



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BAS 05.0059 issue No.:12

Status: **Current**

Date of Issue: 2014-09-11 Page 1 of 4

Applicant: **Crowcon Detection Instruments Ltd**
172 Brook Drive
Milton Park
Abingdon
Oxfordshire
OX14 4SD
United Kingdom

Certificate history:
Issue No. 12 (2014-9-11)
Issue No. 11 (2014-8-6)
Issue No. 10 (2013-2-6)
Issue No. 9 (2009-11-30)
Issue No. 8 (2008-6-13)
Issue No. 7 (2007-7-5)
Issue No. 6 (2006-12-20)

Electrical Apparatus: **TETRA 3**
Optional accessory:

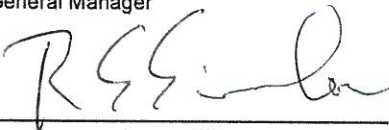
Type of Protection: **Intrinsic Safety and Flameproof**

Marking: **Ex ia d IIC T4 Gb (-20°C ≤ Ta ≤ +55°C)**

Approved for issue on behalf of the IECEx Certification Body: R S Sinclair

Position: General Manager

Signature:
(for printed version)



11-9-14

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2014-09-11

Issue No.: 12

Page 2 of 4

Manufacturer: **Crowcon Detection Instruments Ltd**
172 Brook Drive
Milton Park
Abingdon
Oxfordshire
OX14 4SD
United Kingdom

Additional Manufacturing location
(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

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:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

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

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEx ATR:
UK/BAS/05/0554
GB/BAS/ExTR13.0035/00
GB/BAS/ExTR14.0249/00

File Reference:
05/0554
12/1031
13/0719



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2014-09-11

Issue No.: 12

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The TETRA 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases. The TETRA 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The flammable sensor used is either type VQ500 series by SGX Sensortech (IS) Ltd, to IECEx SIR 04.0014U, or 4P series by City Technology to IECEx SIR 04.0013U, with a Code of Ex d IIC Gb and a maximum permitted ambient temperature of +55°C. These sensors are certified to IEC 60079-0:2007 and IEC 60079-1:2007.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2014-09-11

Issue No.: 12

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 12.1

To permit minor drawing changes not affecting the original assessment.

ExTR: GB/BAS/ExTR14.0249/00

File Reference: 13/0719



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BAS 05.0059 issue No.: 11

Status: **Current**

Date of Issue: **2014-08-06** Page 1 of 4

Applicant: **Crowcon Detection Instruments Ltd**
172 Brook Drive
Milton Park
Abingdon
Oxfordshire
OX14 4SD
United Kingdom

Certificate history:
Issue No. 11 (2014-8-6)
Issue No. 10 (2013-2-6)
Issue No. 9 (2009-11-30)
Issue No. 8 (2008-6-13)
Issue No. 7 (2007-7-5)
Issue No. 6 (2006-12-20)

Electrical Apparatus: **Tetra 3**
Optional accessory:

Type of Protection: **Intrinsic Safety and Flameproof**

Marking: **Ex ia d IIC T4 Gb (-20°C ≤ Ta ≤ +55°C)**

Approved for issue on behalf of the IECEx Certification Body: R S Sinclair *pp McDowney*

Position: General Manager

Signature:
(for printed version)

McDowney

Date: *6/8/14*

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2014-08-06

Issue No.: 11

Page 2 of 4

Manufacturer: **Crowcon Detection Instruments Ltd**
172 Brook Drive
Milton Park
Abingdon
Oxfordshire
OX14 4SD
United Kingdom

Additional Manufacturing location
(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

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:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

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

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEx ATR:
UK/BAS/05/0554
GB/BAS/ExTR09.0168/00
GB/BAS/ExTR13.0035/00

File Reference:
05/0554
09/0552
12/1031



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2014-08-06

Issue No.: 11

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Tetra 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases.

The Tetra 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO

Empty box for conditions of certification.



