



EC - TYPE EXAMINATION CERTIFICATE

**Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

- 3 EC - Type Examination Certificate Number: **Baseefa05ATEX0199X**
- 4 Equipment or Protective System: **A Type DB20 Loudspeaker**
- 5 Manufacturer: **MEDC Limited**
- 6 Address: **Colliery Road, Pinxton, Nottingham, NG16 6JF**
- 7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 Baseefa (2001) Ltd., Notified Body number 1180, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- The examination and test results are recorded in confidential Report No. **05(C)0211**
- 9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0: 2004 EN 60079-1: 2004 EN 60079-7: 2003 IEC 61241-0: 2004 IEC 61241-1: 2004
except in respect of those requirements listed at item 18 of the Schedule.
- 10 If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- 11 This EC - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- 12 The marking of the equipment or protective system shall include the following :
- Ex II 2GD Ex de IIC T4 (T_{amb} = -50°C to +70°C)
Ex tD A21 IP65 T130°C (T_{amb} = -50°C to +70°C)**

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. 0676

Project File No. 05/0211

This certificate is granted subject to the general terms and conditions of Baseefa (2001) Ltd. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

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Baseefa is a trading name of Baseefa (2001) Ltd
Registered in England No. 4305578 at the above address

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa (2001) Ltd.

Re-issued 4thth October 2006 to clarify marking



13

Schedule

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Certificate Number Baseefa05ATEX0199X

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Description of Equipment or Protective System

A Type DB20 Loudspeaker comprises a cylindrical body and end cap manufactured in moulded glass reinforced polyester. The enclosure is fitted with a flare arrangement at the front which is held in position by three M5 by 10mm long socket head cap screws, with brass thread inserts embedded in the body shell. A stainless steel sinter with a maximum bubble pore size of 250µm, is mounted in the centre of the body and secured within a recess with silicone sealant and a circlip. The flare provides protection of the sinter against impact.

The other end of the body is closed by an end cap, over an increased safety (Exe) terminal compartment and is secured by three M5 x 20mm stainless steel socket head cap screws with brass thread inserts embedded in the body shell. The shank diameter of each screw is machined down, by the manufacturer, to provide a retention arrangement within the counterbores of the cover. The interior of the terminal box comprises a 4 way, Klippon Type BK4 Terminal Block to Certificate SIRA01ATEX3247U.

The main body houses a potted driver assembly and an optional potted transformer. The potting provides the boundary between the increased safety terminal enclosure and the flameproof driver enclosure. Up to 4 integral conductors pass through the potting from the terminals to the transformer. Up to two M20 cable entries are provided in the side wall of the terminal box for the connection of external supply cables.

Internal and external earthing facilities are provided by an integral M5 stainless steel stud clamp and nut assembly.

The Type DB20 Loudspeaker is rated up to 100V 8W, with a maximum driver rating of 8 watts for the version without the transformer.

The Type DB20 Loudspeaker may also be marked with alternative temperature information:-

T4 ($T_{amb} = -50^{\circ}\text{C}$ to $+55^{\circ}\text{C}$) and T115 ($T_{amb} = -50^{\circ}\text{C}$ to $+55^{\circ}\text{C}$) or
T5 ($T_{amb} = -50^{\circ}\text{C}$ to $+40^{\circ}\text{C}$) and T100 ($T_{amb} = -50^{\circ}\text{C}$ to $+40^{\circ}\text{C}$)

16 Report Number

Baseefa Certification Report 05(C)0211

17 Special Conditions for Safe Use

1. Not more than one single or multiple strand 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.
2. 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.
3. All terminal screws, used and unused, shall be tightened down.
4. Minimum creepage and clearance distances between the terminals and adjacent conductive parts (including cable entry devices) must be at least 5mm.
5. Painting and surface finishes, other than those applied by the manufacturer, are not permitted



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6. The cable entries shall be sealed, in accordance with the applicable installation code of practice, to ensure that the IP65 ingress protection rating is maintained.
7. This apparatus is not suitable for use in atmospheres containing carbon disulphide

18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
*309-101	1	A	11.03.05	General Arrangement Type DB20 Loudspeaker
*309-101	2	A	11.03.05	General Arrangement Type DB20 Loudspeaker
309-115	-	A	21.10.05	IIC Sinter Detail, Stainless Steel
309-114	-	C	14.09.06	IIC Certification Label

* These drawings are common to certificate Baseefa05ATEX0198X and held on that file.



