

**Australian/New Zealand  
Certification Scheme for**

**EXPLOSION-PROTECTED ELECTRICAL EQUIPMENT**

**ANZEx Scheme**

***Certificate of Conformity***

Certificate No.: <b>ANZEx 12.4123X</b>	Issue No.: <b>0</b>	Date of Issue: <b>20 February 2013</b>
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**Certificate Holder:** Casella CEL  
Regent House, Wolseley Road,  
Kempston, Bedford, MK42 JY  
UK


**Electrical Apparatus:** CEL-35X/IS dBadge Series Dosimeter and Bruel & Kjaer Type 4448 x 002 Noise  
Dose Meter

**Type of Protection:** Ex i

**Marking Code:** Ex ia I Ma & Ex ia IIC T2 Ga  
ANZEx 12.4123X

**Manufacturing Location(s):** Casella CEL  
Regent House, Wolseley Road,  
Kempston, Bedford, MK42 JY  
UK

This certificate and schedule shall not be reproduced except in full

 <p>ABN 06 098 886 563</p>	<p>Certificate issued by</p> <p><b><i>ITACS Pty. Ltd.</i></b> <b><i>4-6 Second Street SA 5007 Australia</i></b> <b><i>PO Box 300 Hindmarsh SA 5007 Australia</i></b> <b><i>Phone: +61 8 8346 8680 Fax: +61 8 8346 7072</i></b> <b><i>Email: itacs@itacslab.com</i></b></p>	 <p>Accreditation by the Joint Accreditation System of Australia and New Zealand Acc No. Z2870404AA www.jas-anz.com.au/register</p>
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*This certificate is granted subject to the conditions as set out in Standards Australia/Standards New Zealand Miscellaneous Publication MP87.1-2008.*

**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 60079-0:2007</b>	<b>Electrical apparatus for explosive gas atmospheres – Part 0: General requirements</b>
<b>IEC 60079-11:2006</b>	<b>Electrical apparatus for explosive gas atmospheres – Part 11: Equipment protected by intrinsic safety “i”</b>
<b>IEC 60079-26: 2006</b>	<b>Electrical apparatus for explosive gas atmospheres – Part 11: Equipment with equipment protection level (EPL) Ga</b>

*This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above. Attention is also drawn to the fact that the above Standards have been superseded*

**TEST & ASSESSMENT REPORTS:**

*The equipment listed has successfully met the examination and test requirements as recorded in*

Test Report No. and Issuing Body: GB/SIR/ExTR11.0110/01,  
GB/SIR/ExTR11.0224/01,  
GB/SIR/ExTR11.0311/00  
GB/SIR/ExTR12.0322/00  
TRAU TR 19300581.001

Quality Assessment Report No. and Issuing Body: GB/SIR/QAR10.0002/02

File Reference: 1113004183 ANZ Ex 12.4123X



*Signed for and on behalf of issuing body*

Certification Authority

Position

20 February 2012

Date of Issue

This certificate and schedule shall not be reproduced except in full  
This certificate is not transferable and remains the property of the issuing body  
and must be returned in the event of it being revoked or not renewed.

# Australian/New Zealand Certification Scheme for

## EXPLOSION-PROTECTED ELECTRICAL EQUIPMENT

### ANZEx Scheme

Certificate No.: <b>ANZEx 12.4123X</b>	Issue No.: <b>0</b>	Date of Issue: <b>20 February 2013</b>
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### Schedule

#### EQUIPMENT:

The CEL-35X/IS *dB*Badge Series Noise Dosimeter aka Brüel & Kjær Type 4448 x 002 Noise Dose Meter is a miniature, fully integrated Noise Dosimeter 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, and 'Type 4448 x 002, where x is any letter A, B,...'. 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 to the device is provided from two, internal and non-removable ½-AAA, 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 aka ZG-0860'.

Noise is monitored using a screw on, ½" 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.

**CERTIFICATION CONDITIONS:** The following conditions apply:

#### Conditions of manufacture

1. When the 250 mAh cells are soldered to the PCB, the manufacturer shall ensure that the segregation between positive and negative of  $\geq 0.5$  mm through solid insulation and  $\geq 1.5$  mm creepage is maintained on the positive terminal

#### Special conditions of safe use

- 1 The CEL-35X/IS *dB*Badge Series Noise Dosimeter aka Brüel & Kjær Type 4448-x-002 Noise Dose Meter shall not be used in areas where a layer of coal dust may be deposited on the enclosure.
- 2 The microphone shall not be removed in the hazardous area.
- 3 The CEL-35X/IS *dB*Badge Series Noise Dosimeter aka Brüel & Kjær Type 4448-x-002 Noise Dose Meter shall only be recharged in a safe area with the charger model number CEL-6362 aka ZG-0860'.

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**DRAWINGS:**

**The following Drawings are applicable to the original issue of this certificate, Issue 0**

Title	Drawing No.	Rev. Level	Date.
CEL-35x/IS dBADGE PSU BOARD CIRCUIT DIAGRAM	93-193090D/IS-04	04	2009/09/30
CEL-35x/IS dBADGE PSU BOARD CIRCUIT PROFILE & DRILLED	02-193091C/IS-04 Sheets 1 & 2	04	2007/03/21
CEL-35x/IS dBADGE PSU BOARD S/A	05-193092C/IS-04	04	2009/09/30
CEL-35x/IS dBADGE PSU PCB S/A	17-193093A/IS-03	03	2009/09/30
CEL-35x/IS dBADGE PSU CASE BODY S/A	03-193095D/IS-03	03	2009/09/24
CEL-35x/IS dBADGE ANALOGUE & PROCESSOR CIRCUIT DIAGRAM	93-193098D/IS-02	02	2008/02/20
CEL-35x/IS dBADGE PROCESSOR BOARD PROFILE & DRILLED	02-193099C/IS-01 Sheet 1	01	2007/02/23
CEL-35x/IS dBADGE PROCESSOR BOARD ARTWORK	02-193099C/IS-01 Sheet 2	01	2007/02/23
CEL-35x/IS dBADGE PROCESSOR BOARD S/A	05-193100C/IS-02	02	2008/02/20
CEL-35x/IS dBADGE $\mu$ PROCESSOR PCB S/A	17-193101A/IS-02 Sheets 1 & 2	02	2008/04/17
CEL-350 dBADGE I.S. – MICROPHONE INFORMATION	17-193107A/IS-01	01	2007/03/28
CEL-35X/IS dBADGE (I.P-RATED) CASE BODY S/A	04-193118D/IS-05	05	2012/12/10
B&K 'TYPE 4448' PERSONAL NOISE DOSE METER I.S. & NON-IS. CASE BODY S/A	04-193260D/IS(SIRA)-02	02	2012/12/10
CEL-350/IS dBADGE – I.S. (ITACS/TUV RHEINLAND) INFORMATION LABEL	13-193096A/IS(TUV)-01	01	2012/12/20