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2014-08-06

Issue No.: 11

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 11.1

This issue permits existing information (for example on Schedule Drawings) to be replaced by the revised certificate holders address. No other changes may be made to the certified design

File Reference: 14/0639



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BAS 05.0059 issue No.:10

Status: **Current**

Date of Issue: **2013-02-06** Page 1 of 4

Applicant: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire, OX14 1DY
United Kingdom

Certificate history:
Issue No. 10 (2013-2-6)
Issue No. 9 (2009-11-30)
Issue No. 8 (2008-6-13)
Issue No. 7 (2007-7-5)
Issue No. 6 (2006-12-20)

Electrical Apparatus: **Tetra 3**
Optional accessory:


Type of Protection: **Intrinsic Safety and Flameproof**

Marking: **Ex ia d IIC T4 Gb (-20°C ≤Ta ≤+55°C)**

Approved for issue on behalf of the IECEx Certification Body: R S Sinclair

Position: General Manager

Signature:
(for printed version)


6-2-13

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2013-02-06

Issue No.: 10

Page 2 of 4

Manufacturer: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire
OX14 1DY
United Kingdom

Additional Manufacturing location
(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

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:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

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

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:
UK/BAS/05/0554
GB/BAS/ExTR09.0168/00
GB/BAS/ExTR13.0035/00

File Reference:
05/0554
09/0552
12/1031



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2013-02-06

Issue No.: 10

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Tetra 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases.

The Tetra 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2013-02-06

Issue No.: 10

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 10.1

To permit: -

- i) The fitting of an alternative battery in the equipment.
- ii) Minor changes to the main PCB not affecting the original assessment.
- iii) Minor component changes to the i-Modules not affecting the original assessment.
- iv) Minor drawing changes not affecting the original assessment.

Variation 10.2

To confirm the current design of Tetra 3 has been reviewed against the requirements of IEC 60079-0: 2011 Edition 6 and IEC 60079-11: 2011 Edition 6 in respect of the differences from IEC 60079-0: 2007 Edition 5 and IEC 60079-11: 2006 Edition 5 and none of the differences affect this equipment.

The standards listed on page 2 of the certificate have been updated.

ExTR: GB/BAS/ExTR13.0035/00

File Reference: 12/1031



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BAS 05.0059 issue No.:9 Certificate history:
Status: **Current** Page 1 of 4 Issue No. 9 (2009-11-30)
Date of Issue: **2009-11-30** Issue No. 8 (2008-6-13)
Issue No. 7 (2007-7-5)
Issue No. 6 (2006-12-20)

Applicant: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire, OX14 1DY
United Kingdom

Electrical Apparatus: **Tetra 3**
Optional accessory:


Type of Protection: **Intrinsic Safety and Flameproof**

Marking: **IECEX BAS 05.0059**
Ex ia d IIC T4 Gb (-20°C ≤ Ta ≤ +55°C)

Approved for issue on behalf of the IECEx Certification Body: R S Sinclair

Position: Managing Director

Signature:
(for printed version)


4-12-09

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Baseefa
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2009-11-30

Issue No.: 9

Page 2 of 4

Manufacturer: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire
OX14 1DY
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

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:

IEC 60079-0 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-0 : 2007-10 Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2006 Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

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

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:
UK/BAS/05/0554
GB/BAS/ExTR09.0168/00

File Reference:
05/0554
09/0552



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2009-11-30

Issue No.: 9

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Tetra 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases.

The Tetra 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2009-11-30

Issue No.: 9

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 9.1

To permit minor drawing changes not affecting the original assessment.
To permit the introduction of the Hybrid 3 as an alternative Hybrid module.

Variation 9.2

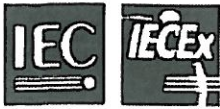
To confirm that the Tetra 3 has been reviewed against the requirements of IEC 60079-0:2004 Edition 4 and IEC 60079-11:2006 Edition 5 in respect of the differences from IEC 60079-0:2000 Edition 3.1 and IEC 60079-11:1999 Edition 4 and none of the differences affect the equipment.

The flameproof component certificates associated with the equipment have been updated to IEC 60079-0:2007 Edition 5 and IEC 60079-1:2006 Edition 6.

