

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

Certificate of Conformity

Certificate No.: ANZEx 08.3057X

Issue No.: 2

Date of Issue: 22/09/2011

Issue No.: 0

Date of Issue: 14/10/2008

Applicant: BW Technologies by Honeywell
2840 – 2nd Avenue SE
Calgary Alberta T2A 7X9
Canada

Electrical Apparatus: GasAlert MicroClip Portable Gas Detector Models MC-XWHM-a-bb-cc
GasAlert MicroClip XT Portable Gas Detector Models MC2-XWHM-a-bb-cc

Type of Protection: Intrinsic Safety

Marking Code: Ex ia I IP65
Ex ia IIC T4 (Ta = 58 °C) IP65
ANZEx 08.3057X

Manufacturer: BW Technologies by Honeywell
2840 – 2nd Avenue SE
Calgary Alberta T2A 7X9
Canada

Manufacturing Location(s): BW Technologies by Honeywell
2840 – 2nd Avenue SE
Calgary Alberta T2A 7X9
Canada
System Sensor de Mexico
Ave. Valle Del Cedro 1681
Parque Industrial Intermex
Cuidad Juarez, Chihuahua
Mexico

The EPEE 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

	<p>Certificate issued by:</p> <p style="text-align: center;"><i>TestSafe Australia</i> 919 Londonderry Road, Londonderry NSW 2753 Australia Phone: +61 2 4724 4900 Fax: +61 2 4724 4999 http://www.testsafe.com.au</p>	 <p>www.jas-anz.com.au/register</p>
---	---	---

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

Certificate of Conformity

Certificate No.: ANZEx 08.3057X	Issue No.: 2	Date of Issue: 22/09/2011
	Issue No.: 0	Date of Issue: 14/10/2008

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:

- AS/NZS 60079.0:2005 Electrical apparatus for explosive gas atmospheres – Part 0: General requirements (including Amendment 1)
- AS/NZS 60079.11:2006 Explosive atmospheres – Part 11: Equipment protection by Intrinsic safety ‘i’
- AS 60529:2004 Degree of protection provided by enclosures (IP code)

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standard(s) listed above.

ASSESSMENT & TEST REPORTS:

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

- Test Report No. and Issuing Body: CA/CSA/ExTR06.0009/06, CSA
- Quality Assessment Report No. and Issuing Body: US/UL/QAR06.0006/04, US/UL/QAR07.0003/02

- File Reference: 2011/008572

 **USEN SINGH**

Signed for and on behalf of issuing body

Quality & Certification Manager

Position

22/09/2011

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 of Conformity

Certificate No.: ANZEx 08.3057X

Issue No.: 2

Date of Issue: 22/09/2011

Issue No.: 0

Date of Issue: 14/10/2008

Schedule

EQUIPMENT:

The GasAlert MicroClip is an intrinsically safe, portable multi-gas detector for monitoring 4 gases simultaneously and continuously: Oxygen [deficiency/enrichment], Combustibles, Carbon Monoxide and Hydrogen sulfide. One 3.7 V (4.2 V for spark) Lithium Polymer battery powers the detector.

It is designed to be located in hazardous zones 0, 1 and 2 and is intrinsically safe; it incorporates a combustible sensor that has been evaluated as fully intrinsically safe.

The Model code breakdown is as follows:

MC-X-W-M-H-a-bb-cc

X -- Indicates the Oxygen Sensor

W -- Indicates the Combustible Sensor

M -- Indicates the Carbon Monoxide Sensor

H -- Indicates the H₂S Sensor

a -- Custom parameter, non effecting intrinsic safety.

bb -- Custom parameters, non effecting intrinsic safety.

cc -- Custom parameters, non effecting intrinsic safety.

X indicates the installed gas detector module option for oxygen

X code	Gases Detected
0	Empty
X	O ₂

W indicates the installed gas detector module option for combustible

W code	Gases Detected
0	Empty
W	LEL

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

Certificate of Conformity

Certificate No.: ANZEx 08.3057X	Issue No.: 2	Date of Issue: 22/09/2011
	Issue No.: 0	Date of Issue: 14/10/2008

EQUIPMENT Continued:

M indicates Carbon Monoxide sensor

M code	Carbon Monoxide sensor
0	Empty
M	Low range, 0-500 ppm
M1 – M5	Other instrument ranges

H indicates H₂S sensor

H code	H ₂ S sensor
0	Empty
H	Standard range, 1 – 100 ppm
H1 – H5	Other instrument ranges

CONDITIONS OF CERTIFICATION:

1. It is a condition of manufacture that only the Varta, PLF 503759 D lithium polymer battery can be installed in the apparatus.
2. It is a condition of safe use that the battery only be charged in a non-hazardous area

DOCUMENTS:

Document No.	Sheets	Document Title	Issue	Date
GMCA-19A	1	GasAlert MicroClip Certification Label	A	2008/09/05
GMCA-20A	1	GasAlert MicroClip Certification Label	A	2008/09/05
GMCD-61B	1	MicroClip Assembly	B	2006/01/12
GMCD-60B	1	Material Details, MicroClip	B	2006/01/30
GMCD-62A	1	Potting, Main PCB, GasAlert MicroClip	A	2005/10/12
GMCD-63A	2	Battery Volume Details, GasAlert MicroClip	A	2006/01/12
GMCW-01J.prj	1 of 11	GasAlert MicroClip PCB Block Diagram	L	2008/02/26

