



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 05.0039 issue No.:14

Status: **Current**

Date of Issue: **2014-11-04** Page 1 of 4

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

Certificate history:
Issue No. 14 (2014-11-4)
Issue No. 13 (2014-9-2)
Issue No. 12 (2014-8-6)
Issue No. 11 (2009-12-17)
Issue No. 10 (2008-8-6)
Issue No. 9 (2008-6-16)
Issue No. 8 (2008-4-4)
Issue No. 7 (2007-7-5)
Issue No. 6 (2006-12-20)

Electrical Apparatus: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:


Type of Protection: **Intrinsic Safety**

Marking: **Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +65°C)**

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

Position: General Manager

Signature:
(for printed version)


5 NOVEMBER 2014

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 05.0039

Date of Issue: 2014-11-04

Issue No.: 14

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 Explosive atmospheres - Part 0: General requirements
Edition: 6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition: 6.0

*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/04/0202
GB/BAS/ExTR14/0249/00
GB/BAS/ExTR14/0324/00

File Reference:
04/0202
13/0719
14/0615



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2014-11-04

Issue No.: 14

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2014-11-04

Issue No.: 14

Page 4 of 4

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

Variation 14.1

To permit a minor change to the GASMAN Charger/Interface terminals not affecting the original assessment.

ExTR: **GB/BAS/ExTR14.0324/00**

File Reference: **14/0615**



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 05.0039 issue No.:13

Status: **Current**

Date of Issue: **2014-09-02** Page 1 of 4

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

Certificate history:
Issue No. 13 (2014-9-2)
Issue No. 12 (2014-8-6)
Issue No. 11 (2009-12-17)
Issue No. 10 (2008-8-6)
Issue No. 9 (2008-6-16)
Issue No. 8 (2008-4-4)
Issue No. 7 (2007-7-5)
Issue No. 6 (2006-12-20)

Electrical Apparatus: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:


Type of Protection: **Intrinsic Safety**

Marking: **Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +65°C)**

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

Position: General Manager

Signature:
(for printed version)


2 SEPTEMBER 2014

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

SGS





IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2014-09-02

Issue No.: 13

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 Explosive atmospheres - Part 0: General requirements
Edition: 6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition: 6.0

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/04/0202
GB/BAS/ExTR09.0166/00
GB/BAS/ExTR14/0249/00

File Reference:
04/0202
09/0551
13/0719



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2014-09-02

Issue No.: 13

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2014-09-02

Issue No.: 13

Page 4 of 4

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

Variation 13.1

To confirm the Gasman Oxygen or Toxic Gas Detector 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 the equipment.

Variation 13.2

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 05.0039 issue No.: 12

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. 12 (2014-8-6)
Issue No. 11 (2009-12-17)
Issue No. 10 (2008-8-6)
Issue No. 9 (2008-6-16)
Issue No. 8 (2008-4-4)
Issue No. 7 (2007-7-5)
Issue No. 6 (2006-12-20)

Electrical Apparatus: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +65°C)**

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair *pp M Powney*

Position:

General Manager

Signature:
(for printed version)

M Powney

6/8/14

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.

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 05.0039

Date of Issue: 2014-08-06

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 : 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 60079-11 : 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/04/0202
GB/BAS/ExTR09.0166/00

File Reference:
04/0202
09/0551



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2014-08-06

Issue No.: 12

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2014-08-06

Issue No.: 12

Page 4 of 4

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

Variation 12.1

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 05.0039** issue No.: **11**
Status: **Current**
Date of Issue: **2009-12-17** Page 1 of 4

Certificate history:
Issue No. 11 (2009-12-17)
Issue No. 10 (2008-8-6)
Issue No. 9 (2008-6-16)
Issue No. 8 (2008-4-4)
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: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **IECEX BAS 05.0039**
Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +65°C)

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)

Date:


18/12/09

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 05.0039

Date of Issue: 2009-12-17

Issue No.: 11

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 60079-11 : 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/04/0202
GB/BAS/ExTR09.0166/00

File Reference:
04/0202
09/0551



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2009-12-17

Issue No.: 11

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2009-12-17

Issue No.: 11

Page 4 of 4

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

Variation 11.1

To permit minor drawing changes not affecting the original assessment.

Variation 11.2

To confirm that the Gasman Oxygen & Toxic Gas Detector have 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 apparatus markings has been revised to add the Equipment Protection Level marking in accordance with clause 29 of IEC 60079-0: 2006 Edition 5.

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 and IEC 60079-11:2006 Edition 5.

