



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 05.0043X

Issue No: 12

Certificate history:

Status: **Current**

Page 1 of 4

Issue No. 12 (2018-06-08)

Issue No. 11 (2017-12-04)

Issue No. 10 (2016-01-29)

Issue No. 9 (2014-08-06)

Issue No. 8 (2013-01-31)

Issue No. 7 (2009-02-04)

Issue No. 6 (2008-09-17)

Issue No. 5 (2007-12-04)

Issue No. 4 (2007-05-23)

Issue No. 3 (2006-11-07)

Date of Issue: **2018-06-08**

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

Equipment: **An Xgard Gas Detector**

Optional accessory:

Type of Protection: **Flameproof and Dust**

Marking:

Ex d IIC T6 Gb Ex tb IIIC T80°C Db
(-40°C ≤ Tamb ≤ + 50°C)

or

Ex d IIC T4 Gb Ex tb IIIC T110°C Db
(-40°C ≤ Tamb ≤ + 80°C)

or

Ex d IIC T3 Gb Ex tb IIIC T180°C Db
(-40°C ≤ Tamb ≤ + 150°C)

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Technical Manager

Signature:
(for printed version)

M POWNEY
Certification
Manager

Date:

M Powney
8/6/18

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 05.0043X Issue No: 12
Date of Issue: 2018-06-08 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 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 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 61241-0 : 2004 Edition:1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition:1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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/04/0829, GB/BAS/ExTR18.0060/00	04/0829, 17/0843
GB/BAS/ExTR09.0022/00	09/0076
GB/BAS/ExTR13.0010/00	12/1010



IECEX Certificate of Conformity

Certificate No: IECEX BAS 05.0043X

Issue No: 12

Date of Issue: 2018-06-08

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Xgard Gas Detector comprises an aluminium alloy or stainless steel base and threaded cover. Bosses on the base are provided for a threaded gas sinter and detector housing or a potted type 4 sensor threaded into the original sensor housing, and cable entry ports. The base contains a gas sensor amplifier printed circuit board.

The detector is rated up to 32V, 10W.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The detector must not be used in a carbon disulphide atmosphere.



IECEX Certificate of Conformity

Certificate No: IECEx BAS 05.0043X

Issue No: 12

Date of Issue: 2018-06-08

Page 4 of 4

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

Variation 12.1

To confirm that the equipment covered by this certificate has been reviewed against the latest requirements of IEC 60079-0:2017 Edition 7 and IEC 60079-31:2013 Edition 2.

ExTR: GB/BAS/ExTR18.0060/00

File Reference: 17/0843



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 05.0043X

Issue No: 11

Certificate history:

Issue No. 11 (2017-12-04)

Issue No. 10 (2016-01-29)

Issue No. 9 (2014-08-06)

Issue No. 8 (2013-01-31)

Issue No. 7 (2009-02-04)

Issue No. 6 (2008-09-17)

Issue No. 5 (2007-12-04)

Issue No. 4 (2007-05-23)

Issue No. 3 (2006-11-07)

Status: **Current**

Page 1 of 4

Date of Issue: **2017-12-04**

Applicant: **Crowcon Detection Instruments Ltd**

172 Brook Drive

Milton Park

Abingdon

Oxfordshire

OX14 4SD

United Kingdom

Equipment: **An Xgard Gas Detector**

Optional accessory:

Type of Protection: **Flameproof and Dust**

Marking:

**Ex db IIC T6 Gb
Ex tb IIIC T80°C Db
(Tamb = -40°C to +50°C) or
Ex db IIC T4 Gb
Ex tb IIIC T110°C Db
(Tamb = -40°C to +80°C) or
Ex db IIC T3 Gb
Ex tb IIIC T180°C Db
(Tamb = -40°C to +150°C)**

Approved for issue on behalf of the IECEx
Certification Body:

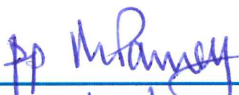
R S Sinclair


Position:

Technical Manager

Signature:
(for printed version)

Date:


+ 12 / 17



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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 05.0043X

Issue No: 11

Date of Issue: **2017-12-04**

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 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition:1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*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:
GB/BAS/ExTR16.0009/00, 17.0354/00	15/0962, 17/0682
GB/BAS/ExTR09.0022/00	09/0076
GB/BAS/ExTR13.0010/00	12/1010



IECEx Certificate of Conformity

Certificate No: IECEx BAS 05.0043X

Issue No: 11

Date of Issue: 2017-12-04

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Xgard Gas Detector comprises an aluminium alloy or stainless steel base and threaded cover. Bosses on the base are provided for a threaded gas sinter and detector housing or a potted type 4 sensor threaded into the original sensor housing, and cable entry ports. The base contains a gas sensor amplifier printed circuit board.

The detector is rated up to 32V, 10W.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The detector must not be used in a carbon disulphide atmosphere.



IECEX Certificate of Conformity

Certificate No: IECEX BAS 05.0043X

Issue No: 11

Date of Issue: 2017-12-04

Page 4 of 4

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

Variation 11.1

To confirm that the equipment covered by this certificate has been reviewed against the latest requirements of IEC 60079-0:2011 Edition 6 and IEC 60079-1:2014 Edition 7.

ExTR: GB/BAS/ExTR17.00354/00

File Reference: 17/0682



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 05.0043X issue No.:10

Status: Current

Date of Issue: 2016-01-29 Page 1 of 4

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

Certificate history:
Issue No. 10 (2016-1-29)
Issue No. 9 (2014-8-6)
Issue No. 8 (2013-1-31)
Issue No. 7 (2009-2-4)
Issue No. 6 (2008-9-17)
Issue No. 5 (2007-12-4)
Issue No. 4 (2007-5-23)
Issue No. 3 (2006-11-7)

Electrical Apparatus: An Xgard Gas Detector
Optional accessory:

Type of Protection: Flameproof and Dust

Marking: Ex d IIC T6 Gb
Ex tb IIIC T80°C Db
(- 40°C ≤ Tamb ≤ + 50°C) or


Ex d IIC T4 Gb
Ex tb IIIC T110°C Db
(- 40°C ≤ Tamb ≤ + 80°C) or

Ex d IIC T3 Gb
Ex tb IIIC T180°C Db
(- 40°C ≤ Tamb ≤ + 150°C)

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

Position: Technical Manager

Signature:
(for printed version)


29/1/16

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

SGS





IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2016-01-29

Issue No.: 10

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 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

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:
GB/BAS/ExTR16.0009/00
GB/BAS/ExTR09.0022/00
GB/BAS/ExTR13.0010/00

File Reference:
15/0962
09/0076
12/1010



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2016-01-29

Issue No.: 10

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Xgard Gas Detector comprises an aluminium alloy or stainless steel base and threaded cover. Bosses on the base are provided for a threaded gas sinter and detector housing or a potted type 4 sensor threaded into the original sensor housing, and cable entry ports. The base contains a gas sensor amplifier printed circuit board.

The detector is rated up to 32V, 10W.

CONDITIONS OF CERTIFICATION: YES as shown below:

The detector must not be used in a carbon disulphide atmosphere.



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2016-01-29

Issue No.: 10

Page 4 of 4

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

Variation 10.1

To allow clarification of drawings and minor drawing changes

ExTR: GB/BAS/ExTR16.0009/00

File Reference: 15/0962



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 05.0043X issue No.: 9

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. 9 (2014-8-6)
Issue No. 8 (2013-1-31)
Issue No. 7 (2009-2-4)
Issue No. 6 (2008-9-17)
Issue No. 5 (2007-12-4)
Issue No. 4 (2007-5-23)
Issue No. 3 (2006-11-7)

Electrical Apparatus: **An Xgard Gas Detector**
Optional accessory:

Type of Protection: **Flameproof and Dust**

Marking: **Ex d IIC T6 Gb**
Ex tb IIIC T80°C Db
(- 40°C ≤ Tamb ≤ + 50°C) or
Ex d IIC T4 Gb
Ex tb IIIC T110°C Db
(- 40°C ≤ Tamb ≤ + 80°C) or
Ex d IIC T3 Gb
Ex tb IIIC T180°C Db
(- 40°C ≤ Tamb ≤ + 150°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:

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2. This certificate is not transferable and remains the property of the issuing body.
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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 05.0043X

Date of Issue: 2014-08-06

Issue No.: 9

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 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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/04/0829
GB/BAS/ExTR09.0022/00
GB/BAS/ExTR13.0010/00

File Reference:
04/0829
09/0076
12/1010



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2014-08-06

Issue No.: 9

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Xgard Gas Detector comprises an aluminium alloy or stainless steel base and threaded cover. Bosses on the base are provided for a threaded gas sinter and detector housing or a potted type 4 sensor threaded into the original sensor housing, and cable entry ports. The base contains a gas sensor amplifier printed circuit board.

The detector is rated up to 32V, 10W.

CONDITIONS OF CERTIFICATION: YES as shown below:

The detector must not be used in a carbon disulphide atmosphere.



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2014-08-06

Issue No.: 9

Page 4 of 4

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

Variation 9.1

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 05.0043X issue No.:8

Status: **Current**

Date of Issue: 2013-01-31 Page 1 of 4

Certificate history:
Issue No. 8 (2013-1-31)
Issue No. 7 (2009-2-4)
Issue No. 6 (2008-9-17)
Issue No. 5 (2007-12-4)
Issue No. 4 (2007-5-23)
Issue No. 3 (2006-11-7)

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

Electrical Apparatus: **An Xgard Gas Detector**
Optional accessory:

Type of Protection: **Flameproof and Dust**

Marking: **Ex d IIC T6 Gb**
Ex tb IIIC T80°C Db
(- 40°C ≤ Tamb ≤ + 50°C) or

Ex d IIC T4 Gb
Ex tb IIIC T110°C Db
(- 40°C ≤ Tamb ≤ + 80°C) or


Ex d IIC T3 Gb
Ex tb IIIC T180°C Db
(- 40°C ≤ Tamb ≤ + 150°C)

Approved for issue on behalf of the IECEx
Certification Body:

 R S Sinclair 

Position: General Manager

Signature:
(for printed version)



31/1/13

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 05.0043X

Date of Issue: 2013-01-31

Issue No.: 8

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 60079-31 : 2008 Edition: 1	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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/04/0829
GB/BAS/ExTR09.0022/00
GB/BAS/ExTR13.0010/00

File Reference:
04/0829
09/0076
12/1010



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2013-01-31

Issue No.: 8

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Xgard Gas Detector comprises an aluminium alloy or stainless steel base and threaded cover. Bosses on the base are provided for a threaded gas sinter and detector housing or a potted type 4 sensor threaded into the original sensor housing, and cable entry ports. The base contains a gas sensor amplifier printed circuit board.

The detector is rated up to 32V, 10W.

CONDITIONS OF CERTIFICATION: YES as shown below:

The detector must not be used in a carbon disulphide atmosphere.



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2013-01-31

Issue No.: 8

Page 4 of 4

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

Variation 8.1

Clarification that the existing certified units are additionally marked to permit the use of the equipment within a Zone 21 area by compliance with IEC 61241-0: 2004 and IEC61241-1: 2004:-

Ex tD A21 IP6X
T80°C T_{amb} = 50°C
T110°C T_{amb} = 80°C
T180°C T_{amb} = 150°C

Variation 8.2

The equipment covered by this certificate has been reviewed against the additional design and test requirements of IEC 60079-0:2011 Edition 6, IEC 60079-1:2007 Edition 6 and IEC 60079-31:2008 Edition 1 and compliance is confirmed.

Variation 8.3

The unit, as Variation 8.2 above, is to be marked with the following amended coding:-

Ex d IIC T6 Gb
Ex tb IIIC T80°C Db
(- 40°C ≤T_{amb} ≤+ 50°C) or

Ex d IIC T4 Gb
Ex tb IIIC T110°C Db
(- 40°C ≤T_{amb} ≤+ 80°C) or

Ex d IIC T3 Gb
Ex tb IIIC T180°C Db
(- 40°C ≤T_{amb} ≤+ 150°C)

Variation 8.4

Minor additional label wording.

