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Issue No. 5 (2019-02-05)

Issue No. 4 (2016-09-28)

Issue No. 3 (2015-09-08)

Issue No. 2 (2014-10-29) Issue No. 1 (2014-03-24)

Issue No. 0 (2013-12-02)

# INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx BAS 13.0113X Issue No. 5 Certificate history:

Status: Current

Date of Issue: 2019-02-05

Applicant: Eaton MEDC Limited

Unit B, Sutton Parkway

Oddicroft Lane Sutton-in-Ashfield NG17 5FB **United Kingdom** 

Equipment: Type DB3B GD Sounder & DB4B GD Loudspeaker

Optional accessory:

Type of Protection: Flameproof & Dust Protected by Enclosure

Marking:

Ex db IIC T\* Gb Ex tb IIIC T\*°C Db IP6\*\* (Tamb = -55°C to +\*°C)

\*See Schedule for T class and ambient combination.

\*\* See Schedule for IP marking

Approved for issue on behalf of the IECEx

Certification Body:

Technical Manager

R S Sinclair

Signature:

Position:

(for printed version)

Date:

M POWNEY
Certification
Manager

- 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.

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 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 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 : 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

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/BAS/ExTR13.0247/00 GB/BAS/ExTR14.0082/00 GB/BAS/ExTR14.0314/00 GB/BAS/ExTR15.0256/00 GB/BAS/ExTR19.0013/00

Quality Assessment Report:

GB/BAS/QAR06.0023/08



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Schedule

### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

The DB4B GD Loudspeaker may be rated up to 100V at either 8W, 15W or 25W and comprises a cylindrical body and two covers all moulded in Glass reinforced polyester. The front cover is an irregular shape which when fitted forms a chamber for the speaker driver assembly and is permanently sealed/filled with a potting compound. In the front of this cover is a fine stainless steel mesh pressed metal wire element to facilitate sound transmission.

The circular rear cover closes a flameproof chamber housing an assembly of a transformer and a control/terminal PCB. The cover 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.

Up to two M20/M25 (or NPT equivalent) cable entries are provided in the side of the enclosure to accommodate suitably certified cable entry

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 DB3B 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).

In addition the DB3B GD Sounder may optionally be marked with an alternative RB6-B GD type designation.

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

MODEL	POWER	TEMPERATURE MARKING	
DB4B GD	8W	T4/T135°C (T <sub>amb</sub> -55°C to +85°C)  T5/T100°C (T <sub>amb</sub> -55°C to +55°C)	
	15W	T6/T85°C (T <sub>amb</sub> -55°C to +40°C)  T3/T200°C (T <sub>amb</sub> -55°C to +85°C)  T4/T135°C (T <sub>amb</sub> -55°C to +70°C)	
	25W	T5/T100°C (T <sub>amb</sub> -55°C to +40°C)  T4/T135°C (T <sub>amb</sub> -55°C to +70°C)  T5/T100°C (T <sub>amb</sub> -55°C to +40°C)	



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MODEL	POWER	TEMPERATURE MARKING
DB3B GD	15W	T4/T135°C (T <sub>amb</sub> -55°C to +85°C)  T5/T100°C (T <sub>amb</sub> -55°C to +55°C)  T6/T85°C (T <sub>amb</sub> -55°C to +40°C)

MODEL	IP RATING	FLARE OPTIONS
DB4B GD	IP6X	When fitted with either long or short flare
DB3B GD		

# 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.



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

### Variation 5.1

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 5.2

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

### Variation 5.3

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

# Variation 5.4

To assess the Type DB3B GD Sounder & DB4B GD Loudspeaker against IEC 60079-0:2017 Ed 7, IEC 60079-1:2014 Ed 7 and IEC 60079-3:2013 Ed 2

ExTR: GB/BAS/ExTR19.0013/00	File Reference:	18/0757