



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 13.0115X**

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Certificate history:

Status: **Current**

Issue No: 7

Issue 6 (2018-05-11)

Issue 5 (2016-09-28)

Issue 4 (2015-09-08)

Issue 3 (2014-10-29)

Issue 2 (2014-10-27)

Issue 1 (2014-03-24)

Issue 0 (2013-12-02)

Date of Issue: 2019-02-06

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

Equipment: **Type DB3BE GD Sounder & DB4BE GD Loudspeaker**

Optional accessory:

Type of Protection: **Flameproof/Increased Safety and Dust Protected by Enclosure**

Marking: **Ex db eb IIC T* Gb**
Ex tb IIIC T*°C Db IP6**
(Tamb = -50°C to +*°C)
***See Schedule for T class & ambient combination.**
**** See Schedule for IP marking**

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

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

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/BAS/ExTR13.0247/00](#)
[GB/BAS/ExTR14.0314/00](#)

[GB/BAS/ExTR14.0082/00](#)
[GB/BAS/ExTR15.0256/00](#)

[GB/BAS/ExTR14.0304/00](#)
[GB/BAS/ExTR18.0102/00](#)

Quality Assessment Report:

[GB/BAS/QAR06.0023/08](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The circular rear cover closes an Ex e terminal enclosure and is secured by three M5 stainless steel screws. The screws may be profiled to be retained within the rear cover during assembly/dis-assembly. The Ex e chamber houses a terminal block of either 4, 6 or 8 (2x4) Ex e connections, Component Certified to IECEx SIR 05.0035U.

The base of this enclosure then forms the cover of the flameproof chamber and with integral cables passing through a potted bushing arrangement. The terminal enclosure is fixed with six M5 x 20mm long stainless steel socket head screws of grade A2-70 minimum. The screws may be profiled to be retained within the rear cover during assembly/dis-assembly. The flameproof chamber houses an assembly of a transformer and a control/terminal PCB.

Up to two M20 or M25 cable entries are provided in the side of the enclosure to accommodate suitably certified cable entry devices.

A plastic horn assembly (with either a long or short flare) is fitted externally to the front, and along the sides, of the enclosure, together with a mounting bracket. When the short flare is fitted the ingress protection rating is reduced to IP65.

Variation 0.1

The DB3BE GD Sounder is rated up to 254V, 15W and is identical in construction to the above Loudspeaker except that the flameproof chamber contains different components, including sound generating PCB's (with both AC & DC variants).

The equipment may be marked with one or multiple combinations, as below:

| MODEL | POWER | TEMPERATURE MARKING |
|----------|-------|---------------------------------------------|
| DB4BE GD | 8W | T4/T135°C (T _{amb} -50°C to +85°C) |
| | | T5/T100°C (T _{amb} -50°C to +55°C) |
| | | T6/T85°C (T _{amb} -50°C to +40°C) |
| | 15W | T3/T200°C (T _{amb} -50°C to +85°C) |
| | | T4/T135°C (T _{amb} -50°C to +70°C) |
| | | T5/T100°C (T _{amb} -50°C to +40°C) |
| | 25W | T4/T135°C (T _{amb} -50°C to +70°C) |
| | | T5/T100°C (T _{amb} -50°C to +40°C) |

| MODEL | POWER | TEMPERATURE MARKING |
|----------|-------|---------------------------------------------|
| DB3BE GD | 15W | T4/T135°C (T _{amb} -50°C to +85°C) |
| | | T5/T100°C (T _{amb} -50°C to +55°C) |
| | | T6/T85°C (T _{amb} -50°C to +40°C) |

| MODEL | IP RATING | FLARE OPTIONS |
|----------|-----------|-----------------------------|
| DB4BE GD | IP66 | When fitted with long flare |



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| | | |
|----------|------|------------------------------|
| DB3BE GD | IP65 | When fitted with short flare |
|----------|------|------------------------------|

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. For replacement purposes the cover fixing screws shall be of stainless steel grade A2-70 or stronger
2. Painting and surface finishes, other than those applied by the manufacturer, are not permitted
3. When the unit is used in dust atmospheres the cable entries used shall be sealed to maintain the IP6X rating, in accordance with the applicable installation codes.
4. Not more than one single or multiple strand wiring lead shall be connected into either side of any terminal, unless multiple conductors have been joined in a suitable manner, e.g. two conductors into a single insulated crimped boot lace ferrule.
5. Leads connected to the terminals shall be insulated for at least 275V and this insulation shall extend to within 1mm of the metal of the terminal throat.
6. Minimum creepage and clearance distances between the terminals and adjacent conductive parts (including cable entry devices) must be at least 6mm.
7. All terminal screws, used and unused, shall be tightened down.
8. If used internal optional earthing material shall be anti-corrosive.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 7.1

To remove the use of an adhesive, and allow an alternative method of Ex d cover gasket retention, across all models of DB3B & DB4B.

Variation 7.2

To correct the cable temperature rise value as indicated on the certification labels

Variation 7.3

To allow an optional IIC IIIC sinter across all models of DB3B & DB4B

Variation 7.4

To allow an increase operating ambient temperature by across all models DB3B & DB4B

Variation 7.5

To assess the Type DB3BE GD Sounder & DB4BE GD Loudspeaker against IEC 60079-0:2017 Ed 7, IEC 60079-1:2014 Ed 7, IEC 60079-7:2015 Ed 5 and IEC 60079-31:2013 Ed 2

ExTR: **GB/BAS/ExTR19.0013/00**

File Reference: **18/0757**