

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 ULD 11.0004X

Issue No: 3

Certificate history:

Status:

Current

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Issue No. 3 (2013-12-02) Issue No. 2 (2012-07-02)

Issue No. 1 (2012-02-19)

Issue No. 0 (2011-06-01)

Date of Issue:

2013-12-02

Applicant:

Crowcon Detection Instruments Ltd.

2 Blacklands Way

Abingdon Business Park,

ABINGDON, Oxfordshire, OX14 1DY United Kingdom

Electrical Apparatus:

Gas-Pro, hand-held battery operated Gas Detector

Optional accessory:

Pump, Flow Plate

Type of Protection:

d ia

Marking:

Ex d ia IIC T4 Gb Tamb: -20 °C to +55 °C

IECEx ULD 11.0004X

Approved for issue on behalf of the IECEx

Jasmin Omerovic

Certification Body:

Position:

Certification Project Engineer

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:

UL International Demko A/S Borupvang 5A, DK-2750 Ballerup Denmark







Issue No: 3

Certificate No: IECEx ULD 11.0004X

Date of Issue: 2013-12-02 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 : 2004 Electrical apparatus for explosive gas atmospheres - Part 0: General requirements

Edition:4.0

IEC 60079-0 : 2007-10 Explosive atmospheres - Part 0:Equipment - General requirements

Edition:5

IEC 60079-1: 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:6

IEC 60079-11: 2006 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:5

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:

DK/ULD/ExTR11.0005/00 DK/ULD/ExTR11.0005/01 DK/ULD/ExTR11.0005/02

Quality Assessment Report:

GB/BAS/QAR06.0070/03





Certificate No:

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Issue No: 3

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2013-12-02

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

CONDITIONS OF CERTIFICATION: YES as shown below:

The equipment is X-marked and shall be marked with the followings warnings: The Gas-Pro shall only be connected to the charging circuit or communications interface circuit, using only suitably rated cables as defined in the Electrical Data, in a safe area, within a maximum ambient temperature of 0 °C to +40 °C.





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

Addition of new Main PCB types ECAD-000106 and ECAD-000106-01. Addition of alternative overmould material types.





INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

Certificate	Nο
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IECEx ULD 11.0004X

issue No 2

Status

Certificate history Issue No. 2 (2012-7-2) Issue No. 1 (2012-2-19) Issue No. 0 (2011-5-1)

Date of Issue

2012-07-02

Page 1 of 4

Applicant

Crowcon Detaction Instruments Ltd. 2 Blacklands Way Abingdon Business Park, ABINGDON, Oxfortshire, OX14 1DY United Kingdom

Electrical Apparatus: Optional accessory

Gas-Pro, hand-held battery operated Gas Detector Pump, Flow Plate

Type of Protection:

Marking:

Ex d ia I/C T4 Gb Tamb. -20 °C to +55 °C IECEx ULD 11.0004X

Approved for issue on behalf of the IECEx Certification Body

Position:

Certification Project Engineer

Signature, (for printed version)

This certificate and schedule may only be reproduced in full.
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 The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website

Certificate issued by
UL International DEMKO A/S
Populavang SA,







IECEx ULD 11 0004X

Date of Issue

2012-07-02

Issue No 2

Page 2 of 4

Manufacturer:

Crowcon Detection Instruments Ltd., 2 Blacklands Way Abingdon Business Park, ABINGDON United Kingdom

Additional Manufacturing location (s)

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

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

IEC 60079-0 ; 2004 Electrical apparatus for explosive gas atmospheres - Part 0: General requirements

IEC 60079-0: 2007-10 Explosive atmospheres - Part 0:Equipment - General requirements

IEC 6007-01; 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" Edition: 6

Econom: 6

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety T

Edition: 5

Edition: 5

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 lest requirements as recorded in

Test Report: DK/ULD/ExTR11 0005/00

DK/ULD/ExTR11 0005/01

Quality Assessment Report:

GB/BAS/QAR06 0070/03





Certificate No

IECEx ULD 11 0004X

Date of Issue:

2012-07-02

Schedule

EQUIPMENT: Equipment and systems covered by this certificate are as follows.

Gas-Pro is a portable, hand-held, re-chargeable battery operated Gas Detector used for the detection of Combustible and Toxic gases, and oxygen depletion. The unit functions as an alarm and data-logger when secured to a person by means of a metal Grip Clip. The circuitry is housed within a polymeric enclosure with approximate dimensions of 130 mm by 83 mm by 45 mm and with orange or red over-moulding and display window. Battery charging and data transfer to the equipment is by the use of an optional charging and communications cables, for use in a safe area only. An optional pump & flow plate is available to facilitate gas sampling.

