



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.:	<b>IECEX EMT 17.0005X</b>	Page 1 of 4	<u>Certificate history:</u>
Status:	<b>Current</b>	Issue No: 4	<a href="#">Issue 3 (2021-12-17)</a>
Date of Issue:	2023-02-13		<a href="#">Issue 2 (2019-01-18)</a>
Applicant:	<b>Moflash Signalling Limited</b> 11 Upper Conybere Street Highgate Birmingham B12 0EB <b>United Kingdom</b>		<a href="#">Issue 1 (2017-06-23)</a>
Equipment:	<b>Alarm Sounder and Beacon range IS-SB-02-XXXX, IS-B-02-XX, IS-S-02-XX</b>		
Optional accessory:			
Type of Protection:	<b>Intrinsic Safety</b>		
Marking:	Ex ia I Ma Ex ia IIC T5 Ga Ex ia IIIC T100 °C Da  -40 °C ≤ Ta ≤ +55 °C  Ex ia I Ma Ex ia IIC T6 Ga Ex ia IIIC T85 °C Da  -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:  
(for printed version)

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 [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

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





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

Manufacturing  
locations:

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 equipment 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 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 Reports:

[GB/EMT/ExTR17.0002/00](#)  
[GB/EMT/ExTR17.0003/00](#)  
[GB/EMT/ExTR17.0004/00](#)  
[GB/EMT/ExTR17.0004/03](#)

[GB/EMT/ExTR17.0002/01](#)  
[GB/EMT/ExTR17.0003/01](#)  
[GB/EMT/ExTR17.0004/01](#)

[GB/EMT/ExTR17.0002/02](#)  
[GB/EMT/ExTR17.0003/02](#)  
[GB/EMT/ExTR17.0004/02](#)

Quality Assessment Reports:

[GB/EMT/QAR17.0001/01](#)

[GB/EMT/QAR17.0001/02](#)

[GB/EMT/QAR17.0001/03](#)



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## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Moflash IS-SB-02-XXXX, IS-B-02-XX and IS-S-02-XX sounder and beacon are a range of intrinsically safe 'ia' units designed to give visual and / or audible warning signals when activated. The devices either operate as a beacon (IS-B), sounder (IS-S) or combined sounder beacon (IS-SB). The beacon and sounder beacon models contain divergent LEDs to provide a visual warning, the sounder and sounder beacon models contain a transducer to provide an audio warning.

All models are designed for use in hazardous gas environments (Zone 0), dust environments (Zone 20) and mining environments (Group 1 equipment).

Power is supplied by IECEx / ATEX approved barriers only. All enclosures are completely non-metallic and have an IP 66 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.

## **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)**

Administrative variation only

### **Annex:**

[Annex to IECEx EMT 17.0005X issue 4.pdf](#)



Annex to IECEx Certificate of Conformity

IECEx EMT 17.0005X issue No.:4

Table of entity parameters

Table of entity parameters	
Parameter	Barrier supply
Ui	28 V
Ii	93 mA
Pi	600 mW
Li	0
Ci	0

Ex Marking

<u>IS-SB-02-XXXX or IS-B-02-XX</u>	<u>IS-S-02-XX</u>
Ex ia I Ma	Ex ia I Ma
Ex ia IIC T5 Ga	Ex ia IIC T6 Ga
Ex ia IIIC T100 °C Da	Ex ia IIIC T85 °C Da
$-40\text{ °C} \leq T_a \leq +55\text{ °C}$	$-40\text{ °C} \leq T_a \leq +55\text{ °C}$

Routine Tests

1. None

Notes to this certificate

1. TA1 TRA-060191-00

<b>Manufacturer's Documents</b>			
Title:	Drawing No.:	Rev. Level:	Date:
<b>Drawings common to all models:</b>			
Sounder and Sounder Beacon General Assembly (2 sheets – Page 1)	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
92 x 1.8 O-Ring NBR70	18-185852	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 (3 sheets)	18-185959	03	2015-10-19
Sonos Red Deep Base MkII 4 Pin	HSG6890	01	2015-10-23
<b>Drawings specific to IS-SB-02-XXXX and IS-S-02-XX:</b>			
Transducer to Cavity Gasket	M00130	2	2017-02-27
IS Inner Cavity to Cover Gasket	M00132	1	2017-03-06
Intrinsically Safe Transducer Holder	M00134	A	2018-02-21
Transducer	M00427	4	2017-02-27
Sonos Outer Cover (2 sheets)	18-185802	03	2013-01-23
Sonos Inner Cavity	18-185983	02B	2013-01-23
<b>Drawings specific to IS-SB-02-XXXX only:</b>			
Sounder Beacon Product Label	S00153	11	2021-09-09
Moflash Intrinsically Safe Sounder-Beacon Range Installation Booklet (12 pages)	S00605	8	2021-10-19
<b>Drawings specific to IS-S-02-XX only:</b>			
Sounder Product Label	S00151	12	2021-09-09

**Annex to IECEx Certificate of Conformity****IECEx EMT 17.0005X issue No.:4**

Moflash Intrinsically Safe Sounder Range Installation Booklet (12 pages)	S00608	8	2021-10-19
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\* Denotes information not provided by manufacturer



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