- 1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**
- 2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres**
Directive 94/9/EC
- 3 Supplementary EC - Type Examination Certificate Number: **See Schedule**
- 4 Equipment or protective system: **See Schedule**
- 5 Manufacturer: **MEDC**
- 6 Address: **Colliery Road, Pinxton, Nottingham, NG16 6JF**
- 7 This supplementary certificate extends the EC - Type Examination Certificates listed in the Schedule to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedules of the said Certificates but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

A copy of this Supplementary Certificate shall be attached to each of the original Certificates.

This certificate may only be reproduced in its entirety, without any change, Schedule included.

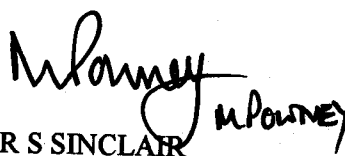
Baseefa Customer Reference No. 0676

Project File No. 07/0181

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R S SINCLAIR
DIRECTOR
On behalf of
Baseefa (2001) Ltd.



Schedule

Description of the variation to the Equipment or Protective System

To permit the use of epoxy or acrylic paint processes on the products detailed below.

Certificate No.	Supplement No.	Equipment Type
BAS99ATEX2195X	5	XBII
BAS99ATEX2196	5	XB12,FB12,TH12,FL12,
BAS00ATEX2031	2	XB9
BAS00ATEX2097X	9	DB3, DB3L, DB4, DB4L
BAS00ATEX2098X	9	DB3E, DB3E, DB4, DB4E
BAS00ATEX2204X	1	XB10
BAS00ATEX2226X	1	XB10E
BAS02ATEX2086X	5	DB10
BAS02ATEX2105X	4	BGE, PBE
Baseefa03ATEX0084X	2	BG1, PB1
Baseefa04ATEX0009X	3	XB15, FB15, FL15, LD15, TH15
Baseefa04ATEX0166X	2	DB16 IIB
Baseefa04ATEX0167X	2	DB16 IIC
Baseefa05ATEX0198X	1	DB20 IIB
Baseefa05ATEX0199X	1	DB20 IIC

Report No.

None

Special Conditions for Safe Use

None additional to those listed previously

Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation

Drawings and Documents

Number	Issue	Date	Description
122-808	1	05/03/07	Addition of Optional Acrylic Paint to Products Listed.



SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE

**Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

- 3 Supplementary EC - Type Examination Certificate Number: **Baseefa05ATEX0199X/2**
- 4 Equipment or Protective System: **Type DB20 Loudspeaker**
- 5 Manufacturer: **MEDC Limited**
- 6 Address: **Colliery Road, Pinxton, Nottingham, NG16 6JF**
- 7 This supplementary certificate extends EC - Type Examination Certificate No. Baseefa05ATEX0199X to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

This certificate may only be reproduced in its entirety, without any change, schedule included.

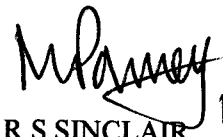
Baseefa Customer Reference No. 0676

Project File No. 08/0040

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13 **Schedule**

14 **Certificate Number Baseefa05ATEX0199X/2**

15 **Description of the variation to the Equipment or Protective System**

Variation 1.1

Clarification and amendment of the marking which is to include the following:

⊕ II 2 GD Ex de IIC T4 ($T_{amb} = -50^{\circ}\text{C}$ to $+70^{\circ}\text{C}$)
Ex tD A21 IP66/IP67 T130 $^{\circ}\text{C}$ ($T_{amb} = -50^{\circ}\text{C}$ to $+70^{\circ}\text{C}$)

The loudspeaker unit may also be marked:

T4 ($T_{amb} = -50^{\circ}\text{C}$ to $+55^{\circ}\text{C}$) and T115 $^{\circ}\text{C}$ ($T_{amb} = -50^{\circ}\text{C}$ to $+55^{\circ}\text{C}$), or
T5 ($T_{amb} = -50^{\circ}\text{C}$ to $+40^{\circ}\text{C}$) and T100 $^{\circ}\text{C}$ ($T_{amb} = -50^{\circ}\text{C}$ to $+40^{\circ}\text{C}$)

16 **Report Number**

Baseefa Certification Report GB/BAS/ExTR 08.0026/00

17 **Special Conditions for Safe Use**

None additional to those listed previously

18 **Essential Health and Safety Requirements**

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 **Drawings and Documents**

Number	Issue	Date	Description
309-114	D	31-01-08	DB20 Certification Label IIC ATEX