	Main PCB Assy No.	Sensors Configuration		
	(Crowcon Part Number)	Reference	Туре	
1004-1080(S013005)	S1 (2)	Toxic (Universal)		
		32 (1)	Toxic (Single)	
		S3 ⁽¹⁾	Combustible (IR)	
		S4 ⁽²⁾	Oxygen	
	1004-1047(\$1013001)	S1 (2)	Toxic (Universal)	
		S2 ⁽¹⁾	Pellistor or PID (SV max)	
		83 ⁽¹⁾	Toxic (Single)	
	S4 (2)	Oxygen		
	1004-1047-01(5013021)	S1 (2)	Toxic (Universal)	
	S2 ⁽¹⁾	Pellistor or PiD (4.25V max)		
		S3 (1)	Toxic (Single)	
NOITION	NOITIONS OF CERTIFICATION: YES a	shown below:	Oxygen	
ATTERY O	IR CONNECT TO THE FOUIPM	RNPXINA HAZARDOL	TORIC (US WARNING - DO NOT CHARGE THE RESTRICT OF THE PROPERTY	
NDERSTA ne Gas-F sing only	ID THE MANUAL BEFORE US to shall only be connected this block of the state of the s	to the charging ci	Combustible (IR) val of communications interface circuit, val of in a capo area, within a maximu local Universal	
ne Gas-Pro	has not been assessed for Peri	orazince as a Gas De	tecRelistor or PID (4.25V max)	
he Gas-F	to has not been assessed		Dowice obi Selety Related device.	
	i	S4 (2)	Oxygen	





Date of Issue

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2012-07-02

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

Correction of CoC to add missing T-code to markings on page 1 (T4)





INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Almospheres

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Date of lasse

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2012-02-19

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Applicant

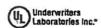
Crowcon Detection Instruments Ltd. 2 Blacklands Way Abrigdon Business Park ABINGOON, Oxfordburs, OX14 107 United Kingdom

Gas-Pro, hand-held battery operated Gas Delector Pump. Flow Plate

Exid is tiC Gb Tamb -20 °C to +55 °C IECEx ULD 11 0004X

Approved for statue on behalf of the IECEx Certification Body

Jasmin Omeroyic







IECEx ULD 11 0004X

2012-02-19

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Manufacturer

Crowcon Detection Instruments Ltd. 2 Blacklands Way Aborgson Business Park. ABINCOPON Observables Office of the Control of the Con

This certificate is issued as ventication that a sample(s) representance of production, was assessed and lessed and found to comply with sEC Standard inteller and that the manufacture's quality system, relating to the Expedicts covered by this certificate, was assessed and found to comply with the ECEX possibly system requirements. This curificate is granted subject to the conditions as set out in ECEX Scheme Rulex, IECEX 02 and Operational Documents as amended.

STANDARDS: The effected apparatus and any acceptable variations to is apported 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 eleptoristigues althougheres - Part 0. General requirements.

Eddon 4.0

Explorary althougheres - Part 0. Equipment - General requirements.

Eddon 5.

IEC 60078-1 : 2007-04 Explosive atmospheres - Part 1 Equipment protection by Nameproof encrosures "d" Labor 8

IEC 60079-11: 2008

Explosere almospheres - Part 11 Equipment protection by introductarily 15

Eastern 5

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

TEST & ASSESSMENT REPORTS.

A sample(s) of the equipment based her successivity met the examination and test requirements as recorded in

IntReport. OKULDE-TRIT 0005-00

D4-U-DEx1811 000501

Quality Assessment Report

CB 943 Q4R06 0010 03





ECE . ULD 11 0004X

Date of Issue

2017-02-19

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EQUIPMENT: Equipment and systems covered by this certificate are as follows

Hain PCB Assy No.	Sensors Configuration	
(Crowcon Part Number)	Reference	Туре
1004-1080(301)005)	81127	Taxa (Universal)
	52(1)	Taxia (Single)
	53(1)	Combustible (IR)
	34(1)	Oxygen
1004-1047(\$1013001)	51(2)	Toxiq (Universal)
	52(1)	Pelistor or PID (5V max)
	53(1)	Toxic (Single)
	34 (7)	Caygeri
1004-1047-01(\$013021)	St (7)	Toxic (Universit)
	S2(1)	Peliator or PID (4 25V max)
	53(1)	Toxic (Single)
	34 (2)	Oxygen
1004-1042(51013002)	\$1(2)	Toxid (Universal)
	82(1)	Petistor or PID (SV max)
	83(1)	Combustible (IR)
	54(2)	Oxygen
1004-1042-01(5013022)	31(2)	Total (Universal)
	32 ⁽¹⁾	Peinstor of PID (4 25V max)
	53(1)	Combustible (IR)
	\$4(2)	Oxygen

CONDITIONS OF CERTIFICATION; YES as shown below;

The equipment is X-marked and shall be marked with the followings watnings. § WARNING – DO NOT CHARGE THE BATTERY OR CONJECT TO THE EQUIPMENT IN A HAZARDOUS LOCATION. § WARNING – READ AND UNDERSTAND THE MANUAL BEFORE USE.

The Gas-Pro shall only be connected to the charging circuit or communications interface circuit, using only suitably rated cables as defined in the Electrical Data, in a safe area, within a maximum ambient temperature of 0 · C to +40 · C.

The Gas-Pro has not been assessed for Performance as a Gas Detector.

The Gas-Pro has not been assessed for Performance as a Safety Device or Safety Related device.





Geraficate No Date of faxue JEGE . ULD 11 0004X

2012-02-10

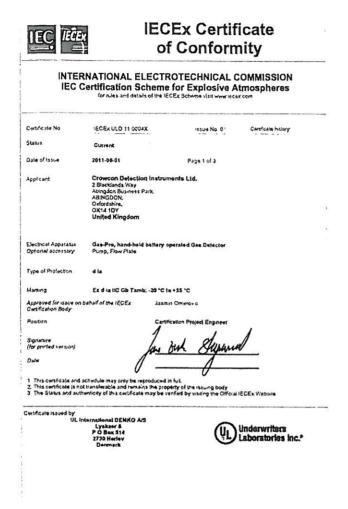
Issue Na. 1

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

Addison of red overmoulded variant









Date of Issue

IECE ULD 11 0004X

2011-06-01

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Crowcon Detection Instruments Ltd. 2 Blackines Way Abingdon Busness Park ABINGDON Oxfordshire OX14 10Y United Kingdom

Manufacturing (ocation(s)

This certificate is asseed as verification that a sample(s) representative of production, was assessed and Insted and found to comply with the IEC Standard (at below and that the manufacturer's quality system, relating to the Expiriculate covered by this contribute, was assessed and found to comply with the IECEX containty paster 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 achieving of this certificate and the identified documents was found to comply with the following standards.

EC 60079-0 ; 2004 Electrical apparatus for nucleoning gas atmospheres. Pair 0: General requirements Edition. 4.0 (EC 60079-0 ; 2007-10 Expression atmospheres - Part 0: Equipment - General requirements Edition. 5 (EC 60079-1 ; 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures of Edition. 6

IEC 60079-11: 2006 Explosure atmospheres - Part 11 Equipment protection by intrinsic safety "Earlon 5

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

TEST L ASSESSMENT REPORTS: A sample(s) of the equipment sized has successfully met the examination and test requirements as recorded in

Test Report.

OKULD ExTR11 0005:00

Quality Assessment Report

GB BAS/QAROS 0070/01





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2011-06-01

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Main PCB Assy No.	Senters Configuration		
Crawcon Part Number)	Reference	Туря	
1004-1000(5013005)	51(7)	Torre (Universal)	
	\$2(1)	Toxic (Single)	
	33(1)	Corobustble (IR)	
	84(2)	Oxygeri	
1004-1047(5:013001)	S1 (2)	Toxic (Universal)	
	52(1)	Pension or PID (SV max)	
	33 (1)	Toxic (Single)	
	3412)	Oxygen	
1004-1047-01(2013021)	\$1 (2)	Toxic (Universit)	
	52(1)	Person or PID (4 25V max)	
	53 (1)	Taxic (Single)	
	54 (2)	Oxygen	
1004-1042(\$1013002)	51 (I)	Toxic (Universal)	
	\$2(1)	Petistor or PIO (SV max)	
	53 (1)	Combustible (IR)	
	54 (2)	Oxygen	
1004-1042-01(5013022)	31 (1)	Toxic (Universit)	
	57 (1)	Pelistor or PID (4.25V max)	
	S3 (1)	Combustible (IR)	
	\$4 (2)	Oxygen	

The soupment is X-marked and that be marked with the followings warnings § WARNING - DO NOT CHARGE THE BATTERY OR CONNECT TO THE EQUIPMENT IN A HAZARCOUS LOCATION § WARNING - READ AND UNDERSTAND THE ANNUAL BEFORE USE. The Gas-Pro shall only be connected to the charging circuit or communications interface circuit, using only suitably rated cables as defined in the Electrical Data, in a safe area, within a maximum ambient temperature of 0°C to +40°C. The Gas-Pro has not been assessed for Performance as a Gas Defector. The Gas-Pro has not been assessed for use as a Safety Device or Safety Related device.