Variation 11.3

To permit the alternative fitting of the Hybrid 3 sub-assembly in place of the Hybrid 1A sub-assembly on the rechargeable versions of the apparatus. This change does not affect the original assessment.

ExTR: **GB/BAS/ExTR09.0166/00**

File Reference: **09/0551**



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 05.0039 issue No.:10 Certificate history:
Issue No. 10 (2008-8-6)
Issue No. 9 (2008-6-16)
Issue No. 8 (2008-4-4)
Issue No. 7 (2007-7-5)
Issue No. 6 (2006-12-20)

Status: **Current**

Date of Issue: **2008-08-06** Page 1 of 4

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

Electrical Apparatus: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **IECEX BAS 05.0039**
Ex Ia IIC T4 (-20°C ≤ Ta ≤ +65°C)

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

Position: Managing Director

Signature:
(for printed version)

Date:

6-8-08

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 05.0039

Date of Issue: 2008-08-06

Issue No.: 10

Page 2 of 4

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

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 60079-11 : 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/04/0202

File Reference:
04/0202



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2008-08-06

Issue No.: 10

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2008-08-06

Issue No.: 10

Page 4 of 4

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

Variation 10.1

To permit the use of an alternative rechargeable cell Sanyo Type UF553450Z. When this cell is used the apparatus marking is Ex ia IIC T4 (-20°C ≤ Ta ≤ +65°C).

ExTR: GB/BAS/ExTR08.0128/00

File Reference: 08/0305



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 05.0039 issue No.:9
Status: **Current**
Date of Issue: **2008-06-16** Page 1 of 4

Certificate history:
Issue No. 9 (2008-6-16)
Issue No. 8 (2008-4-4)
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: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:


Type of Protection: **Intrinsic Safety**

Marking: **IECEX BAS 05.0039**
Ex ia IIC T4 (-20°C ≤ Ta ≤ +65°C)

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

Position: Managing Director

Signature:
(for printed version)


18-6-08

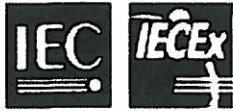
Date:

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 05.0039

Date of Issue: 2008-06-16

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

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/04/0202

File Reference:
04/0202



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2008-06-16

Issue No.: 9

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEX Certificate of Conformity

Certificate No.: IECEX BAS 05.0039

Date of Issue: 2008-06-16

Issue No.: 9

Page 4 of 4

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

Variation 9.1

To permit the use of alternative encapsulants in the hybrids as listed on the appropriate parts lists, the use of an optional alternative model name Gasalarm and the introduction of a new drawing listing the possible model names.

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 05.0039 issue No.:8 Certificate history:
Issue No. 8 (2008-4-4)
Status: **Current** Issue No. 7 (2007-7-5)
Issue No. 6 (2006-12-20)
Date of Issue: **2008-04-04** Page 1 of 4

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

Electrical Apparatus: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **IECEX BAS 05.0039**
Ex Ia IIC T4 (-20°C ≤ Ta ≤ +65°C)

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

Position: Managing Director

Signature:
(for printed version)

Date:

4-4-08

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 05.0039

Date of Issue: 2008-04-04

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 60079-11 : 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/04/0202

File Reference:
04/0202



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2008-04-04

Issue No.: 8

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2008-04-04

Issue No.: 8

Page 4 of 4

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

Variation 8.1

To permit the use of an alternative rechargeable cell type ICP653450U.

When this cell is used, the marking becomes Ex Ia IIC 170°C (T3) (-20°C ≤ Ta ≤ +65°C)

ExTR: GB/BAS/08.0076/00

File Reference: 08/0211



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 05.0039 issue No.:7
Status: **Current** History:
Issue No. 7 (2007-7-5)
Issue No. 6 (2006-12-20)
Date of Issue: **2007-07-05** Page 1 of 4
Applicant: **Crowcon Detection Instruments Ltd**
2 Blacklands Way
Abingdon Business Park
Abingdon
Oxfordshire
OX14 1DY
United Kingdom

Electrical Apparatus: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **IECEX BAS 05.0039**
Ex Ia IIC T4 (-20°C ≤ Ta ≤ +65°C)

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)



11-7-07

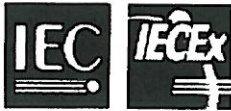
Date:

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 05.0039

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 Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
Edition: 3.1
IEC 60079-11 : 1999 Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'
Edition: 4

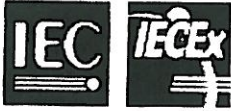
This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

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/04/0202

File Reference:
04/0202



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

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 Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

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 for the rechargeable version:

- a) The use of an alternative rechargeable battery as defined on the G A

Variation 1.2

To permit for the non-rechargeable version:

- a) General Assembly and main PCB changes to accommodate a ½AA size cell
b) The use of the following type CR2 cells: Panasonic Power Lithium, GP Photo Lithium, Maxell Photo-Power Lithium, or Energizer Photo Lithium

Variation 1.3

To permit for all versions:

- a) Minor changes to the oxygen and toxic i-modules
b) Various changes to drawings, which affect documentation but do not make any technical change.

