

**Australian/New Zealand
Certification Scheme for
EXPLOSION-PROTECTED ELECTRICAL EQUIPMENT
ANZEx Scheme**

Certificate of Conformity

Certificate No.: ANZEx 08.3021X	Issue No.: 0*	Date of Issue: 28/05/2008
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* This ANZEx certificate was issued on the basis of an existing AUSEx Certificate of Conformity (Ex 05.3976X Issue 1) in accordance with Clause 3.3 of MP87:2004. Certificate AUSEx 05.3976X was first issued on 2005/05/31

Certificate Holder: Ampcontrol CSM Pty Ltd.
7 Billbrooke Close
Cameron Park NSW 2285
Australia

Electrical Apparatus: Voice Communication Audio Barrier

Type of Protection: [Ex ia]

Marking Code: Ampcontrol
Voice Communication Audio Barrier
[Ex ia] I
ANZEx 08.3021X
S. No. ...

Manufacturing Location(s): Ampcontrol CSM Pty Ltd.
7 Billbrooke Close
Cameron Park NSW 2285
Australia

The EPPE certification database located at <http://www.anzex.com.au> shows the validity of this Certificate.

This certificate and schedule shall not be reproduced except in full

 Test Safe AUSTRALIA ABN 94 084 639 032	Certificate issued by: TestSafe Australia 919 Londonderry Road, Londonderry NSW 2753 Australia Phone: +61 2 4724 4900 Fax: +61 2 4724 4999 http://www.testsafe.com.au	 JAS-ANZ www.jas-anz.com.au/register
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This certificate is granted subject to the conditions as set out in Standards Australia/Standards New Zealand Miscellaneous Publication MP87:2004.

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:

- AS/NZS 60079.0:2000 Electrical apparatus for explosive gas atmospheres – Part 0: General requirements (including Amendment 1)
- AS/NZS 60079.11:2000 Electrical apparatus for explosive gas atmospheres – Part 11: Intrinsic safety “i” (including Amendment 1)

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

ASSESSMENT & TEST REPORTS:

The equipment listed has successfully met the assessment and test requirements as recorded in:

- Test Report No.(s) and Issuing Body: **TestSafe 26498**
- Quality Assessment Report No. and Issuing Body: **TestSafe 06.002/2008**
- File Reference: **2008/001365**



Signed for and on behalf of issuing body

Quality & Certification Manager

Position

28/05/2008

Date of Issue

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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.

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Schedule

EQUIPMENT:

The Voice Communication Audio Barrier has two sets of terminals, with identical triple voltage clamping zener diodes, duplicated current limiting resistors, duplicated d.c. blocking capacitors on both sides of its terminals. A voice transformer in the middle of the circuit provides galvanic isolation and audio frequency coupling between the identical circuits. The terminals on both sides can be worked as input/output terminal simultaneously for duplex communication. The equipment is to be installed in a Safe Area for connecting between non-intrinsically safe equipment in safe area and intrinsically safe equipment in hazardous area or for connecting between two separate intrinsic safety equipment in hazardous areas to provide voice communication. It was specified by the manufacturer that a U_i/U_m of 30 V could be applied to one set of terminals and a U_o of 12.6 V would appear on the other terminals during operation.

CONDITIONS OF CERTIFICATION:

1. It is a condition of safe use that the barrier shall be installed and used in a safe area.
2. It is a condition of safe use that the following parameters shall be taken into account during installation:

Description	Terminals	Parameters
Maximum Voltage that can be applied	P1, P2 and P3, P4 on drawing no. VIA-Z-002	$U_i = 30 \text{ V}$ $U_m = 30 \text{ V}$
Maximum Output Voltage	P1, P2 and P3, P4 on drawing no. VIA-Z-002	$U_o = 12.6 \text{ V}$
Maximum Output Current	P1, P2 and P3, P4 on drawing no. VIA-Z-002	$I_o = 97.5 \text{ mA}$
Maximum allowable external capacitance, inductance and inductance to resistance ratio	P1, P2 and P3, P4 on drawing no. VIA-Z-002	$C_o = 30 \mu\text{F}$ $L_o = 49 \text{ mH}$ $L_o/R_o = 1.52 \text{ mH}/\Omega$

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DOCUMENTS:

Document Number	Document Title	Revision	Date
VIA-Z-001	Document Schedule	3	17/03/2008
VIA-Z-002	Voice Comm Audio Isolation Module (<i>Schematic Diagram</i>)	2	09/05/2005
VIA-Z-003	(<i>Voice Comm Audio Isolation Module Printed Circuit Board Artwork</i>)	2	09/05/2005
VIA-Z-004	VIA Voice Comm Audio Isolation Module Enclosure and Marking Details	3	17/03/2008
VCOM-Z-038	Voice Comm Audio Transformer Details	1	20/10/2003