



1 **EC-TYPE EXAMINATION CERTIFICATE**

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

3 EC-Type Examination Certificate Number : **BAS00ATEX1260**

4 Equipment or Protective System: **SOUNDER TYPE DB7**

5 Manufacturer: **MEDC LIMITED**

6 Address: **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 The Electrical Equipment Certification Service, notified body number 600 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 N°

00(C)0892 dated 23 January 2001

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014: 1997 + Amds 1 & 2 EN 50020: 1994 EN 50284: 1999

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. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.

12 The marking of the equipment or protective system shall include the following:-

⊕ II 1 G EEx ia IIB T4 (-55°≤T_a≤+70°C) or EEx ia IIC T4 (-55°≤T_a≤+70°C)

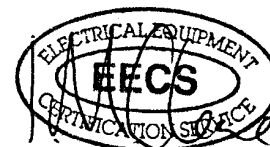
This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: EECS 0676/02/013

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances.



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I M CLEARE
DIRECTOR
1 March 2001



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Schedule

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Description of Equipment or Protective System

The Sounder Type DB7 is designed to produce an audio signal.

The sounder comprises an electronic circuit on a printed circuit board and an inductive sounder device. The PCB is potted into a plastic enclosure which is mounted into a plastic base which forms a terminal enclosure.

The sounder is energised at nominal voltages of either 24V or 12V and is designed for apparatus groups IIC and IIB. Tones may be selected by pre-set switches on the p.c.b. Further tones may be selected on the dual-tone versions by reversing the polarity of the supply.

The range of sounders and intrinsic safety parameters are as follows:-

Type No	Nominal Voltage (V)	Group	U_i (V)	I_i (mA)	P_i (W)	C_i	L_i	R_i (Ω)	L_i/R_i ($\mu\text{H}/\Omega$)
DB7-24C	24	IIC	28	61.3	0.84	0	10 mH + 234.4 Ω	234.4	42
DB7-24B	24	IIB	28	123	0.84	0	10 mH + 18.7 Ω	18.7	534
DB7-12C	12	IIC	15.7	61.3	1.125	0	10 mH + 211.1 Ω	211.1	47
DB7-12B	12	IIB	15.7	123	1.125	0	10 mH + 83.1 Ω	83.1	120
DB7-24C-D	24	IIC	28	61.3	0.653	0	10 mH + 171.5 Ω	171.5	58
DB7-24B-D	24	IIB	28	123	0.653	0	10 mH + 46.4 Ω	46.4	215
DB7-12C-D	12	IIC	15.7	61.3	0.563	0	10 mH + 148.5 Ω	148.5	67
DB7-12B-D	12	IIB	15.7	123	0.563	0	10 mH + 25.5 Ω	25.5	392

This apparatus has an internal resistance R_i , which may be used in conjunction with the source resistance, to ensure that the input current limit I_i for inductive safety, is not exceeded.

By virtue of its shape, design and position of use, it is assessed that the apparatus is not considered to be an electrostatic risk, however, the apparatus must not be installed in a position where it may be subjected to an excessive air flow that may cause an electrostatic build-up.

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Report No.

00(C)0892

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Special Conditions For Safe Use

None



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18. Essential Health and Safety Requirements

ESSENTIAL HEALTH & SAFETY REQUIREMENTS not covered by standards listed in Section 9		
Clause	Subject	Compliance
1.1.3	Changes in characteristics of materials and combinations thereof	Report No 00(C)0892 Clause 6.1.1.3
1.2.2	Components for incorporation or replacement	Report No 00(C)0892 Clause 6.1.2.2
1.2.5	Additional means of protection	Report No 00(C)0892 Clause 6.1.2.5
1.2.7	Protection against other hazards	Report No 00(C)0892 Clause 6.1.2.7
1.4.2	Withstanding attack by aggressive substances	Report No 00(C)0892 Clause 6.1.4.2

19 DRAWINGS

Number	Issue	Date	Description
212-190	A	27.11.00	General Assembly
212-185	A	15.01.01	Circuit Diagram 24V IIC
212-186	A	15.01.01	Circuit Diagram 24V IIB
212-187	A	15.01.01	Circuit Diagram 12V IIC
212-188	A	15.01.01	Circuit Diagram 12V IIB
212-189	A	18.01.01	Circuit Diagram Dual Tone
212-179 SS1	B	18.12.00	Silk Screen PC202
212-179 UP	B	18.12.00	Artwork PC202
212-179 LO	B	18.12.00	Artwork PC202
212-179 SS2	B	18.12.00	Silk Screen PC202
212-180 SS1	B	18.12.00	Silk Screen PC203
212-180 UP	B	18.12.00	Artwork PC203
212-180 LO	B	18.12.00	Artwork PC203
212-180 SS2	B	18.12.00	Silk Screen PC203
212-181 SS1	B	18.12.00	Silk Screen PC204
212-181 UP	B	18.12.00	Artwork PC204
212-181 LO	B	18.12.00	Artwork PC204
212-181 SS2	B	18.12.00	Silk Screen PC204

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BASEEFA List Keywords

2ALARMS