IECEX ATR: UK/BAS/05/0256	File Reference: 04/0202
---------------------------	-------------------------

Variation 2.1

To permit various changes to documents and the use of an alternative sensor module known as 'dual toxic'.

IECEX ATR: UK/BAS/05/0256/1	File Reference: 04/0202
-----------------------------	-------------------------

Variation 3.1

To permit a change of encapsulant in the hybrid circuits.

IECEX ATR: GB/BAS/ExTR06.0029/00	File Reference: 06/0285
----------------------------------	-------------------------

Variation 4.1

To permit the use of alternative model names **Oxy-Mate C**, **Oxy-Mate CR**, **Toxi-Mate C** and **Toxi-Mate CR**, minor additions to the list of Oxygen and Toxic i-Modules which may be used, and a minor change to Hybrid 1A.

IECEX ATR: GB/BAS/ExTR06.0058/00	File Reference: 06/0425
----------------------------------	-------------------------

Variation 5.1

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

ExTR: GB/BAS/ExTR06.0104/00	File Reference: 06/0673
-----------------------------	-------------------------

Variation 6.1

To permit minor changes to the desktop charger units with part number C01940 and C01941.

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 C01940 must be used.

ExTR: GB/BAS/ExTR06.0172/00	File Reference: 06/1022
-----------------------------	-------------------------

Variation 7.1

To permit minor changes to circuits and various documents.

ExTR: GB/BAS/ExTR06.0177/00	File Reference: 06/0781
-----------------------------	-------------------------



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 05.0039** 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: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **IECEX BAS 05.0039**
Ex ia IIC T4 (-20°C ≤ Ta ≤ +65°C)


Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)


20-12-06

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 05.0039

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 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 60079-11 : 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/04/0202

File Reference:
04/0202



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0039**

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 Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0039**

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 for the rechargeable version:

- a) The use of an alternative rechargeable battery as defined on the G A

Variation 1.2

To permit for the non-rechargeable version:

- a) General Assembly and main PCB changes to accommodate a 1/2AA size cell
- b) The use of the following type CR2 cells: Panasonic Power Lithium, GP Photo Lithium, Maxell Photo-Power Lithium, or Energizer Photo Lithium

Variation 1.3

To permit for all versions:

- a) Minor changes to the oxygen and toxic i-modules
- b) Various changes to drawings, which affect documentation but do not make any technical change.

IECEX ATR:
UK/BAS/05/0256

File Reference:
04/0202

Variation 2.1

To permit various changes to documents and the use of an alternative sensor module known as 'dual toxic'.

IECEX ATR:
UK/BAS/05/0256/1

File Reference:
04/0202

Variation 3.1

To permit a change of encapsulant in the hybrid circuits.

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

File Reference:
06/0285

Variation 4.1

To permit the use of alternative model names Oxy-Mate C, Oxy-Mate CR, Toxi-Mate C and Toxi-Mate CR, minor additions to the list of Oxygen and Toxic I-Modules which may be used, and a minor change to Hybrid 1A.

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

File Reference:
06/0426

Variation 5.1

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

ExTR: **GB/BAS/ExTR06.0104/00**

File Reference: **06/0673**

Variation 6.1

To permit minor changes to the desktop charger units with part number C01940 and C01941.

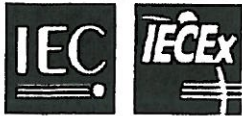
Variation 6.2

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 C01940 must be used.

ExTR: **GB/BAS/ExTR06.0172/00**

File Reference: **06/1022**



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 05.0039** Issue No.: **5**
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: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **IECEX BAS 05.0039**
Ex ia IIC T4 (-20°C ≤ Ta ≤ +65°C)

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)



22/9/06

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 05.0039**

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

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 60079-11 : 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/04/0202

File Reference:
04/0202



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2006-09-18

Issue No.: 5

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

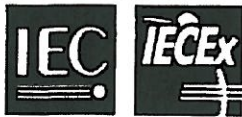
The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2006-09-18

Issue No.: 5

Page 4 of 4

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

Variation 1.1

To permit for the rechargeable version:

- a) The use of an alternative rechargeable battery as defined on the G A

Variation 1.2

To permit for the non-rechargeable version:

- a) General Assembly and main PCB changes to accommodate a 1/2AA size cell
- b) The use of the following type CR2 cells: Panasonic Power Lithium, GP Photo Lithium, Maxell Photo-Power Lithium, or Energizer Photo Lithium

Variation 1.3

To permit for all versions:

- a) Minor changes to the oxygen and toxic i-modules
- b) Various changes to drawings, which affect documentation but do not make any technical change.

