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

Certificate No.:	**IECEx EMT 20.0008X**	Page 1 of 4 <u>Certificate history:</u>
Status:	**Current**	Issue No: 0
Date of Issue:	2023-02-10	

Applicant: **Texecom Limited (Incorporating Klaxon Signals)**
St. Crispin Way
Haslingden, Lancashire BB4 4PW
United Kingdom

Equipment: **Alarm Sounder and Beacon Range Ex IS Sounder, Ex IS Beacon, Ex IS Sounder/Beacon TCCA0000, TCCA0010, TCCA0020**

Optional accessory:

Type of Protection: **Intrinsic Safety "Ex ia"**

Marking:
Ex ia I Ma   -40 °C ≤ Ta ≤ +55°C
Ex ia IIC T5 Ga   -40 °C ≤ Ta ≤ +55°C
Ex ia IIIC T100°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)

Certificate issued by:

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

IECEx Certificate of Conformity

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

Manufacturing locations:
Moflash Signalling Limited
11 Upper Conybere Street
Highgate
Birmingham
B12 0EB
United Kingdom

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 60079-0:2017   Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

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/ExTR17.0004/00   GB/EMT/ExTR17.0004/01   GB/EMT/ExTR17.0004/02
GB/EMT/ExTR17.0004/03   GB/EMT/ExTR22.0004/00

Quality Assessment Report:

GB/EMT/QAR20.0001/00

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Texecom Ex IS Sounder, Ex IS Beacon and Ex IS 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 (TCCA0010), sounder (TCCA0000) or combined sounder beacon (TCCA0020). 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 the capacitance and inductance limits are not exceed by distributed capacitance (C_c) or distributed inductance (L_c) due to cable length.

Equipment (continued):

The Klaxon Signals TCCA0020, TCCA0010 and TCCA0000 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 (TCCA0010), sounder (TCCA0000) or combined sounder beacon (TCCA0020). 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 Ex 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.

Annex:

Annex to IECEx EMT 20.0008X issue 0.pdf

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

Annex to IECEx Certificate of Conformity   **IECEx EMT 20.0008X issue No.:0**

Model designation.

Description	Texecom Part Code	Texecom Approval Type
Ex IS Sounder 24vDc Red	TCC-0001	TCCA0000
Ex IS Beacon 24vDc Amber Lens	TCC-0002	TCCA0010
Ex IS Beacon 24vDc Red Lens	TCC-0003	TCCA0010
Ex IS Beacon 24vDc Blue with Clear Lens	TCC-0004	TCCA0010
Ex IS Beacon 24vDc Green with Clear Lens	TCC-0005	TCCA0010
Ex IS Beacon 24vDc White with Clear Lens	TCC-0006	TCCA0010
Ex IS Sounder/Beacon 24vDc with Amber Lens	TCC-0007	TCCA0020
Ex IS Sounder/Beacon 24vDc Red Lens	TCC-0008	TCCA0020
Ex IS Sounder/Beacon 24vDc Blue with Clear Lens	TCC-0009	TCCA0020
Ex IS Sounder/Beacon 24vDc Green with Clear Lens	TCC-0010	TCCA0020
Ex IS Sounder/Beacon 24vDc White with Clear Lens	TCC-0011	TCCA0020

Table of entity parameters

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Parameter	Barrier supply
U_i	28 V
I_i	93 mA
P_i	600 mW
L_i	0
C_i	0

Ex Marking

Ex Marking	
Beacon or Souder/ Beacon TCCA0010 or TCCA0020	Sounder TCCA0000
⟨Ex⟩ I M1 ⟨Ex⟩ II 1 G D Ex ia I Ma Ex ia IIC T5 Ga Ex ia IIIC T100 °C Da -40 °C ≤ Ta ≤ +55 °C	⟨Ex⟩ I M1 ⟨Ex⟩ II 1 G D Ex ia I Ma Ex ia IIC T6 Ga Ex ia IIIC T85 °C Da -40 °C ≤ Ta ≤ +55 °C

Routine Tests
1. None

Manufacturer's Documents			
Title:	Drawing No.:	Rev. Level:	Date:
Drawings common to all models:			
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
Drawings specific to TCCA0020 and TCCA0000:			
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
Drawings specific to Sounder Beacon only TCCA0020:			
Sounder Beacon Product Label	S00153KL	3	2022-12-19
Intrinsically Safe Sounder-Beacon Range Installation Booklet (12 pages)	S00605KL	10	2023-01-16

Drawings specific to Sounder TCCA0000 only:			
Sounder Product Label	S00151KL	3	2022-12-19
Intrinsically Safe Sounder Range Installation Booklet (12 pages)	S00608KL	10	2023-01-16
Drawings specific to Beacon only TCCA0010:			
Beacon Product Label	S00155KL	2	2022-12-19
Intrinsically Safe Sounder Range Installation Booklet (12 pages)	S00609KL	8	2023-01-16

* 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.