# 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 BAS 08.0043X**

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Certificate history:
Issue 2 (2014-04-08)
Issue 1 (2011-01-20)
Issue 0 (2009-12-21)

Status: **Current**

Issue No: 3

Date of Issue: 2016-09-29

Applicant: **Eaton MEDC Limited**
Unit B, Sutton Parkway
Oddicroft Lane
Sutton-in-Ashfield
NG17 5FB
**United Kingdom**

Equipment: **Sounder Types DB5 and DB51**

Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **Ex ia IIC T4 Ga (-20°C to +55°C)**

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

Position: **Technical 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 www.iecex.com or use of this QR Code.

Certificate issued by:

**SGS Baseefa Limited**
**Rockhead Business Park**
**Staden Lane**
**Buxton, Derbyshire, SK17 9RZ**
**United Kingdom**

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Certificate No.: **IECEx BAS 08.0043X** 

Date of issue: 2016-09-29 

Manufacturer: **Eaton MEDC Limited**
Unit B, Sutton Parkway
Oddicroft Lane
Sutton-in-Ashfield
NG17 5FB
**United Kingdom**

Additional 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

IEC 60079-26:2006 Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga
Edition:2

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/BAS/ExTR08.0089/00 GB/BAS/ExTR09.0145/00 GB/BAS/ExTR11.0010/00
GB/BAS/ExTR14.0074/00

Quality Assessment Report:

GB/BAS/QAR06.0023/07

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**EQUIPMENT:**
Equipment and systems covered by this Certificate are as follows:

The sounder comprises an electronic circuit on a printed circuit board and an inductive sounder device.

The printed circuit board is potted into a plastic enclosure which is mounted into a plastic base that forms a terminal enclosure.

An optional end-of-line resistor may be fitted across the terminals.

The terminal parameters are shown in the Annex.

**SPECIFIC CONDITIONS OF USE: YES as shown below:**
1. By virtue of its shape, design and position of intended use, it is considered not to be an electrostatic risk, however the apparatus must not be installed in a position where it may be subjected to an excessive dust laden airflow.

2 . The equipment must only be cleaned using a damp cloth.

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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**
**Variation 3.1**

This issue permits existing information (for example on Schedule Drawings) to be replaced by the revised certificate holders name. No other changes may be made to the certified design

File Reference: **16/0725**

**Annex:**

IECEx BAS 08.0043X Annex.pdf

TERMINAL PARAMETERS

Sounder DB5

$U_i$ = 28V
$I_i$ = 28mA
$P_i$ = 810mW
$C_i$ = 0
$L_i$ = 20mH + 1000Ω
$L_i / R_i$ = 20µH/Ω

The DB5 sounder has internal resistance that limits the input current to 28mA when connected to a 28V source, so may be connected to power sources having an output current ($I_o$) greater than 28mA but not exceeding 150mA without compromising safety.

An optional end-of-line resistor may be connected across the input terminals.

Sounder DB51

$U_i$ = 15.7V
$I_i$ = 37mA
$P_i$ = 560mW
$C_i$ = 0
$L_i$ = 20mH
$R_i$ = 325Ω
$L_i / R_i$ =61.5µH/Ω

The DB51 sounder has internal resistance that limits the input current to 37mA when connected to a 15.7V source, so may be connected to power sources having an output current ($I_o$) greater than 37mA but not exceeding 150mA without compromising safety. The DB51 must be powered from a resistively limited source.

An optional end-of-line resistor may be connected across the input terminals.