

1 EU - TYPE EXAMINATION CERTIFICATE

2 Product or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU – Annex III

3 EU - Type Examination Certificate No.: **EMT17ATEX0013X (incorporating variation V1 to V3)**

4 Product: **Alarm beacon, IS-B-02-XX**

5 Manufacturer: **Moflash Signalling Ltd.,**

6 Address: **11 Upper Conybere Street, Highgate, Birmingham, B12 0EB,
United Kingdom**

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Element Materials Technology, Notified Body number 2812, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in the confidential report **TRA-026799-33-00A, TRA-036546-33-02A & TRA-043502-33-02A.**

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

EN 60079-0:2012 +A11:2013 EN 60079-11:2012


Except in respect of those requirements listed at section 18 of the schedule.

10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to specific conditions of use specified in the schedule to this certificate.

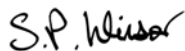
11 This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of this product shall include the following:

 **I M1 Ex ia I Ma -40 °C ≤ Ta ≤ +55°C**

 **II 1 G D Ex ia IIC T5 Ga -40 °C ≤ Ta ≤ +55°C**
Ex ia IIIC T100°C Da

This certificate and its schedules may only be reproduced in its entirety and without change. This certificate is issued in accordance with the Element Materials Technology Ex Certification Scheme.



S P Winsor, Certification Manager

Issue date: 2019-11-01

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CSF355-NL 1.0

13 SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

14 CERTIFICATE NUMBER EMT17ATEX0013X (incorporating variation V1 to V3)

15 Description of Product

The Moflash IS-B-02-xxxx beacon is an intrinsically safe 'ia' equipment designed to give a visual warning signal when activated. The equipment contains one main PCB that has LEDs to provide visual warning and a control circuit.

The power is supplied by IECEx/ATEX approved barriers only. The enclosure is completely non-metallic and has an IP66 rating. The enclosure can be of various colours such as red, amber, white or clear. The units are fixed installations.

The optical radiation output of the apparatus with respect to explosion protection is covered in this certificate based on Exception 1 to the scope of EN 60079-28:2015

Table of entity parameters	
Parameter	Barrier supply
U _i	28 V
I _i	93 mA
P _i	660 mW
L _i	0
C _i	0

16 Test report No. (associated with this certificate issue): None.

17 Specific Conditions of Use

1. Clean equipment regularly to prevent dust build-up with a damp or anti-static cloth only.
2. Equipment only suitable for fixed installation.
3. It must be ensured that the equipment is installed in accordance with IEC 60079-14 and IEC 60079-25 and that capacitance and inductance limits are not exceeded by distributed capacitance (C_c) or distributed inductance (L_c) due to cable length.



Attention is drawn to the operating and installation instructions which may contain useful information in relation to conditions of use.

18 Essential Health and Safety Requirements (Directive Annex II)

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

19 Drawings and Documents

The list of controlled technical documentation is given in Appendix A to this schedule.

20 Routine Tests

None.

21 Specific Conditions for Manufacture

None.

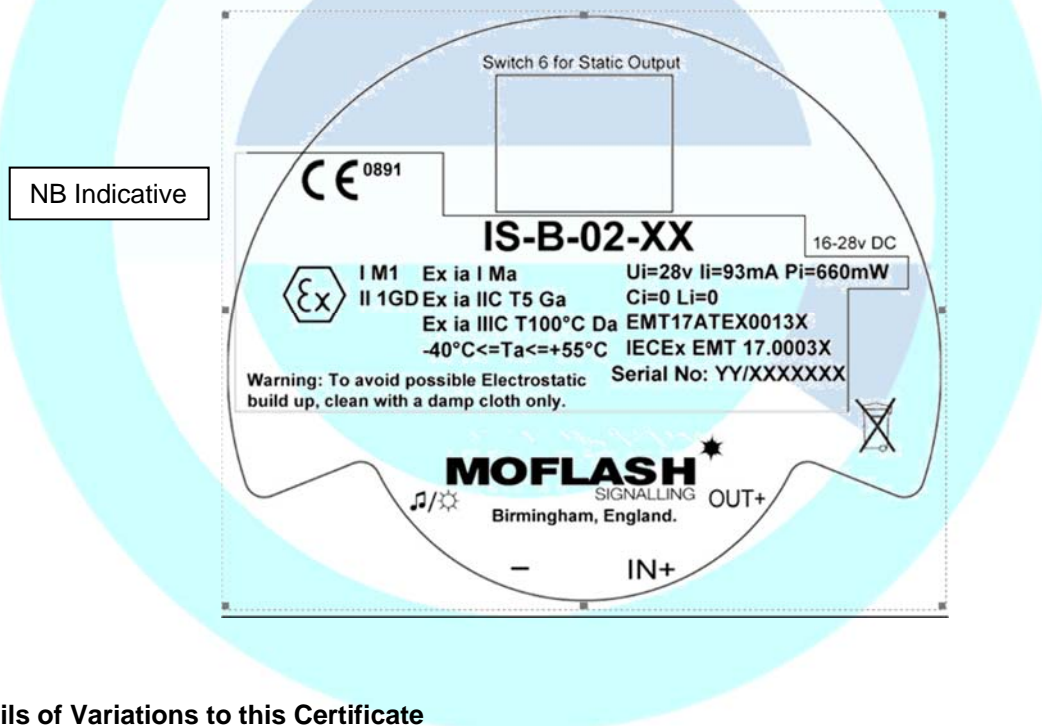
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22 Photographs



23 Details of Markings



24 Details of Variations to this Certificate

This certificate is a consolidated certificate and reflects the latest status of the certification, including the following variations:

- Variation V1 -- Entity parameters changed and Lower ambient temperature range reduced from -20 °C to -40 °C
- Variation V2 -- Changes to transducer mounting, pcb, marking and instruction update.
- Variation V3 - This certificate was originally issued by Notified Body number 0891 under Directive 2014/34/EU. The technical file has been transferred to Element Notified Body number 2812 without further assessment or evaluation.

25 Notes to CE marking

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In respect of CE Marking, Element Materials Technology accepts no responsibility for the compliance of the product against all applicable Directives in all applications.

26 Notes to this certificate

Element Materials Technology certification reference: NR-MOFQ-0003.

Throughout this certificate, the date format yyyy-mm-dd (year-month-day) is used.

Notified Body number 2812 is the designation for Element Materials Technology Rotterdam BV.

27 Conditions for the validity of this certificate

This certificate remains valid for so long as:

- (i) The equipment listed in section 4 is manufactured in accordance with the documents listed in Appendix A of this certificate.
- (ii) The standards listed in section 9 of this certificate continue to satisfy the Essential Health and Safety Requirements of Annex II of Directive 2014/34/EU and the generally acknowledged state of the art (e.g. as determined by the publishers of those standards).

SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE**CERTIFICATE NUMBER EMT17ATEX0013X (incorporating variation V1 to V3)****APPENDIX A - TECHNICAL DOCUMENTS**

Title:	Drawing No.:	Rev. Level:	Date:
Beacon General Assembly (2 sheets – Page 2)	IS-GA001	6	2018-12-17
Circuit Board Potting	XS0200-xxP	3	2017-02-27
Conformal Coating Application	XS0200-xxPC	4	2018-12-05
Critical Spacing	E00607	8	2018-12-05
Intrinsically Safe Potting Jig	M00131	A	2017-01-12
IS O Ring	M00133	1	2017-03-06
Intrinsically Safe Circuit Sounder Beacon	MOF152	9	2018-11-29
Intrinsically Safe Project - BOM	MOF152BOM	9	2018-12-17
Beacon Product Label	S00155	8	2018-12-11
Sonos Beacon Only Cover (2 sheets)	18-186418	03	2014-11-19
Wiper Contact	18-185906	01	2013-02-06
Sonos Hole Bung	18-185907	01	2012-11-15
Sonos PCB Holder with Cutout (3 sheets)	18-185959-3	03	2015-10-19
Sonos Red Deep Base MkII 4 Pin	HSG6890	01	2015-10-23
Moflash Intrinsically Safe Beacon Range Installation Booklet (8 pages)	S00609	5	2017-10-12