



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx BAS 12.0077X Issue No: 0 Certificate history:  
Issue No. 0 (2013-04-02)

Status: **Current** Page 1 of 3

Date of Issue: **2013-04-02**

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

Electrical Apparatus: **Type DB16 IIC Loudspeaker Unit**  
*Optional accessory:*

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

Marking: **Ex de IIC T3 Gb, Ex tb IIIC T110°C Db (Tamb = -50°C to +40°C\*) \*see schedule**

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

R S Sinclair

*Position:*

General 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 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: **Cooper 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 electrical 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:

<b>IEC 60079-0 : 2011</b> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2007-04</b> Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-7 : 2006-07</b> Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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/ExTR12.0136/00](#)

Quality Assessment Report:

[GB/BAS/QAR06.0023/04](#)



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The Type DB16 IIC Loudspeaker Unit is rated at up to 100V with a maximum power dissipation of 30 watts and an ambient temperature range of -50°C to +40°C. The unit comprises a cylindrical enclosure and an external horn flare all manufactured in glass reinforced polyester.

The flare arrangement forms a front cover to the enclosure which is held in position by six M5 by 20mm long stainless steel socket head cap screws. A stainless steel sintered metal disc is mounted in the centre of the horn flare to facilitate the transmission of sound energy. The interior of the flameproof housing comprises a driver unit mounted in the flare and potted into position behind the sinter, together with an optional transformer mounted on the chamber dividing wall. The rear of the flameproof compartment forms the base of the terminal compartment with up to 4 integral conductors passing through the enclosure wall via a potted bushing.

The other end of the enclosure body is closed by a flat cover over an integral increased safety (Exe) terminal chamber. The cover is secured by three M5 x 20mm stainless steel socket head cap screws. The shank diameter of each screw is machined to provide a retention arrangement. The interior of the terminal box comprises up to two, independently Component Certified 4 way, Terminal Blocks, mounted horizontally in the base of the terminal chamber.

Internal and external earthing facilities are provided on the side wall of the terminal chamber.

Up to two M20 or M25 cable entries (or NPT equivalent) are provided in the side wall of the terminal box for the accommodation of suitably certified cable entry devices. The cable entry devices or stopping plugs should be certified as Equipment (not a Component).

### Variation One

A de-rated unit, of up to 25W maximum, with an extended ambient temperature range of -50°C to +65°C.

### CONDITIONS OF CERTIFICATION: YES as shown below:

1. Painting and surface finishes, other than those applied by the manufacturer, are not permitted.
2. 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.
3. 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.
4. Minimum creepage and clearance distances between the terminals and adjacent conductive parts (including cable entry devices) must be at least 5mm.
5. All terminal screws, used and unused, shall be tightened down.
6. For replacement purposes the horn fixing screws shall be of stainless steel grade A2-70 or stronger.
7. This apparatus is not suitable for use in atmospheres containing carbon disulphide.