ExTR: GB/BAS/ExTR13.0010/00

File Reference: 12/1010



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 05.0043X issue No.:7
Status: **Current**
Date of Issue: 2009-02-04 Page 1 of 4

Certificate history:
Issue No. 7 (2009-2-4)
Issue No. 6 (2008-9-17)
Issue No. 5 (2007-12-4)
Issue No. 4 (2007-5-23)
Issue No. 3 (2006-11-7)

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

Electrical Apparatus: **An Xgard Gas Detector**
Optional accessory:

Type of Protection: **Flameproof**

Marking: **Ex d IIC T6 (- 40°C ≤ Tamb ≤ + 50°C)**
or T4 (- 40°C ≤ Tamb ≤ + 80°C)
or T3 (- 40°C ≤ Tamb ≤ + 150°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 05.0043X

Date of Issue: 2009-02-04

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 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 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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/04/0829
GB/BAS/ExTR09.0022/00

File Reference:
04/0829
09/0076



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2009-02-04

Issue No.: 7

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Xgard Gas Detector comprises an aluminium alloy or stainless steel base and threaded cover. Bosses on the base are provided for a threaded gas sinter and detector housing or a potted type 4 sensor threaded into the original sensor housing, and cable entry ports. The base contains a gas sensor amplifier printed circuit board.

The detector is rated up to 32V, 10W.

CONDITIONS OF CERTIFICATION: YES as shown below:

The detector must not be used in a carbon disulphide atmosphere.



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2009-02-04

Issue No.: 7

Page 4 of 4

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

Variation 7.1

Minor corrections to the drawing.

ExTR: GB/BAS/ExTR09.0022/00

File Reference: 09/0076



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 05.0043X issue No.:6 **Certificate history:**
Status: **Current** Issue No. 6 (2008-9-17)
Date of Issue: **2008-09-17** Page 1 of 4 Issue No. 5 (2007-12-4)
Issue No. 4 (2007-5-23)
Issue No. 3 (2006-11-7)

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

Electrical Apparatus: **An Xgard Gas Detector**
Optional accessory:

Type of Protection: **Flameproof**

Marking: **Ex d IIC T6 (- 40°C ≤ Tamb ≤ + 50°C)**
or T4 (- 40°C ≤ Tamb ≤ + 80°C)
or T3 (- 40°C ≤ Tamb ≤ + 150°C)

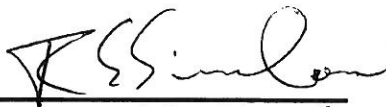
Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)


17-9-08

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





IECEx Certificate of Conformity

Certificate No.:

IECEx BAS 05.0043X

Date of Issue:

2008-09-17

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 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

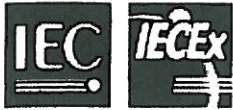
This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

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/04/0829

File Reference:
04/0829



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2008-09-17

Issue No.: 6

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Xgard Gas Detector comprises an aluminium alloy or stainless steel base and threaded cover. Bosses on the base are provided for a threaded gas sinter and detector housing or a potted type 4 sensor threaded into the original sensor housing, and cable entry ports. The base contains a gas sensor amplifier printed circuit board.

The detector is rated up to 32V, 10W.

CONDITIONS OF CERTIFICATION: YES as shown below:

The detector must not be used in a carbon disulphide atmosphere.



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2008-09-17

Issue No.: 6

Page 4 of 4

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

Variation 6.1

To allow the introduction of an alternative sinter and sinter housing arrangement for the XGard Unit for use in ambient temperatures of -40°C to $+50^{\circ}\text{C}$ or $+80^{\circ}\text{C}$. This change does not affect the XGard HT version type 4 for use in an ambient temperatures of up to 150°C .

Variation 6.2

The introduction of an alternative design of enclosure in stainless steel for the Xgard assembly, together with clarification of the certified drawings.

ExTR: GB/BAS/ExTR08.0180/00

File Reference: 08/0251



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 05.0043X issue No.:5 Certificate history:
Status: **Current** Issue No. 5 (2007-12-4)
Date of Issue: **2007-12-04** Page 1 of 4 Issue No. 4 (2007-5-23)
Issue No. 3 (2006-11-7)

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

Electrical Apparatus: **An Xgard Gas Detector**
Optional accessory:

Type of Protection: **Flameproof**

Marking: **Ex d IIC T6 (- 40°C ≤ Tamb ≤ + 50°C)**
or T4 (- 40°C ≤ Tamb ≤ + 80°C)
or T3 (- 40°C ≤ Tamb ≤ + 150°C)


Approved for issue on behalf of the IECEx
Certification Body:

 R S Sinclair

Position:

Managing Director

Signature:
(for printed version)



4/12/07 M. POONEY

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 05.0043X

Date of Issue: 2007-12-04

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 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 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

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/04/0829

File Reference:
04/0829



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2007-12-04

Issue No.: 5

Page 3 of 4

Schedule

EQUIPMENT:

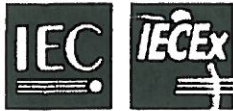
Equipment and systems covered by this certificate are as follows:

The Xgard Gas Detector comprises an aluminium alloy or stainless steel base and threaded cover. Bosses on the base are provided for a threaded gas sinter and detector housing or a potted type 4 sensor threaded into the original sensor housing, and cable entry ports. The base contains a gas sensor amplifier printed circuit board.

The detector is rated up to 32V, 10W.

CONDITIONS OF CERTIFICATION: YES as shown below:

The detector must not be used in a carbon disulphide atmosphere.



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2007-12-04

Issue No.: 5

Page 4 of 4

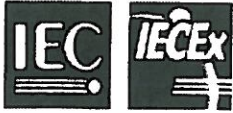
DETAILS OF CERTIFICATE CHANGES (for Issues 1 and above):

Variation 5.1

To allow the use of LM25M as an alternative material for the manufacture of the Xgard enclosure.

ExTR: GB/BAS/ExTR07.0178/00

File Reference: 07/0655



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 05.0043X issue No.: 4 History:
Issue No. 4 (2007-5-23)
Issue No. 3 (2006-11-7)
Status: Current
Date of Issue: 2007-05-23 Page 1 of 4

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

Electrical Apparatus: **An Xgard Gas Detector**
Optional accessory:

Type of Protection: **Flameproof**

Marking: **Ex d IIC T6 (- 40°C ≤ Tamb ≤ + 50°C)**
or T4 (- 40°C ≤ Tamb ≤ + 80°C)
or T3 (- 40°C ≤ Tamb ≤ + 150°C)

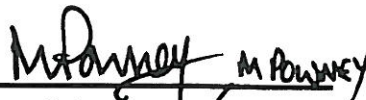
Approved for issue on behalf of the IECEx
Certification Body:

 R S Sinclair

Position:

Managing Director

Signature:
(for printed version)


23/05/07

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 05.0043X**

Date of Issue: **2007-05-23**

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 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

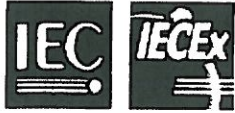
This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

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/04/0829

File Reference:
04/0829



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2007-05-23

Issue No.: 4

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Xgard Gas Detector comprises an aluminium alloy or stainless steel base and threaded cover. Bosses on the base are provided for a threaded gas sinter and detector housing or a potted type 4 sensor threaded into the original sensor housing, and cable entry ports. The base contains a gas sensor amplifier printed circuit board.

The detector is rated up to 32V, 10W.

CONDITIONS OF CERTIFICATION: YES as shown below:

The detector must not be used in a carbon disulphide atmosphere.



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0043X**

Date of Issue: **2007-05-23**

Issue No.: **4**

Page 4 of 4

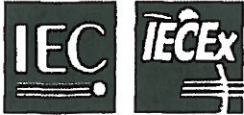
DETAILS OF CERTIFICATE CHANGES (for Issues 1 and above):

Variation 4.1

Minor changes to the PCB and earth fixing arrangements, together with some clarification of the drawing detail including the casting material.

ExTR: GB/BAS/ExTR07.0063/00

File Reference: 07/0379



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 05.0043X** Issue No.: **3**

Status: **Current**

Date of Issue: **2006-11-07** Page 1 of 4

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

Electrical Apparatus: **An Xgard Gas Detector**
Optional accessory:

Type of Protection: **Flameproof**

Marking: **Ex d IIC T6 (- 40°C ≤ Tamb ≤ + 50°C)**
or T4 (- 40°C ≤ Tamb ≤ + 80°C)
or T3 (- 40°C ≤ Tamb ≤ + 150°C)

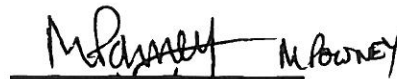
*Approved for issue on behalf of the IECEx
Certification Body:*

 R S Sinclair

Position:

Managing Director

*Signature:
(for printed version)*


7/11/06

Date:

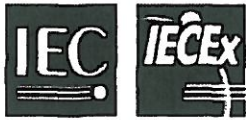
1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

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 05.0043X

Date of Issue: 2006-11-07

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 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

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/04/0829

File Reference:
04/0829



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0043X**

Date of Issue: **2006-11-07**

Issue No.: **3**

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

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Xgard Gas Detector comprises an aluminium alloy or stainless steel base and threaded cover. Bosses on the base are provided for a threaded gas sinter and detector housing or a potted type 4 sensor threaded into the original sensor housing, and cable entry ports. The base contains a gas sensor amplifier printed circuit board.

The detector is rated up to 32V, 10W.

CONDITIONS OF CERTIFICATION: YES as shown below:

The detector must not be used in a carbon disulphide atmosphere.



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0043X**

Date of Issue: **2006-11-07**

Issue No.: **3**

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

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

Variation 1.1

To permit the use of the equipment within a Zone 21 area by compliance with IEC 61241-0: 2004 and IEC61241-1: 2004.

The Xgard gas detector is additionally marked:-

Ex tD A21 IP6x

T80°C T_{amb} = 50°C

T110°C T_{amb} = 80°C

T180°C T_{amb} = 150°C

IECEX ATR:
UK/BAS/05/0839

File Reference:
05/0839

Variation 2.1

Minor dimensional changes not affecting certification.

ExTR: GB/BAS/ExTR06.0080/00

File Reference: 06/0534

Variation 3.1

An alternative assembly incorporating an infrared sensor module.

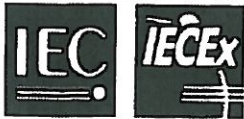
In this form the unit is designated a XGARD IR Gas Detector.

Variation 3.2

Minor dimensional changes not affecting certification.

ExTR: GB/BAS/ExTR06.0140/00

File Reference: 06/0907



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 05.0043X** Issue No.: **2**
Status: **Current**
Date of Issue: **2006-08-01** Page 1 of 4


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

Electrical Apparatus: **An Xgard Gas Detector**
Optional accessory:

Type of Protection: **Flameproof**

Marking: **Ex d IIC T6 (- 40°C ≤ Tamb ≤ + 50°C)**
or T4 (- 40°C ≤ Tamb ≤ + 80°C)
or T3 (- 40°C ≤ Tamb ≤ + 150°C)

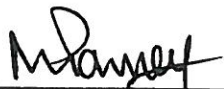
*Approved for issue on behalf of the IECEx
Certification Body:*

 R S Sinclair

Position:

Managing Director

*Signature:
(for printed version)*


1/8/06

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 05.0043X**

Date of Issue: **2006-08-01**

Issue No.: **2**

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

Manufacturer: **Crowcon Detection Instruments Limited**
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 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

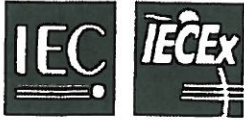
This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

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/04/0829

File Reference:
04/0829



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2006-08-01

Issue No.: 2

Page 3 of 4

Schedule

EQUIPMENT:

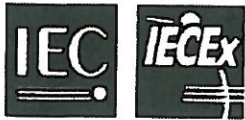
Equipment and systems covered by this certificate are as follows:

The Xgard Gas Detector comprises an aluminium alloy or stainless steel base and threaded cover. Bosses on the base are provided for a threaded gas sinter and detector housing or a potted type 4 sensor threaded into the original sensor housing, and cable entry ports. The base contains a gas sensor amplifier printed circuit board.

The detector is rated up to 32V, 10W.

CONDITIONS OF CERTIFICATION: YES as shown below:

The detector must not be used in a carbon disulphide atmosphere.



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0043X**

Date of Issue: **2006-08-01**

Issue No.: **2**

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

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

Variation 1.1

To permit the use of the equipment within a Zone 21 area by compliance with IEC 61241-0: 2004 and IEC61241-1: 2004.

The Xgard gas detector is additionally marked:-

Ex tD A21 IP6x

T80°C T_{amb} = 50°C

T110°C T_{amb} = 80°C

T180°C T_{amb} = 150°C

IECEX ATR:
UK/BAS/05/0839

File Reference:
05/0839

Variation 2.1

Minor dimensional changes not affecting certification.

ExTR: **GB/BAS/ExTR06.0080/00**

File Reference: **06/0534**



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 05.0043X** Issue No.: **1**
Status: **Current**
Date of Issue: **2006-02-07** Page 1 of 4

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

Electrical Apparatus: **An Xgard Gas Detector**
Optional accessory:

Type of Protection: **Flameproof**

Marking: **Ex d IIC T6 (- 40°C ≤ Tamb ≤ + 50°C)
or T4 (- 40°C ≤ Tamb ≤ + 80°C)
or T3 (- 40°C ≤ Tamb ≤ + 150°C)**


Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)


7-2-06

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 05.0043X

Date of Issue: 2006-02-07

Issue No.: 1

Page 2 of 4

Manufacturer: **Crowcon Detection Instruments Limited**
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 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "ID"

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/04/0829

File Reference:
04/0829



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0043X**

Date of Issue: **2006-02-07**

Issue No.: **1**

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

Schedule

EQUIPMENT:

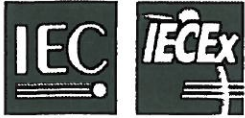
Equipment and systems covered by this certificate are as follows:

The Xgard Gas Detector comprises an aluminium alloy or stainless steel base and threaded cover. Bosses on the base are provided for a threaded gas sinter and detector housing or a potted type 4 sensor threaded into the original sensor housing, and cable entry ports. The base contains a gas sensor amplifier printed circuit board.

The detector is rated up to 32V, 10W.

CONDITIONS OF CERTIFICATION: YES as shown below:

The detector must not be used in a carbon disulphide atmosphere.



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 05.0043X**

Date of Issue: **2006-02-07**

Issue No.: **1**

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

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

Variation 1.1

To permit the use of the equipment within a Zone 21 area by compliance with IEC 61241-0: 2004 and IEC61241-1: 2004.

The Xgard gas detector is additionally marked:-

Ex tD A21 IP6x

T80°C T_{amb} = 50°C

T110°C T_{amb} = 80°C

T180°C T_{amb} = 150°C

IECEX ATR:
UK/BAS/05/0839

File Reference:
05/0839

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 05.0043X** Issue No.: **0**

Status: **Current**

Date of Issue: **2005-11-08** Page 1 of 3

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

Electrical Apparatus: **An Xgard Gas Detector**
Optional accessory:

Type of Protection: **Flameproof**

Marking: **Ex d IIC T6 (- 40°C ≤ Tamb ≤ + 50°C)
or T4 (- 40°C ≤ Tamb ≤ + 80°C)
or T3 (- 40°C ≤ Tamb ≤ + 150°C)**

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Managing Director

Signature:
(for printed version)

Date:

8-11-05

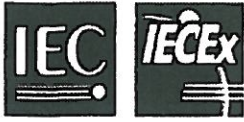
1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

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 05.0043X**

Date of Issue: **2005-11-08**

Issue No.: **0**

Page **2** of **3**

Manufacturer: **Crowcon Detection Instruments Limited**
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 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'

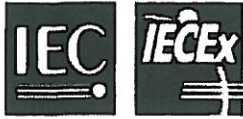
This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

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/04/0829

File Reference:
04/0829



IECEX Certificate of Conformity

Certificate No.: IECEx BAS 05.0043X

Date of Issue: 2005-11-08

Issue No.: 0

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Xgard Gas Detector comprises an aluminium alloy or stainless steel base and threaded cover. Bosses on the base are provided for a threaded gas sinter and detector housing or a potted type 4 sensor threaded into the original sensor housing, and cable entry ports. The base contains a gas sensor amplifier printed circuit board.

The detector is rated up to 32V, 10W.

CONDITIONS OF CERTIFICATION: YES as shown below:

The detector must not be used in a carbon disulphide atmosphere.

Annexe: