	03-04-02	XB8 Xenon Beacon PCB Layout
213-161 UP	1 of 1	A	03-04-02	XB8 Xenon Beacon PCB Layout
213-161 SS1	1 of 1	A	03-04-02	XB8 Xenon Beacon PCB Layout

These drawings are common to and held with IECEx BAS 10.0111.

20 Certificate History

Certificate No.	Date	Comments
BAS02ATEX1258X	23 July 2002	The release of the prime certificate. The associated test and assessment against the requirements of EN 50014:1997 + Amendments 1 & 2, EN 50020:1994 and EN 50284:1999 is documented in Test Report No. 02(C)0205
BAS02ATEX1258X Issue 1	4 November 2010	This issue of the certificate incorporates the previously issued primary certificate and confirms the current design meets the requirements of EN 60079-0:2009 and EN 60079-11:2007. This issue also incorporates the addition of alternative encapsulant types and other minor drawing changes. Assessment detailed in reports GB/BAS/ExTR10.0253/00 and GB/BAS/ExTR10.0254/00
BAS02ATEX1258X Issue 2	8 November 2013	To permit a reduction in the on board capacitance and to reduce the C_i parameter to 0.68 μ F. Assessment detailed in report GB/BAS/ExTR13.0245/00.
For drawings applicable to each issue, see original of that issue.		