



1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 07ATEX2032X** Issue: **0**

4 Equipment: **CEL-35X/IS dBadge Series Noise Dosemeter**

5 Applicant: **Casella CEL Limited**

6 Address: Regent House
Wolseley Road
Kempston
Bedford
MK42 7JY
UK

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 50014: 1997 EN 50284: 1999
EN 50020: 2002 EN 50303: 2000

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment 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. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



I M1
II 1G
EEx ia IIC T4
EEx ia I
(T_a = -20°C to +40°C)

Project Number 51A15494
C. Index 12

C. Ellaby
Certification Officer

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service

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SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 07ATEX2032X
Issue 0

13 DESCRIPTION OF EQUIPMENT

The CEL-35X/IS *dB*adge series is a miniature, fully integrated Noise Dosemeter used for the measurement of personal noise exposure. The series covered by this certificate are CEL-35X/IS, where X is any number from 0 to 9. The product is designed to be worn using a range of fixing methods, alternatively it may be mounted on a hard hat.

The device comprises a plastic enclosure that contains two printed circuit boards, an LCD display and rechargeable cells. Two rubber keys located on the sides of the product are used to control the instruments operation.

Power the device is provided from two, internal and non-removable, type GP 1.2V @330mAh 1/2AAA, cylindrical, Nickel metal Hydride cells. Two exposed contacts are located on the rear of the product for connection to a purpose designed, drop in, charger system. The charge contacts are protected from reverse current flow by three blocking diodes. The unit is not to be charged within a hazardous area. Battery charging is only permitted using charger model number CEL-6362.

Noise is monitored using a screw on, 1/2" back, electret microphone, this is a high impedance capacitive type sensor, which can be removed for replacement or product testing. Measured noise data is downloaded to a PC (in the non-Hazardous area) using an infrared cable free communication link.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	26 April 2007	R52A15494A	The release of prime certificate.

15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

15.1 Parts of the enclosure are non-conducting and may generate an ignition-capable level of electrostatic charge under certain extreme conditions. The user should ensure that the equipment is not installed or used in a location where it may be subjected to external conditions (such as high-pressure steam), which might cause a build-up of electrostatic charge on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.

15.2 The *dB*adge Noise Dosemeter shall not be used in areas where a layer of coal dust may be deposited on the enclosure.

15.3 The microphone shall not be removed in the hazardous area.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 CONDITIONS OF CERTIFICATION

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

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Certificate Annexe

Certificate Number: Sira 07ATEX2032X
Equipment: CEL-35X/IS *dB*Badge Series Noise Dosemeter
Applicant: Casella CEL Limited



Issue 0

Number	Sheet	Rev.	Date	Description
93-193090D/IS	1 of 1	03	20 Apr 07	CEL-35x <i>dB</i> Badge I.S PSU Board Circuit Diagram ATEX
02-193091C/IS	1 to 2	04	20 Apr 07	CEL-35x <i>dB</i> Badge I.S PSU Board Profile & Drilled ATEX
05-193092C/IS	1 of 1	03	20 Apr 07	CEL-35x <i>dB</i> Badge I.S PSU Board PCB S/A ATEX
17-193093A/IS	1 of 1	02	20 Apr 07	CEL-35x <i>dB</i> Badge I.S PSU Board PCB Parts List ATEX
03-193095D/IS	1 of 1	02	20 Apr 07	CEL-35x <i>dB</i> Badge I.S G/A ATEX
13-193096A/IS	1 of 1	03	20 Apr 07	CEL-35x <i>dB</i> Badge I.S Information/Serial No. Label ATEX
93-193098D/IS	1 of 1	01	20 Apr 07	CEL-350 <i>dB</i> Badge I.S - Analogue/Processor Board Circuit Diagram
02-193099C/IS	1 to 2	01	20 Apr 07	CEL-350 <i>dB</i> Badge I.S - Analogue/Processor Board Profile & Drilled
05-193100C/IS	1 of 1	01	20 Apr 07	CEL-350 <i>dB</i> Badge I.S - Analogue/Processor Board PCB S/A
17-193101A/IS	1 to 2	01	20 Apr 07	CEL-350 <i>dB</i> Badge I.S - Analogue/Processor Board Parts List
17-193107A/IS	1 of 1	01	20 Apr 07	CEL-350 <i>dB</i> Badge I.S - Microphone Information

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