IECEX ATR: UK/BAS/05/0256

File Reference: 04/0202

Variation 2.1

To permit various changes to documents and the use of an alternative sensor module known as 'dual toxic'.

IECEX ATR: UK/BAS/05/0256/1

File Reference: 04/0202

Variation 3.1

To permit a change of encapsulant in the hybrid circuits.

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

File Reference: 06/0285

Variation 4.1

To permit the use of alternative model names Oxy-Mate C, Oxy-Mate CR, Toxi-Mate C and Toxi-Mate CR, minor additions to the list of Oxygen and Toxic i-Modules which may be used, and a minor change to Hybrid 1A.

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

File Reference: 06/0426

Variation 5.1

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

ExTR: 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 05.0039** Issue No.: **4**
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: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **IECEX BAS 05.0039**
Ex ia IIC T4 (-20°C ≤ Ta ≤ +65°C)


Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)


13/7/6

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 05.0039

Date of Issue: 2006-07-13

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 60079-11 : 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/04/0202

File Reference:
04/0202



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2006-07-13

Issue No.: 4

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2006-07-13

Issue No.: 4

Page 4 of 4

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

Variation 1.1

To permit for the rechargeable version:

- a) The use of an alternative rechargeable battery as defined on the G A

Variation 1.2

To permit for the non-rechargeable version:

- a) General Assembly and main PCB changes to accommodate a ½AA size cell
- b) The use of the following type CR2 cells: Panasonic Power Lithium, GP Photo Lithium, Maxell Photo-Power Lithium, or Energizer Photo Lithium

Variation 1.3

To permit for all versions:

- a) Minor changes to the oxygen and toxic i-modules
- b) Various changes to drawings, which affect documentation but do not make any technical change.

IECEX ATR: UK/BAS/05/0256

File Reference: 04/0202

Variation 2.1

To permit various changes to documents and the use of an alternative sensor module known as 'dual toxic'.

IECEX ATR: UK/BAS/05/0256/1

File Reference: 04/0202

Variation 3.1

To permit a change of encapsulant in the hybrid circuits.

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

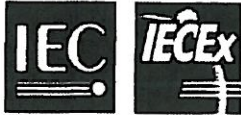
File Reference: 06/0285

Variation 4.1

To permit the use of alternative model names Oxy-Mate C, Oxy-Mate CR, Toxi-Mate C and Toxi-Mate CR, minor additions to the list of Oxygen and Toxic i-Modules which may be used, and a minor change to Hybrid 1A.

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 05.0039** Issue No.: **3**

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: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **IECEx BAS 05.0039**
Ex ia IIC T4 (-20°C ≤ Ta ≤ +65°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:

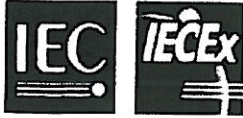
1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

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 05.0039**

Date of Issue: **2006-04-26**

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 60079-11 : 1999 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'I'

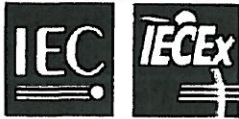
*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

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/04/0202

File Reference:
04/0202



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0039**

Date of Issue: **2006-04-26**

Issue No.: **3**

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

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

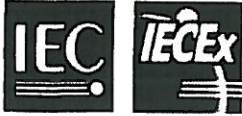
The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2006-04-26

Issue No.: 3

Page 4 of 4

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

Variation 1.1

To permit for the rechargeable version:

- a) The use of an alternative rechargeable battery as defined on the G A

Variation 1.2

To permit for the non-rechargeable version:

- a) General Assembly and main PCB changes to accommodate a ½AA size cell
- b) The use of the following type CR2 cells: Panasonic Power Lithium, GP Photo Lithium, Maxell Photo-Power Lithium, or Energizer Photo Lithium

Variation 1.3

To permit for all versions:

- a) Minor changes to the oxygen and toxic i-modules
- b) Various changes to drawings, which affect documentation but do not make any technical change.

IECEX ATR:
UK/BAS/05/0256

File Reference:
04/0202

Variation 2.1

To permit various changes to documents and the use of an alternative sensor module known as 'dual toxic'.

IECEX ATR:
UK/BAS/05/0256/1

File Reference:
04/0202

Variation 3.1

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 05.0039** Issue No.: **2**
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: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **IECEX BAS 05.0039**
Ex ia IIC T4 (-20°C ≤ Ta ≤ +65°C)

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)



3/3/6

Date:

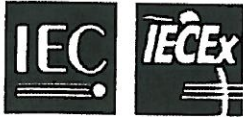
1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

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 05.0039**

Date of Issue: **2006-03-01**

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 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 60079-11 : 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/04/0202

File Reference:
04/0202



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2006-03-01

Issue No.: 2

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

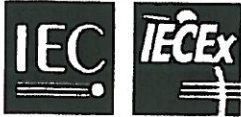
The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2006-03-01

Issue No.: 2

Page 4 of 4

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

Variation 1.1

To permit for the rechargeable version:

- a) The use of an alternative rechargeable battery as defined on the G A

Variation 1.2

To permit for the non-rechargeable version:

- a) General Assembly and main PCB changes to accommodate a ½AA size cell
- b) The use of the following type CR2 cells: Panasonic Power Lithium, GP Photo Lithium, Maxell Photo-Power Lithium, or Energizer Photo Lithium

Variation 1.3

To permit for all versions:

- a) Minor changes to the oxygen and toxic i-modules
- b) Various changes to drawings, which affect documentation but do not make any technical change.

IECEX ATR: UK/BAS/05/0256

File Reference: 04/0202

Variation 2.1

To permit various changes to documents and the use of an alternative sensor module known as 'dual toxic'.

IECEX ATR: UK/BAS/05/0256/1

File Reference: 04/0202

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 05.0039** Issue No.: **1**

Status: **Current**

Date of Issue: **2005-06-27** Page 1 of 4

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

Electrical Apparatus: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **IECEX BAS 05.0039**
Ex ia IIC T4 (-20°C ≤ Ta ≤ +65°C)

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)

RS Sinclair
RS SINCLAIR
27/6/05

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 05.0039**

Date of Issue: **2005-06-27**

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 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 60079-11 : 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/04/0202

File Reference:
04/0202



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2005-06-27

Issue No.: 1

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: **IECEx BAS 05.0039**

Date of Issue: **2005-06-27**

Issue No.: **1**

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

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

Variation 1.1

To permit for the rechargeable version:

- a) The use of an alternative rechargeable battery as defined on the G A

Variation 1.2

To permit for the non-rechargeable version:

- a) General Assembly and main PCB changes to accommodate a ½AA size cell
- b) The use of the following type CR2 cells: Panasonic Power Lithium, GP Photo Lithium, Maxell Photo-Power Lithium, or Energizer Photo Lithium

Variation 1.3

To permit for all versions:

- a) Minor changes to the oxygen and toxic I-modules
- b) Various changes to drawings, which affect documentation but do not make any technical change.

IECEx ATR:
UK/BAS/05/0256

File Reference:
04/0202

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 05.0039** Issue No.: **0**

Status: **Current**

Date of Issue: **2005-05-04** Page 1 of 3

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

Electrical Apparatus: **Gasman Oxygen or Toxic Gas Detector**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **IECEX BAS 05.0039**
Ex Ia IIC T4 (-20°C ≤ Ta ≤ +65°C)

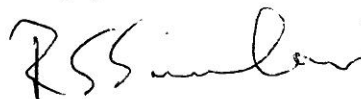
Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)


10-5-05

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 05.0039**

Date of Issue: **2005-05-04** 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 60079-11 : 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/04/0202	04/0202



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0039

Date of Issue: 2005-05-04

Issue No.: 0

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Gasman Oxygen or Toxic Gas Detector is designed to detect the presence of oxygen (deficiency) or toxic gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded.

It comprises a battery, a gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20.

Two types are available, one rechargeable, and one non-rechargeable. External contacts are provided for recharging, and for serial data communications.

The sensors are known Oxygen or Toxic i-modules, and the permitted i-modules are listed in the User Manual provided by the manufacturer.

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using a Crowcon desktop charger or charger / interface part number C01940 or C01941. In the case of the non-rechargeable apparatus, the charging circuit will have no effect.

The cell in the non-rechargeable apparatus must only be changed when in a non-hazardous area, and replaced only with cell type CR2477.

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

CONDITIONS OF CERTIFICATION: NO

Annexe: