

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification Scheme for Explosive Atmospheres**

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

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IECEx BAS 05.0043X

issue No.:9

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)

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**

Electrical Apparatus: Optional accessory:

An Xgard Gas Detector

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:

RS Sinclair A MPOWNEY

Position:

General Manager

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:

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





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



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Ce	rtit	ıca	te	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:



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

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INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

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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:

D

R S Sinclair

MOWNE)

Position:

General Manager

Signature:

(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.

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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





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

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-1: 2007-04

Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'

Edition: 6

IEC 60079-31: 2008

Edition: 1 IEC 61241-0 : 2004

Electrical apparatus for use in the presence of combustible dust - Part 0: General

Edition: 1

requirements

IEC 61241-1: 2004

Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by

Edition: 1

enclosures "tD"

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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



Certificate No.:	IECEx BAS 05.0043X	
Date of Issue:	2013-01-31	Issue No.: 8
		Page 3 of 4
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FOURNIENT	Sche	edule
EQUIPMENT: Equipment and systems covered	d by this certificate are as follo	ows:
are provided for a threaded gas	sinter and detector housing o	inless steel base and threaded cover. Bosses on the base or a potted type 4 sensor threaded into the original sensor sor amplifier printed circuit board.
The detector is rated up to 32V,	10W.	
CONDITIONS OF CERTIFICAT	ION: YES as shown below:	
The detector must not be used i		here.



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

 $T80^{\circ}CT_{amb} = 50^{\circ}C$

 $T110^{\circ}C T_{amb} = 80^{\circ}C$

 $T180^{\circ}C T_{amb} = 150^{\circ}C$

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 ≤Tamb ≤+50°C) or

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

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

Variation 8.4

Minor additional label wording.

ExTR: GE	3/BAS/ExTR13.0010/00	File Reference:	12/1010
-			



INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification Scheme for Explosive Atmospheres**

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Certificate No.:

IECEx BAS 05,0043X

issue No.:7

Certificate history:

Status:

Current

Issue No. 7 (2009-2-4) Issue No. 6 (2008-9-17)

Date of Issue:

2009-02-04

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)

Date:

This certificate and schedule may only be reproduced in full.

This certificate is not transferable and remains the property of the issuing body.
 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**





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

Electrical apparatus for explosive gas atmospheres - Part 0: General requirements

Edition: 4.0

Edition: 1.

IEC 60079-1: 2003

Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'

Edition: 5

IEC 61241-0: 2004

Electrical apparatus for use in the presence of combustible dust - Part 0: General

requirements

IEC 61241-1: 2004

Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by

Edition: 1

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



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:



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



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) Issue No. 5 (2007-12-4)

Date of Issue:

2008-09-17

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: Optional accessory:

An Xgard Gas Detector

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.

This certificate is not transferable and remains the property of the issuing body.
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Certificate issued by:

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





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

Electrical apparatus for explosive gas atmospheres - Part 0: General requirements

Edition: 4.0

IEC 60079-1: 2003

Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'

Edition: 5

IEC 61241-0: 2004

Electrical apparatus for use in the presence of combustible dust - Part 0: General

Edition: 1

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

IECEY ATR

UK/BAS/04/0829

File Reference:



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:



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 $+50^{\circ}$ C or $+80^{\circ}$ 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



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) Issue No. 4 (2007-5-23) Issue No. 3 (2006-11-7)

Date of Issue:

2007-12-04

Page 1 of 4

Applicant:

Crowcon Detection Instruments Ltd

2 Blacklands Way Abingdon Business Park

Abingdon Oxfordshire **OX14 1DY United Kingdom**

Electrical Apparatus:

Optional accessory:

An Xgard Gas Detector

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.

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





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

IEC 60079-1: 2003

Edition: 5 IEC 61241-0: 2004

Edition: 1

IEC 61241-1: 2004

Edition: 1

Electrical apparatus for explosive gas atmospheres - Part 0: General requirements

Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'

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Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements

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:



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:



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



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:

Status:

Current

Issue No. 4 (2007-5-23)

Issue No. 3 (2006-11-7)

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: Optional accessory:

An Xgard Gas Detector

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:

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





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):

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IEC 60079-0: 2004

Electrical apparatus for explosive gas atmospheres - Part 0: General requirements

Edition: 4.0

IEC 60079-1: 2003

Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'

Edition: 5 IEC 61241-0: 2004

Electrical apparatus for use in the presence of combustible dust - Part 0: General

Edition: 1 IEC 61241-1: 2004

Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by

Edition: 1

enclosures "tD"

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TEST & ASSESSMENT REPORTS:

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IECEX ATR: UK/BAS/04/0829 File Reference: 04/0829



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:



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



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 \leq Tamb \leq + 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:

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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:

Baseefa (2001) Ltd.

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



MIOUNEY



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'rs 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

Electrical apparatus for explosive gas atmospheres - Part 0: General requirements

Edition: 4.0

IEC 60079-1: 2003

Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'

Edition: 5

IEC 61241-0: 2004 Edition: 1

Electrical apparatus for use in the presence of combustible dust - Part 0: General

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



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:



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

 $T80^{\circ}C T_{amb} = 50^{\circ}C$

 $T110^{\circ}C T_{amb} = 80^{\circ}C$

 $T180^{\circ}C T_{amb} = 150^{\circ}C$

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



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 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:

Position:

R S Sinclair

Managing Director

Signature: (for printed version)

1. This certificate and schedule may only be reproduced in full.

This certificate is not transferable and remains the property of the issuing body.
 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**





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 manufacture'rs 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

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IEC 60079-0: 2004

Electrical apparatus for explosive gas atmospheres - Part 0: General requirements

Edition: 4.0

IEC 60079-1 : 2003

Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'

Edition: 5

IEC 61241-0 : 2004

Electrical apparatus for use in the presence of combustible dust - Part 0: General

Edition: 1

requirements

IEC 61241-1: 2004

Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by

Edition: 1

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:

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IECEx ATR:

File Reference:

UK/BAS/04/0829



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:



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

 $T80^{\circ}C T_{amb} = 50^{\circ}C$

 $T110^{\circ}C T_{amb} = 80^{\circ}C$

 $T180^{\circ}C T_{amb} = 150^{\circ}C$

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



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)

1. This certificate and schedule may only be reproduced in full.

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Certificate issued by:

Baseefa (2001) Ltd.

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





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'rs 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.

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Edition: 4.0

IEC 60079-1: 2003

Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'

Edition: 5

IEC 61241-0: 2004 Edition: 1

IEC 61241-1: 2004

requirements

Edition: 1

Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

Electrical apparatus for use in the presence of combustible dust - Part 0: General

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:

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File Reference:

UK/BAS/04/0829



Certificate No.:

IECEX BAS 05.0043X

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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:



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):

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The Xgard gas detector is additionally marked:-

Ex tD A21 IP6x

 $T80^{\circ}C T_{amb} = 50^{\circ}C$

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IECEx ATR: File Reference: UK/BAS/05/0839 05/0839

Annexe:



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 \leq Tamb \leq + 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:

Signature: (for printed version)

Date:

Managing Director

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Certificate issued by:

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IECEX BAS 05.0043X

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Issue No.: 0

Page 2 of 3

Manufacturer:

Crowcon Detection Instruments Limited

2 Blacklands Way Abingdon Business Park

Abingdon Oxfordshire OX14 1DY United Kingdom

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Edition: 5

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File Reference:

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Page 3 of 3

Schedule

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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: