



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx EMT 17.0005X

Issue No: 1

Certificate history:

Issue No. 1 (2017-06-23)

Issue No. 0 (2017-04-19)

Status: **Current**

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Date of Issue: **2017-06-23**

Applicant: **Moflash Signalling Limited**
11 Upper Conybere Street,
Highgate,
Birmingham,
B12 0EB
United Kingdom

Equipment: **Alarm sounder beacon- IS-SB-02-xxxx**

Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking:

Ex ia IIC T5 Ga

Ex ia IIIC T100°C Da

Ex ia I Ma

-40 °C ≤ Ta ≤ +55°C

*Approved for issue on behalf of the IECEx
Certification Body:*

Stephen Winsor

Position:

Certification Manager

*Signature:
(for printed version)*

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Element Materials Technology
Unit 1 Pendle Place
Skelmersdale
West Lancashire
United Kingdom





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Certificate No: IECEX EMT 17.0005X Issue No: 1

Date of Issue: **2017-06-23** Page 2 of 4

Manufacturer: **Moflash Signalling Limited**
11 Upper Conybere Street,
Highgate,
Birmingham,
B12 0EB
United Kingdom

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[GB/EMT/ExTR17.0004/00](#) [GB/EMT/ExTR17.0004/01](#)

Quality Assessment Report:

[GB/EMT/QAR17.0001/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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 approved barriers only. The enclosure is completely non-metallic and has an IP66 rating. The enclosure can be of various colours 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

SPECIFIC CONDITIONS OF USE: YES as shown below:

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.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

1. Entity parameters changed: Pi of equipment was 571 mW, now increased to 660 mW. Ui increased from 24.8 V to 28 V.
2. Lower ambient temperature range reduced from -20 °C to -40 °C

Annex:

[Annex to IECEx EMT 17.0005X Is 1.pdf](#)



Element Materials Technology,
Unit 1, Pendle Place,
Skelmersdale,
West Lancashire, WN8 9PN,
United Kingdom

Annex to IECEx Certificate of Conformity

IECEx EMT 17.0005X issue No.:1

Routine Tests:

None.

Table of Entity Parameters:

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



Annex to IECEx Certificate of Conformity

IECEx EMT 17.0005X issue No.:1

Manufacturer's 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