The list of Standards on Page 2 of the certificate has been updated to show IEC 60079-0:2004 Edition 4, IEC 60079-0:2007 Edition 5, IEC 60079-1:2006 Edition 6 and IEC 60079-11:2006 Edition 5.

ExTR: GB/BAS/ExTR09.0168/00

File Reference: 09/0552



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BAS 05.0059 issue No.:8
Status: **Current**
Date of Issue: **2008-06-13** Page 1 of 4

Certificate history:
Issue No. 8 (2008-6-13)
Issue No. 7 (2007-7-5)
Issue No. 6 (2006-12-20)

Applicant: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire, OX14 1DY
United Kingdom

Electrical Apparatus: **Tetra 3**
Optional accessory:


Type of Protection: **Intrinsic safety and flameproof**

Marking: **IECEX BAS05.0059**
Ex Iad IIC T4 (-20°C ≤ Ta ≤ +55°C)

Approved for issue on behalf of the IECEx Certification Body: R S Sinclair

Position: Managing Director

Signature:
(for printed version)


18-6-08

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Baseefa
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2008-06-13

Issue No.: 8

Page 2 of 4

Manufacturer: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire
OX14 1DY
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

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:

IEC 60079-0 : 2000 Edition: 3.1	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2001 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
IEC 60079-11 : 1999 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'

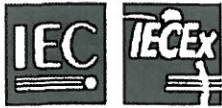
This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:
UK/BAS/05/0554

File Reference:
05/0554



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2008-06-13

Issue No.: 8

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Tetra 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases.

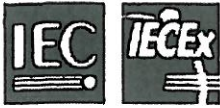
The Tetra 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2008-06-13

Issue No.: 8

Page 4 of 4

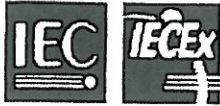
DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 8.1

To permit the use of alternative encapsulants in the hybrids as listed on the appropriate parts lists.

ExTR: GB/BAS/ExTR07.0191/00

File Reference: 07/1070



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BAS 05.0059 issue No.:7 History:
Status: Current Issue No. 7 (2007-7-5)
Date of Issue: 2007-07-05 Page 1 of 4 Issue No. 6 (2006-12-20)

Applicant: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire, OX14 1DY
United Kingdom

Electrical Apparatus: **Tetra 3**
Optional accessory:

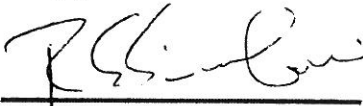
Type of Protection: **Intrinsic safety and flameproof**

Marking: **IECEX BAS05.0059**
Ex Iad IIC T4 (-20°C ≤ Ta ≤ +55°C)

Approved for issue on behalf of the IECEx R S Sinclair
Certification Body:

Position: Managing Director

Signature:
(for printed version)


11-7-07

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Baseefa (2001) Ltd.
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0059
Date of Issue: 2007-07-05 Issue No.: 7
Page 2 of 4

Manufacturer: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire
OX14 1DY
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacture's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

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:

IEC 60079-0 : 2000 Edition: 3.1	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2001 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
IEC 60079-11 : 1999 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'

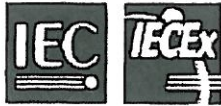
This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:
UK/BAS/05/0554

File Reference:
05/0554



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2007-07-05

Issue No.: 7

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Tetra 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases.

The Tetra 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2007-07-05

Issue No.: 7

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 1.1

To permit changes to documents to enable the IR i-module to be listed separately from the Flammable i-module. This is a documentation change, and does not affect the safety assessment of the apparatus.

IECEx ATR: UK/BAS/05/0256/4	File Reference: 05/0554
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Variation 2.1

To permit a change of encapsulant in the hybrid circuits.

IECEx ATR: GB/BAS/ExTR06.0029/00	File Reference: 06/0285
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Variation 3.1

To permit the use of an alternative model name **Combi-Mate 3**, minor additions to the list of Oxygen and Toxic i-Modules which may be used, and minor changes to the GA, Hybrid 1A and the charger PCB.

IECEx ATR: GB/BAS/ExTR06.0058/00	File Reference: 06/0425
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Variation 4.1

To permit minor changes to drawings, the use of alternative sounders, and the use of an optional alternative CO₂ chemical i-module.

Ex TR: GB/BAS/ExTR06.0104/00	File Reference: 06/0673
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Variation 5.1

To permit changes to the display PCB to form an issue 2 version, and to permit the addition of a conformal coating in a localised area of existing issue 1 PCBs.

Ex TR: GB/BAS/ExTR06.0162/00	File Reference: 06/0926
------------------------------	-------------------------

Variation 6.1

To permit minor changes to the desktop charger units with part number C011018 and C011019.

Variation 6.2

When only charging of the apparatus is required, the desktop charger part number C01941 may be replaced by any Crowcon charger with an output (U_m) of 9V.

When both charging and data communication are required, only charger / interface part number C011019 must be used.

Ex TR: GB/BAS/ExTR06.0172/00	File Reference: 06/1022
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Variation 7.1

To permit minor changes to circuits and various documents.

Ex TR: GB/BAS/ExTR06.0177/00	File Reference: 06/0781
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IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX BAS 05.0059** Issue No.: **6**

Status: **Current**

Date of Issue: **2006-12-20** Page 1 of 4

Applicant: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire, OX14 1DY
United Kingdom

Electrical Apparatus: **Tetra 3**
Optional accessory:

Type of Protection: **Intrinsic safety and flameproof**

Marking: **IECEX BAS05.0059**
Ex Iad IIC T4 (-20°C ≤ Ta ≤ +55°C)

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)

Date:

20-12-06

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Baseefa (2001) Ltd.
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0059**

Date of Issue: **2006-12-20**

Issue No.: **6**

Page 2 of 4

Manufacturer: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire
OX14 1DY
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacture's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

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:

IEC 60079-0 : 2000 Edition: 3.1	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2001 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
IEC 60079-11 : 1999 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'

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

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:
UK/BAS/05/0554

File Reference:
05/0554



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2006-12-20

Issue No.: 6

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Tetra 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases.

The Tetra 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2006-12-20

Issue No.: 6

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 1.1

To permit changes to documents to enable the IR i-module to be listed separately from the Flammable i-module. This is a documentation change, and does not affect the safety assessment of the apparatus.

IECEx ATR: UK/BAS/06/0256/4	File Reference: 06/0564
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Variation 2.1

To permit a change of encapsulant in the hybrid circuits.

IECEx ATR: GB/BAS/ExTR06.0029/00	File Reference: 06/0286
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Variation 3.1

To permit the use of an alternative model name **Combi-Mate 3**, minor additions to the list of Oxygen and Toxic i-Modules which may be used, and minor changes to the GA, Hybrid 1A and the charger PCB.

IECEx ATR: GB/BAS/ExTR06.0068/00	File Reference: 06/0426
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Variation 4.1

To permit minor changes to drawings, the use of alternative sounders, and the use of an optional alternative CO₂ chemical i-module.

Ex TR: GB/BAS/ExTR06.0104/00	File Reference: 06/0673
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Variation 5.1

To permit changes to the display PCB to form an issue 2 version, and to permit the addition of a conformal coating in a localised area of existing issue 1 PCBs.

Ex TR: GB/BAS/ExTR06.0162/00	File Reference: 06/0926
------------------------------	-------------------------

Variation 6.1

To permit minor changes to the desktop charger units with part number C011018 and C011019.

Variation 6.2

When only charging of the apparatus is required, the desktop charger part number C01941 may be replaced by any Crowcon charger with an output (U_m) of 9V.

When both charging and data communication are required, only charger / interface part number C011019 must be used.

Ex TR: GB/BAS/ExTR06.0172/00	File Reference: 06/1022
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IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX BAS 05.0059** Issue No.: **5**
Status: **Current**
Date of Issue: **2006-11-20** Page 1 of 4

Applicant: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire, OX14 1DY
United Kingdom

Electrical Apparatus: **Tetra 3**
Optional accessory:

Type of Protection: **Intrinsic safety and flameproof**

Marking: **IECEX BAS05.0059**
Ex iad IIC T4 (-20°C ≤ Ta ≤ +55°C)

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)



20/11/6

Date:

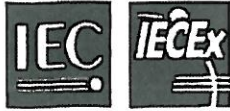
1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Baseefa (2001) Ltd.

Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0059**

Date of Issue: **2006-11-20**

Issue No.: **5**

Page **2** of **4**

Manufacturer: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire
OX14 1DY
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacture's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

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:

IEC 60079-0 : 2000 Edition: 3.1	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2001 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
IEC 60079-11 : 1999 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'

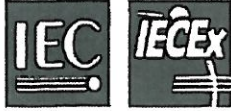
This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:
UK/BAS/05/0554

File Reference:
05/0554



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0059**

Date of Issue: **2006-11-20**

Issue No.: **5**

Page **3** of **4**

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Tetra 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases.

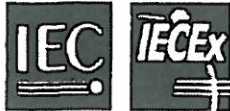
The Tetra 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2006-11-20

Issue No.: 5

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 1.1

To permit changes to documents to enable the IR I-module to be listed separately from the Flammable I-module. This is a documentation change, and does not affect the safety assessment of the apparatus.

IECEX ATR:
UK/BAS/05/0256/4

File Reference:
05/0554

Variation 2.1

To permit a change of encapsulant in the hybrid circuits.

IECEX ATR:
GB/BAS/ExTR06.0029/00

File Reference:
06/0285

Variation 3.1

To permit the use of an alternative model name **Combi-Mate 3**, minor additions to the list of Oxygen and Toxic I-Modules which may be used, and minor changes to the GA, Hybrid 1A and the charger PCB.

IECEX ATR:
GB/BAS/ExTR06.0058/00

File Reference:
06/0425

Variation 4.1

To permit minor changes to drawings, the use of alternative sounders, and the use of an optional alternative CO₂ chemical I-module.

Ex TR: GB/BAS/ExTR06.0104/00

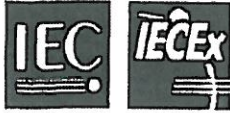
File Reference: 06/0673

Variation 6.1

To permit changes to the display PCB to form an issue 2 version, and to permit the addition of a conformal coating in a localised area of existing issue 1 PCBs.

Ex TR: GB/BAS/ExTR06.0162/00

File Reference: 06/0926



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx BAS 05.0059** Issue No.: **4**
Status: **Current**
Date of Issue: **2006-09-18** Page 1 of 4
Applicant: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire, OX14 1DY
United Kingdom
Electrical Apparatus: **Tetra 3**
Optional accessory:
Type of Protection: **Intrinsic safety and flameproof**
Marking: **IECEx BAS05.0059**
Ex Iad IIC T4 (-20°C ≤ Ta ≤ +55°C)

*Approved for issue on behalf of the IECEx
Certification Body:*

R S Sinclair

Position:

Managing Director

*Signature:
(for printed version)*



Date:

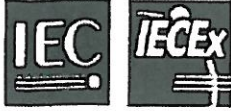
1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Baseefa (2001) Ltd.

Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0059**

Date of Issue: **2008-09-18**

Issue No.: **4**

Page **2** of **4**

Manufacturer: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire
OX14 1DY
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacture's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

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:

IEC 60079-0 : 2000 Edition: 3.1	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2001 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
IEC 60079-11 : 1999 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'

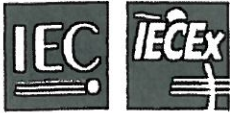
This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:
UK/BAS/05/0554

File Reference:
05/0554



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2006-09-18

Issue No.: 4

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Tetra 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases.

The Tetra 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0059**

Date of Issue: **2006-09-18**

Issue No.: **4**

Page **4** of **4**

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 1.1

To permit changes to documents to enable the IR I-module to be listed separately from the Flammable I-module. This is a documentation change, and does not affect the safety assessment of the apparatus.

IECEX ATR:
UK/BAS/05/0256/4

File Reference:
06/0564

Variation 2.1

To permit a change of encapsulant in the hybrid circuits.

IECEX ATR:
GB/BAS/ExTR06.0029/00

File Reference:
06/0285

Variation 3.1

To permit the use of an alternative model name **Combi-Mate 3**, minor additions to the list of Oxygen and Toxic I-Modules which may be used, and minor changes to the GA, Hybrid 1A and the charger PCB.

IECEX ATR:
GB/BAS/ExTR06.0058/00

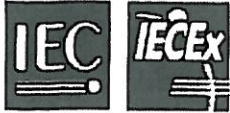
File Reference:
06/0425

Variation 4.1

To permit minor changes to drawings, the use of alternative sounders, and the use of an optional alternative CO₂ chemical I-module.

Ex TR: **GB/BAS/ExTR06.0104/00**

File Reference: **06/0673**



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx BAS 05.0059** Issue No.: **3**

Status: **Current**

Date of Issue: **2006-07-13** Page 1 of 4

Applicant: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire, OX14 1DY
United Kingdom

Electrical Apparatus: **Tetra 3**
Optional accessory:

Type of Protection: **Intrinsic safety and flameproof**

Marking: **IECEx BAS05.0059**
Ex iad IIC T4 (-20°C ≤ Ta ≤ +55°C)

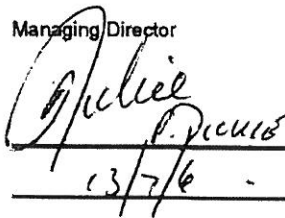
*Approved for issue on behalf of the IECEx
Certification Body:*

R S Sinclair

Position:

Managing Director

*Signature:
(for printed version)*


13/7/06

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Baseefa (2001) Ltd.

Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2006-07-13

Issue No.: 3

Page 2 of 4

Manufacturer: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire
OX14 1DY
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacture's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

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:

IEC 60079-0 : 2000 Edition: 3.1	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2001 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
IEC 60079-11 : 1999 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'

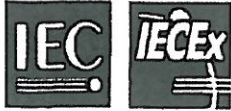
This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:
UK/BAS/05/0554

File Reference:
05/0554



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2006-07-13

Issue No.: 3

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Tetra 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases.

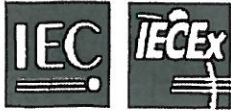
The Tetra 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2006-07-13

Issue No.: 3

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for Issues 1 and above):

Variation 1.1

To permit changes to documents to enable the IR i-module to be listed separately from the Flammable i-module. This is a documentation change, and does not affect the safety assessment of the apparatus.

IECEX ATR:
UK/BAS/05/0256/4

File Reference:
05/0564

Variation 2.1

To permit a change of encapsulant in the hybrid circuits.

IECEX ATR:
GB/BAS/ExTR06.0029/00

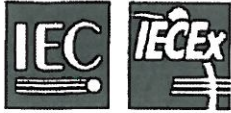
File Reference:
06/0285

Variation 3.1

To permit the use of an alternative model name **Combi-Mate 3**, minor additions to the list of Oxygen and Toxic I-Modules which may be used, and minor changes to the GA, Hybrid 1A and the charger PCB.

IECEX ATR:
GB/BAS/ExTR06.0058/00

File Reference:
06/0425



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx BAS 05.0059** Issue No.: **2**
Status: **Current**
Date of Issue: **2006-04-26** Page 1 of 4

Applicant: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire, OX14 1DY
United Kingdom

Electrical Apparatus: **Tetra 3**
Optional accessory:

Type of Protection: **intrinsic safety and flameproof**

Marking: **IECEx BAS05.0059**
Ex iad IIC T4 (-20°C ≤ Ta ≤ +55°C)

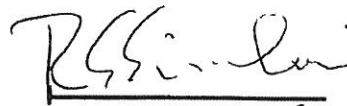
Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)


26-4-06

Date:

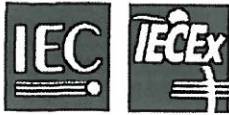
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Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2006-04-26

Issue No.: 2

Page 2 of 4

Manufacturer: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire
OX14 1DY
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

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:

IEC 60079-0 : 2000 Edition: 3.1	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2001 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
IEC 60079-11 : 1999 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'

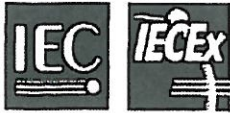
This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:
UK/BAS/05/0554

File Reference:
05/0554



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2006-04-26

Issue No.: 2

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Tetra 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases.