This certificate and schedule shall not be reproduced except in full

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

ANZEx Scheme

Certificate of Conformity

Certificate No.: **ANZEx 08.3057X**

Issue No.: **2**

Date of Issue: **22/09/2011**

Issue No.: **0**

Date of Issue: **14/10/2008**

DOCUMENTS Continued:

Document No.	Sheets	Document Title	Issue	Date
GMCW-10J.sch	2 of 11	Arm Processor	L	2008/02/26
GMCW-15J.sch	3 of 11	Charge Circuit	L	2008/02/26
GMCW-20J.sch	4 of 11	Power Supplies	L	2008/02/26
GMCW-25J.sch	5 of 11	CO Sensor	L	2008/02/26
GMCW-26J.sch	6 of 11	H2S Sensor	L	2008/02/26
GMCW-28J.sch	7 of 11	O2 Sensor	L	2008/02/26
GMCW-29J.sch	8 of 11	LEL Sensor	L	2008/02/26
GMCW-30J.sch	9 of 11	Alarm Buzzer and Power Supply	L	2008/02/26
GMCW-40J.sch	10 of 11	IR, Backlight, EEPROM, LCD	L	2008/02/26
GMCW-50J.sch	11 of 11	Vibrator, Alarm LEDs, Jtag, Button	L	2008/02/26
-	6	Part List Assy – Compliance, GasAlert MicroClip	127547	7991
GMCE-01G.cam	17	GasAlert MicroClip GMCE-01G (<i>PCB Layout</i>)	G	2006/08/21
QF-EN-055	1	Component Specification Sheet “Black-Box” Specification Sheet for Oxygen / Toxic Gas Sensors	REL	2001/01/12

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

Certificate of Conformity

Certificate No.: ANZEx 08.3057X	Issue No.: 2	Date of Issue: 22/09/2011
	Issue No.: 0	Date of Issue: 14/10/2008

Schedule of Variations

Variations Permitted by Issue 1:

- Add Group I application to the apparatus.
- Addition of BYD Type SL503759 lithium polymer battery.

This change has been assessed in Test Report 31579.

Condition of Certification Relating to Issue 1:

The conditions of certification are unchanged from the issue 0 of the certificate.

Drawings Relating to Issue 1:

Document No.	Sheets	Document Title	Issue	Date
GMCA-19C	1	GasAlert MicroClip Australia Certification Label	C	2009/09/02
GMCA-20C	1	GasAlert MicroClip Australia Certification Label	C	2009/09/02

Variations Permitted by Issue 2:

- Addition of Narada type NL503759 lithium polymer battery.
- Update to add an alternate O₂ sensor which results in a new model GasAlertMicroClip XT.

These changes have been assessed in IECEx Test Report CA/CSA/ExTR06.0009/06.

Condition of Certification Relating to Issue 2:

1. It is a condition of manufacture that only the Varta type PLF503759D, BYD Type SL503759 and Narada type NL503759 lithium polymer battery can be installed in the apparatus.
2. It is a condition of safe use that the battery only be charged in a non-hazardous area

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

ANZEx Scheme

Certificate of Conformity

Certificate No.: ANZEx 08.3057X

Issue No.: 2

Date of Issue: 22/09/2011

Issue No.: 0

Date of Issue: 14/10/2008

Drawings Relating to Issue 2:

Document No.	Sheets	Document Title	Issue	Date
GMCD-66A	1	MicroClip XT Assembly	A	2010/05/04
GMCD-67A	1	GA MicroClip XT – Potting Details	A	2010/05/04
GMCD-68A	1	MicroClip XT – Material Details	A	2010/05/04
GMCD-69A	2	Battery Volume Details, GAMicroClip XT	A	2010/05/04
-	6	Part List Assy – Compliance, GasAlertMicroClip XT	131209	-
GMCW-01N.prj	1 of 12	GasAlert MicroClip PCB Block Diagram	N	2010/10/08
GMCW-10.sch	2 of 12	Arm Processor	N	2010/10/08
GMCW-15.sch	3 of 12	Charge Circuit	N	2010/10/08
GMCW-20.sch	4 of 12	Power Supplies	N	2010/10/08
GMCW-25.sch	5 of 12	CO Sensor	N	2010/10/08
GMCW-26.sch	6 of 12	H2S Sensor	N	2010/10/08
GMCW-28.sch	7 of 12	O2 Sensor	N	2010/10/08
GMCW-29.sch	8 of 12	LEL Sensor	N	2010/10/08
GMCW-30.sch	9 of 12	Alarm Buzzer and Power Supply	N	2010/10/08
GMCW-40.sch	10 of 12	IR, Backlight, EEPROM, LCD	N	2010/10/08
GMCW-50.sch	11 of 12	Vibrator, Alarm LEDs, Jtag, Button	N	2010/10/08
GMCW-90.sch	12 of 12	Revision History	N	2010/10/08
GMCE-01J.PCB	18	GasAlert MicroClip GMCE-01J (<i>PCB Layout</i>)	J	2010/10/13
GMCA-27A	1	GasAlert MicroClip XT Australian Certification Label	A	2011/09/12
GMCA-29A	1	GasAlert MicroClip XT Australian Certification Label	A	2011/09/12