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.: **EMT17ATEX0012X (incorporating variation V1)**

4 Product: **Alarm sounder beacon IS-SB-02-XXXX**

5 Manufacturer: **Moflash Signalling Limited**

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 0891, 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-026803-33-00A & TRA-036546-33-00A.**

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:

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

I M1 Ex ia I Ma -40 °C ≤ Ta ≤ +55°C

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: 2017-06-23

Unit 1, Pendle Place, Skelmersdale, West Lancashire, WN8 9PN, United Kingdom
Element Materials Technology Warwick Ltd.
Registered in England and Wales. Registered Office: 5 Fleet Place, London, EC4M 7RD
Company Reg No. 02536659

UKAS PRODUCT CERTIFICATION 0178

13 SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

14 EMT17ATEX0012X (incorporating variation V1)

15 Description of Product

The Moflash IS-SB-02-XXXX sounder/beacon is an intrinsically safe 'ia' unit designed to give both visual and audible warning signal when activated. This device can be operated as a beacon, sounder or combined sounder beacon. The equipment contains divergent LEDs to provide a visual warning and a sounder transducer to provide an audio warning.

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 IEC 60079-28:2015.

Table of entity parameters	
Parameter	Barrier supply
Ui	28 V
Ii	93 mA
Pi	660 mW
Li	0
Ci	0

16 Test report No. (associated with this certificate issue): TRA-036546-33-00A.

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 (I_c) due to cable length.

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, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	**Subject**
None	None

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.

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:

1. Variation V1 -- Entity parameters changed and Lower ambient temperature range reduced from -20 °C to -40 °C

25 Notes to CE marking

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: TRA-036546-32-00.

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

Notified Body 0891 is the designation for Element Materials Technology Warwick Ltd (formerly known as TRaC Global Ltd).

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).

APPENDIX A - TECHNICAL DOCUMENTS

Title:	Drawing No.:	Rev. Level:	Date:
Sounder and Sounder Beacon General Assembly (2 sheets – Page 1)	IS-GA001	4	2017-02-27
Circuit Board Potting	XS0200-xxP	3	2017-02-27
Conformal Coating Application	XS0200-xxPC	3	2017-03-29
Critical Spacing	E00607	4	2017-02-27
Transducer to Cavity Gasket	M00130	1	2017-01-26
Intrinsically Safe Potting Jig	M00131	A	2017-01-12
Gasket	M00132	1	2017-03-06
IS O Ring	M00133	1	2017-03-06
M00427 Transducer	M00427	4	2017-02-10
Intrinsically safe circuit sounder beacon	MOF152	5.0	2017-06-16
Intrinsically Safe Project - BOM	MOF152BOM	4	2017-06-01
Sounder / Beacon Product Label	S00153	6	2017-06-01
Sonos Outer Cover (2 pages)	18-185802	03	2013-01-23
92 x 1.8 O-Ring NBR70	18-185852	01	2013-04-16
Sonos Cover to Cavity Gasket	18-185853	01	2013-02-04
Sound Element to Cavity Gasket	18-185854	01	2013-04-16
Wiper Contact	18-185906	01	2013-02-06
Sonos Hole Bung	18-185907	01	2012-11-15
Sonos PCB Holder with Cutout	18-185959	03	2014-01-03
Sonos Inner Cavity	18-185983	02B	2013-01-23
Sonos Red Deep Base MkII 4 Pin	HSG6890	01	2014-01-10
Moflash Intrinsically Safe Sounder Beacon Installation Sheet (Controlled pages 1, 2, 3 and 7)	S00605	4	2017-06-07