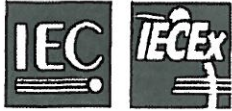
The Tetra 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0059**

Date of Issue: **2008-04-28**

Issue No.: **2**

Page **4** of **4**

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 1.1

To permit changes to documents to enable the IR i-module to be listed separately from the Flammable i-module. This is a documentation change, and does not affect the safety assessment of the apparatus.

IECEX ATR:
UK/BAS/05/0256/4

File Reference:
05/0564

Variation 2.1

To permit a change of encapsulant in the hybrid circuits.

IECEX ATR:
GB/BAS/ExTR06.0029/00

File Reference:
06/0285



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX BAS 05.0059** Issue No.: **1**
Status: **Current**
Date of Issue: **2006-03-01** Page 1 of 4

Applicant: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire, OX14 1DY
United Kingdom

Electrical Apparatus: **Tetra 3**
Optional accessory:

Type of Protection: **Intrinsic safety and flameproof**

Marking: **IECEX BAS05.0059**
Ex Iad IIC T4 (-20°C ≤ Ta ≤ +55°C)

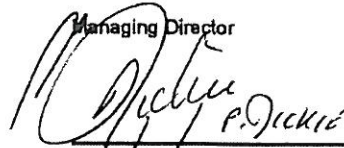
Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)


P. Dickie
3/3/6

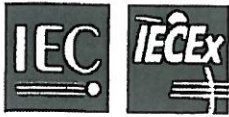
Date:

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Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0059**
Date of Issue: **2006-03-01** Issue No.: **1**
Page 2 of 4

Manufacturer: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire
OX14 1DY
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx O2 and Operational Documents as amended.

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:

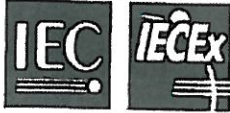
IEC 60079-0 : 2000 Edition: 3.1	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2001 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
IEC 60079-11 : 1999 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'

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

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:	File Reference:
UK/BAS/05/0554	05/0554



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2006-03-01

Issue No.: 1

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Tetra 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases.

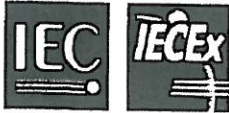
The Tetra 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2006-03-01

Issue No.: 1

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

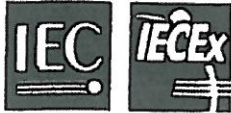
Variation 1.1

To permit changes to documents to enable the IR i-module to be listed separately from the Flammable i-module. This is a documentation change, and does not affect the safety assessment of the apparatus.

IECEx ATR:
UK/BAS/05/0266/4

File Reference:
05/0564

Annexe:



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BAS 05.0059 Issue No.: 0
Status: Current
Date of Issue: 2005-12-21 Page 1 of 3

Applicant: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire, OX14 1DY
United Kingdom

Electrical Apparatus: **Tetra 3**
Optional accessory:

Type of Protection: **Intrinsic safety and flameproof**

Marking: **IECEX BAS05.0059**
Ex lad IIC T4 (-20°C ≤ Ta ≤ +55°C)

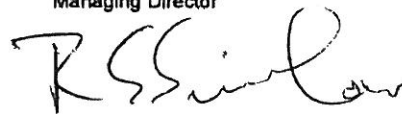
Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)


23-12-05

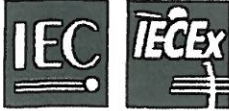
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Certificate issued by:

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Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2005-12-21

Issue No.: 0

Page 2 of 3

Manufacturer: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire
OX14 1DY
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacture's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

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:

IEC 60079-0 : 2000 Edition: 3.1	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2001 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
IEC 60079-11 : 1999 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'

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

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:
UK/BAS/05/0554

File Reference:
05/0554



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0059

Date of Issue: 2005-12-21

Issue No.: 0

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Tetra 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases.

The Tetra 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO

Annexe: