

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 08.0028X

issue No ·4

Status:

Current

Date of Issue:

2016-10-17

Page 1 of 4

Issue No. 4 (2016-10-17) Issue No. 3 (2014-8-6) Issue No. 2 (2012-12-6) Issue No. 1 (2008-11-6) Issue No. 0 (2008-9-17)

Certificate history:

Applicant:

Crowcon Detection Instruments Ltd

172 Brook Drive Milton Park Abingdon Oxfordshire OX14 4SD United Kingdom

Equipment:

TXgard-IS+

Optional accessory:

Type of Protection:

Intrinsic Safety ia

Marking:

Ex ia IIC T4 Ga (-40°C to +65°C)

Approved for issue on behalf of the IECEx

R S Sinclair

Certification Body:

Position:

Technical 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 08.0028X

Date of Issue:

2016-10-17

Issue No.: 4

Page 2 of 4

Manufacturer:

Crowcon Detection Instruments Limited

172 Brook Drive Milton Park Abingdon Oxfordshire **OX14 4SD**

United Kingdom

Additional Manufacturing location(s):

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

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0: 2011

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-11: 2011

Edition: 6.0

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

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

TEST & ASSESSMENT REPORTS:

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

Test Report:

GB/BAS/ExTR08.0063/00 GB/BAS/ExTR16.0305/00 GB/BAS/ExTR08.0122/00

GB/BAS/ExTR12.0316/00

Quality Assessment Report:

GB/BAS/QAR06.0070/06



Certificate No.:

IECEx BAS 08.0028X

Date of Issue:

2016-10-17

Issue No.: 4

Page 3 of 4

Schedule

FOLIPMENT:

Equipment and systems covered by this certificate are as follows:

The TXgard-IS+ is a gas detector capable of detecting a wide range of non-combustible gasses. The sensor which is in a housing attached to the side of the TXgard-IS+ determines the gas types that the apparatus will detect. The Personality Module inside the detector is either an Oxygen Personality Module that is specific to the oxygen detecting variant, or is a Toxic Gas Personality Module that is common to all toxic gas detecting variants. Calibration and the selection of different features is carried out via a three button keypad and external LCD. The detector uses a two terminal 4-20mA loop for power input and signal output.

Input Parameters:

 $U_i = 28V$ $C_i = 0$

 $I_i = 93mA L_i = 0$

 $P_i = 0.66W$

SPECIFIC CONDITIONS OF USE: YES as shown below:

 To minimize the risk of electrostatic discharge the apparatus must only be cleaned using a damp cloth.



00	tificate	AI-	
(.ei	meare	INO	-

IECEx BAS 08.0028X

Date of Issue:

2016-10-17

Issue No.: 4

Page 4 of 4

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

Variation 4.1

To permit minor electrical and mechanical changes that do not affect the existing assessment.

ExTR: GB/BAS/ExTR16.0305/00	File Reference: 16/0385	



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

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

0-	4:1		L-		-	
Ce	ш	IUd	æ	IN	O	

IECEx BAS 08.0028X

issue No.:3

Certificate history: Issue No. 3 (2014-8-6) Issue No. 2 (2012-12-6) Issue No. 1 (2008-11-6) Issue No. 0 (2008-9-17)

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:

TXgard-IS+

Optional accessory:

Type of Protection: Intrinsic Safety ia

Marking:

Ex ia IIC T4 Ga (-40°C to +65°C)

Approved for issue on behalf of the IECEx

Certification Body:

R S Sinclair

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 08.0028X

Date of Issue:

2014-08-06

Issue No.: 3

Page 2 of 4

Manufacturer:

Crowcon Detection Instruments Limited

172 Brook Drive Milton Park Abingdon Oxfordshire **OX14 4SD United Kingdom**

Additional Manufacturing location

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

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0: 2011

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-11: 2011

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition: 6.0

IEC 60079-26: 2006

Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga

Edition: 2

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

Test Report:

GB/BAS/ExTR08.0063/00

GB/BAS/ExTR08.0122/00

GB/BAS/ExTR12.0316/00

Quality Assessment Report:

GB/BAS/QAR06.0070/03



Certificate No.:

IECEx BAS 08.0028X

Date of Issue:

2014-08-06

Issue No.: 3

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The TXgard-IS+ is a gas detector capable of detecting a wide range of non-combustible gasses. The sensor which is in a housing attached to the side of the TXgard-IS+ determines the gas types that the apparatus will detect. The Personality Module inside the detector is either an Oxygen Personality Module that is specific to the oxygen detecting variant, or is a Toxic Gas Personality Module that is common to all toxic gas detecting variants. Calibration and the selection of different features is carried out via a three button keypad and external LCD. The detector uses a two terminal 4-20mA loop for power input and signal output.

Input Parameters:

 $U_i = 28V$ $C_i = 0$ $I_i = 93mA$ $L_i = 0$ $P_i = 0.66W$

CONDITIONS OF CERTIFICATION: YES as shown below:

1.	To minimize the risk of electrostatic discharge the apparatus must only be cleaned using a damp cloth.
	The state of the s



Certificate No.:

IECEx BAS 08.0028X

Date of Issue:

2014-08-06

Issue No.: 3

Page 4 of 4

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

Variation 3.1

Reference:	14/0639				
					
		~		 	



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 08.0028X

issue No.:2

Certificate history:

Status:

Current

Issue No. 2 (2012-12-6) Issue No. 1 (2008-11-6) Issue No. 0 (2008-9-17)

Date of Issue:

2012-12-06

Page 1 of 4

Applicant:

Crowcon Detection Instruments Ltd

2 Blacklands Way

Abingdon Business Park

Abingdon Oxfordshire **OX14 1DY**

United Kingdom

Electrical Apparatus:

TXgard-IS+

Optional accessory:

Type of Protection:

Intrinsic Safety ia

Marking:

Ex ia IIC T4 Ga (-40°C to +65°C)

Approved for issue on behalf of the IECEx

Certification Body:

Position:

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 08.0028X

Date of Issue:

2012-12-06

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: 2011

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-11: 2011-

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

06

Edition: 6.0

IEC 60079-26: 2006

Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga

Edition: 2

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

Test Report:

GB/BAS/ExTR08.0063/00

GB/BAS/ExTR08.0122/00

GB/BAS/ExTR12.0316/00

Quality Assessment Report:

GB/BAS/QAR06.0070/03



Certificate No.:

IECEx BAS 08.0028X

Date of Issue:

2012-12-06

Issue No.: 2

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The TXgard-IS+ is a gas detector capable of detecting a wide range of non-combustible gasses. The sensor which is in a housing attached to the side of the TXgard-IS+ determines the gas types that the apparatus will detect. The Personality Module inside the detector is either an Oxygen Personality Module that is specific to the oxygen detecting variant, or is a Toxic Gas Personality Module that is common to all toxic gas detecting variants. Calibration and the selection of different features is carried out via a three button keypad and external LCD. The detector uses a two terminal 4-20mA loop for power input and signal output.

Input Parameters:

 $U_i = 28V$ $C_i = 0$

 $I_i = 93mA L_i = 0$

 $P_i = 0.66W$

CONDITIONS OF CERTIFICATION: YES as shown below:

Andread Contract Cont		A 44		
Contraction of the second				
The state of the s				
-				
MANAGEMENT STATEMENT OF STREET, STATEMENT OF STATEMENT OF STREET, STATEMENT OF				
-			-	

1. To minimize the risk of electrostatic discharge the apparatus must only be cleaned using a damp cloth.



Certificate No.:

IECEx BAS 08.0028X

Date of Issue:

2012-12-06

Issue No.: 2

Page 4 of 4

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

Variation 2.1

To permit a minor label change not affecting the original assessment.

Variation 2.2

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

(TR:	GB/BAS/ExTR	212.0316/00		File Reference:	12/0885	
***************************************			Term terminan serimenter en en electrologica (1000 (12 art) (1000 (12 art) (1000 (12 art) (1000 (100) (1000 (100) (1000 (1000 (100) (1000 (100) (1000 (1000 (1000 (100) (1000 (100) (1000 (1000 (1000 (100) (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (100) (1000 (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000 (100) (1000) (1000 (100) (1000 (100) (100) (100	other harmonic resistance de colonic de la colonica colonica de la colonica de la colonica de la colonica de l		



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 08.0028X

issue No.:1

Certificate history:

Status

Current

Issue No. 1 (2008-11-6) Issue No. 0 (2008-9-17)

Date of Issue:

2008-11-06

Page 1 of 4

Applicant:

Crowcon Detection Instruments Ltd

2 Blacklands Way Abingdon Business Park

Abingdon Oxfordshire **OX14 1DY**

United Kingdom

Electrical Apparatus:

TXgard-IS+

Optional accessory:

Type of Protection:

Intrinsic Safety ia

Marking:

Ex ia IIC T4 Ga (-40°C to +65°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 Rockhead Business Park Staden Lane Buxton Derbyshire SK17 9RZ **United Kingdom**





Certificate No.:

IECEx BAS 08.0028X

Date of Issue:

2008-11-06

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 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 60079-11: 2006

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition: 5

IEC 60079-26: 2006

Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga

Edition: 2

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

Test Report:

GB/BAS/ExTR08.0063/00 GB/BAS/ExTR08.0122/00

Quality Assessment Report: GB/BAS/QAR06,0070/00



Certificate No.:

IECEx BAS 08.0028X

Date of Issue:

2008-11-06

Issue No.: 1

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The TXgard-IS+ is a gas detector capable of detecting a wide range of non-combustible gasses. The sensor which is in a housing attached to the side of the TXgard-IS+ determines the gas types that the apparatus will detect. The Personality Module inside the detector is either an Oxygen Personality Module that is specific to the oxygen detecting variant, or is a Toxic Gas Personality Module that is common to all toxic gas detecting variants. Calibration and the selection of different features is carried out via a three button keypad and external LCD. The detector uses a two terminal 4-20mA loop for power input and signal output.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. To minimize the risk of electrostatic discharge the apparatus must only be cleaned using a damp cloth.



Certificate No.:

IECEx BAS 08.0028X

Date of Issue:

2008-11-06

Issue No.: 1

Page 4 of 4

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

Variation 1.1

To permit minor electrical and mechanical changes that do not affect the existing assessment.

ExTR: GB/BAS/ExTR08.0122/00

File Reference: 08/0736



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 08,0028X

issue No.:0

Certificate history:

Status:

Current

Date of Issue:

2008-09-17

Page 1 of 3

Applicant:

Crowcon Detection Instruments Limited

2 Blacklands Way Abingdon Business Park

Abingdon Oxfordshire **OX14 1DY**

United Kingdom

Electrical Apparatus:

TXgard-IS+

Optional accessory:

Type of Protection:

Intrinsic Safety la

Marking:

Ex la IIC T4 Ga (-40°C to +65°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 **Rockhead Business Park** Staden Lane Buxton Derbyshire SK17 9RZ **United Kingdom**





Certificate No.:

IECEX BAS 08,0028X

Date of Issue:

2008-09-17

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 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 60079-11: 2006

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition: 5

IEC 60079-26 : 2008

Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga

Edition: 2

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

Test Report:

GB/BAS/ExTR08.0063/00

Quality Assessment Report: GB/BAS/QAR06.0070/00



Certificate No.:

IECEX BAS 08,0028X

Date of Issue:

2008-09-17

Issue No.: 0

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The TXgard-IS+ is a gas detector capable of detecting a wide range of non-combustible gasses. The sensor which is in a housing attached to the side of the TXgard-IS+ determines the gas types that the apparatus will detect. The Personality Module inside the detector is either an Oxygen Personality Module that is specific to the oxygen detecting variant, or is a Toxic Gas Personality Module that is common to all toxic gas detecting variants. Calibration and the selection of different features is carried out via a three button keypad and external LCD. The detector uses a two terminal 4-20mA loop for power input and signal output.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. To minimize the risk of electrostatic discharge the apparatus must only be cleaned using a damp cloth.