

Issue No. 7 (2017-12-04)

Issue No. 6 (2016-04-29)

Issue No. 5 (2015-10-19)

Issue No. 4 (2015-05-20) Issue No. 3 (2013-12-02)

Issue No. 2 (2012-07-02)

Issue No. 1 (2012-02-19)

Issue No. 0 (2011-06-01)

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:	IECEx ULD 11.0004X	Issue No: 7	Certificate history
Certificate No	IECEX ULD 11.0004A	ISSUE INO. /	Certificate History

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: Gas-Pro Portable Hand-held Gas Detector

Optional accessory: Pump, Flow Plate

Type of Protection: Flameproof "db" and Intrinsic Safety "ia"

Marking:

Ex db ia IIC T4 Gb

-20°C ≤ Ta ≤ +55°C

Approved for issue on behalf of the IECEx Andrew Moffat

Certification Body:

Position: Associate Project Engineer

Signature:

(for printed version)

Date: 2017-12-04

- 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





Certificate No: IECEx ULD 11.0004X Issue No: 7

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 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-1: 2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:7.0

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

Edition:6.0

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

TEST & ASSESSMENT REPORTS:

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

Test Report:

DK/ULD/ExTR11.0005/06

Quality Assessment Report:

GB/BAS/QAR06.0070/06



Certificate No:	IECEx ULD 11.0004X	Issue No: 7

Date of Issue: 2017-12-04 Page 3 of 4

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. The circuitry is housed within a polymeric enclosure manufactured from clear polycarbonate over-moulded with static-dissipative TPE in orange, red, or black with openings in the TPE providing display windows. 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 is available to facilitate gas sampling.

Please see Annex for additional information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Only connect to Gas-Pro in a safe area for charging or communications.
- Gas-Pro must not be charged or have communication to the device, at ambient temperatures outside of the temperature range 0°C to 40°C.



Certificate No.	IECEX OLD 11.0004X	issue No. /
Date of Issue:	2017-12-04	Page 4 of 4
DETAILS OF CERTIFICATE CHAN	NGES (for issues 1 and above):	
Issue 1: Addition of red overmoulde	ed variant.	
Issue 2: Correction of CoC to add r	nissing T-code to markings on page 1 (T4).	
Issue 3: Addition of new Main PCB	types ECAD-000106 and ECAD-000106-01.	
Issue 4: Standard upgrade, change design.	e of address, Polycarbonate enclosure modification and add	ition of alternate GripClip top ring
Issue 5: Addition of alternative mar	king drawing containing info for other certification agencies.	
Issue 6: Modification of existing Ga	sPro design to reduce EMC. Alternative battery and sensors	s added to range.
	e drawing. Addition of the lower ambient charging temperatur dition of additional sensor options also incorporated. Schedul	
Annex:		
Annex to IECEx ULD 11.0004X Iss	ue 7.pdf	



Certificate No.: IECEx ULD 11.0004X

Issue No.: 7 Page 1 of 2

EQUIPMENT

The Main PCB is divided into separate power limiting nets to distribute power to processor, gas sensors, vibrator, sounder and pump drive circuitry. It interfaces to a charging and communications Interface and to the separate Display PCB. Upto 4 Gas Sensors are fitted of the infrared, pellistor, PID, toxic and oxygen types. The infrared, pellistor and PID type are suitably certified components. All sensor are located within energy limited circuitry.

The equipment is designed to be used with a defined selection of toxic/O2 electrochemical gas sensors and one or more flammable/pellistor gas sensor. The flammable/pellistor gas sensors are 'Ex db' certified components or certified equipment. Alternatively, one or more of the permitted flammable/pellistor gas sensors are certified to the intrinsically safe protection concept only.

The Main PCB types determine the type of sensors fitted as follows:

Main PCB Assy No. (Crowcon Part Number)	Sensors Configuration
1004-1080	Toxic (Universal)
(S013005)	Toxic (Single)
	Combustible (IR)
	Oxygen
1004-1047	Toxic (Universal)
(S013001)	Pellistor or PID (5V max)
	Toxic (Single)
	Oxygen
1004-1047-01	Toxic (Universal)
(S013021)	Pellistor or PID (4.25V max)
	Toxic (Single)
	Oxygen
1004-1042	Toxic (Universal)
(S013002)	Pellistor or PID (5V max)
	Combustible (IR)
	Oxygen
1004-1042-01	Toxic (Universal)
(S013022)	Pellistor or PID (4.25V max)
	Combustible (IR)
	Oxygen
ECAD-000106	Toxic (Universal)
(S013004)	Pellistor or PID (5V max)
	Pellistor or PID (5V max)
	Oxygen
ECAD-000106-01	Toxic (Universal)
(S013024)	Pellistor or PID (4.25V max)
	Pellistor or PID (4.25V max)
	Oxygen

The Display PCB consists of LCD Module, Display Processor, LED backlight, interface circuits to Main PCB and LED lights for displaying status of the unit. The LCD Module consists of LCD with backlight. The Battery is a rechargeable Li-Ion battery wired to the Main PCB. A flow plate used to facilitate the flow of gases over the sensor heads is screwed to the front of the GasPro enclosure.



Certificate No.: IECEx ULD 11.0004X

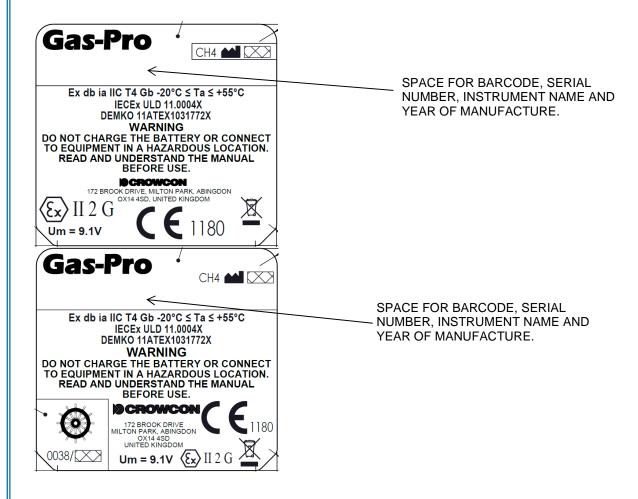
Issue No.: 7 Page 2 of 2

PARAMETERS RELATING TO THE SAFETY

Um: 9.1 V

MARKING

Marking has to be readable and indelible; it has to include the following indications:





INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:	IECEX ULD 11.0004X		Issue No: 6	Certificate history:
				Issue No. 6 (2016-04-29)
Status:	Current		Page 1 of 5	Issue No. 5 (2015-10-19)
				Issue No. 4 (2015-05-20)
Date of Issue:	2016-04-29			Issue No. 3 (2013-12-02)
				Issue No. 2 (2012-07-02)
Applicant:	Crowcon Detection Instruments L	td.		Issue No. 1 (2012-02-19)
	172 Brook Drive			Issue No. 0 (2011-06-01)
	Milton Park			
	Abingdon			
	Oxfordshire			
	OX14 4SD			
	United Kingdom			
Electrical Apparatus:	Gas-Pro Portable Hand-held Gas	Detector		
Optional accessory:	Pump, Flow Plate			
Space. accessory.	i sinp, i low i late			
Type of Protection:	Flameproof "d" and Intrinsic Safe	ty "ia"		
Marking:				
	Ex d ia IIC T4 Gb			
	-20°C ≤ Ta ≤ +55°C			
	20 0 1 10 1 100 0			
Annual Saniana and Labell of the	1505	12.2004 11.000		
Approved for issue on behalf of the Certification Body:	ie IECEX	Katy A. Holdrege		
Certification Body.				
Position:		Senior Staff Engineer		
,		Comor Clair Engineer		
Signature:				
(for printed version)				
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Date:				
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	125 20 20 20 10 1000			
 This certificate and schedule m 	ay only be reproduced in full			

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

Certificate issued by:

3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.



Certificate No:

IECEx ULD 11.0004X

Issue No: 6

Date of Issue:

2016-04-29

Page 2 of 5

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





Certificate No:

IECEx ULD 11.0004X

Issue No: 6

Date of Issue:

2016-04-29

Page 3 of 5

Manufacturer:

Crowcon Detection Instruments Ltd.

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

Additional Manufacturing location(s):

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

STANDARDS:

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

IEC 60079-0: 2011

Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-1: 2007-04

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

Edition:6

IEC 60079-11 : 2011

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

Edition:6.0

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

TEST & ASSESSMENT REPORTS:

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

Test Report:

DK/ULD/ExTR11.0005/05

Quality Assessment Report:

GB/BAS/QAR06.0070/05



Certificate No:

IECEx ULD 11.0004X

Issue No: 6

Date of Issue:

2016-04-29

Page 4 of 5

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. The circuitry is housed within a polymeric enclosure manufactured from clear polycarbonate over-moulded with static-dissipative TPE in orange, red, or black with openings in the TPE providing display windows. 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 is available to facilitate gas sampling.

See Annex for additional information.

CONDITIONS OF CERTIFICATION: YES as shown below:

See Annex for Conditions of Certification.



Certificate No:

IECEx ULD 11.0004X

Issue No: 6

Date of Issue:

2016-04-29

Page 5 of 5

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

Issue 1: Addition of red overmoulded variant

Issue 2: Correction of CoC to add missing T-code to markings on page 1 (T4).

Issue 3: Addition of new Main PCB types ECAD-000106 and ECAD-000106-01.

Issue 4: Standard upgrade, change of address, Polycarbonate enclosure modification and addition of alternate GripClip top ring design.

Issue 5: Addition of alternative marking drawing containing info for other certification agencies.

Issue 6: Modification of existing GasPro design to reduce EMC. Alternative battery and sensors added to range.

Annex:

Annex to IECEx ULD 11.0004X Issue 6.pdf

Annex to IECEx ULD 11.0004X Issue 6
Applicant: Crowcon Detection Instruments Ltd.

The Main PCB is divided into separate power limiting nets to distribute power to processor, gas sensors, vibrator, sounder and pump drive circuitry. It interfaces to a charging and communications Interface and to the separate Display PCB. Up to 4 Gas Sensors are fitted of the infrared, pellistor, PID, toxic and oxygen types. The infrared, pellistor and PID type are suitably certified components. All sensor are located within energy limited circuitry.

The equipment is designed to be used with a defined selection of $toxic/O_2$ electrochemical gas sensors and one or more flammable/pellistor gas sensor. The flammable/pellistor gas sensors are 'Ex d' certified components,

The Main PCB types determine the type of sensors fitted as follows:

Main PCB Assy No. (Crowcon Part Number)	Sensors Configuration
	Toxic (Universal)
1004-1080	Toxic (Single)
(S013005)	Combustible (IR)
	Oxygen
	Toxic (Universal)
1004-1047	Pellistor or PID (5V max)
(S013001)	Toxic (Single)
	Oxygen
ASSESSMENT DESCRIPTION AND ADDRESS.	Toxic (Universal)
1004-1047-01	Pellistor or PID (4.25V max)
(S013021)	Toxic (Single)
	Oxygen
	Toxic (Universal)
1004-1042	Pellistor or PID (5V max)
(S013002)	Combustible (IR)
	Oxygen
1001 1010 01	Toxic (Universal)
1004-1042-01	Pellistor or PID (4.25V max)
(S013022)	Combustible (IR)
	Oxygen
E04D 000400	Toxic (Universal)
ECAD-000106	Pellistor or PID (5V max)
(S013004)	Pellistor or PID (5V max)
	Oxygen
EOAD 000400 04	Toxic (Universal)
ECAD-000106-01	Pellistor or PID (4.25V max)
(S013024)	Pellistor or PID (4.25V max)
	Oxygen

The Display PCB consists of LCD Module, Display Processor, LED backlight, interface circuits to Main PCB and LED lights for displaying status of the unit. The LCD Module consists of LCD with backlight. The Battery is a re-chargeable Li-lon battery wired to the Main PCB. A flow plate used to facilitate the flow of gases over the sensor heads is screwed to the front of the GasPro enclosure.

Annex to IECEx ULD 11.0004X Issue 6 Applicant: Crowcon Detection Instruments Ltd.

Conditions of Certification

The equipment is X-marked and shall be marked with the followings warnings:

- WARNING DO NOT CHARGE THE BATTERY OR CONNECT 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 following additional previous editions of the Standards noted under the "Standards" section of this certificate were applied to integral components as itemised below. There are no significant safety related changes between these previous editions and the editions noted under the "Standards" section.

Gas Sensor Head, VQ500 Series, Manufactured by SGX Sensortech (IS) Ltd. (Previously E2V).

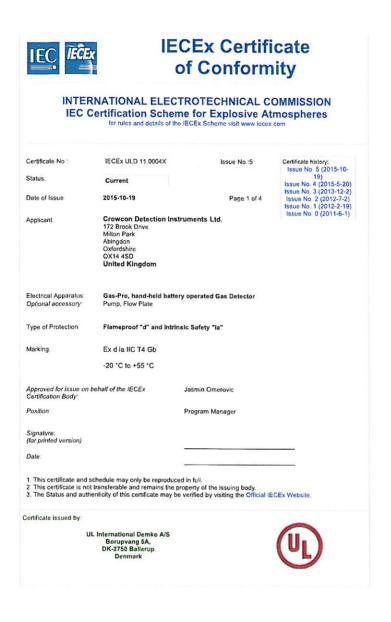
Gas Sensor Head, IR1 Series, Manufactured by SGX Sensortech (IS) Ltd. (Previously E2V).

Gas Sensor Head, 4P75 Series, Manufactured by City IEC 60079-0: 2007-10, 5th Edition, Technology Limited.

IEC 60079-0: 2007-10, 5th Edition, IEC 60079-1: 2007-04, 6th Edition

IEC 60079-0: 2007-10, 5th Edition, IEC 60079-1: 2007-04, 6th Edition

IEC 60079-1: 2007-04, 6th Edition





Certificate No.

IECEx ULD 11.0004X

United Kingdom

Date of Issue

2015-10-19

Issue No 5

Page 2 of 4

Manufacturer

Crowcon Detection Instruments Ltd. 172 Brook Drive Milton Park Abingdon Oxfordshire OX14 4SD

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

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

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

Edition: 6.0

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

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

Test Report: DK/ULD/ExTR11.0005/04

Quality Assessment Report;

GB/BAS/QAR06.0070/04

-	of Co	nformity
Certificate No.	IECEx ULD 11.0004X	
Date of Issue	2015-10-19	Issue No. 5
		Page 3 of 4
	Schedule	
QUIPMENT: quipment and systems co	overed by this certificate are as follows:	
neans of a metal Grip Clip nm by 83 mm by 45 mm r	 The circuitry is housed within a polymeric of minimediatured from clear polycarbonate over- in the TPE providing display windows. Batter charging and 	and data-logger when secured to a person by inclosure with approximate dimensions of 130 moulded with static-dissipative TPE, orange, red y charging and data transfer to the equipment is
CONDITIONS OF CERTIF Refer to Annex for addit	FICATION: YES as shown below: ional information.	

IEC IECEX		x Certificate Conformity
Certificate No	IECEx ULD 11.0004X	
Date of Issue	2015-10-19	Issue No., 5
		Page 4 of 4
DETAILS OF CERTIFICAT	TE CHANGES (for issues 1 and abo	ve):
Issue 3: Addition of new M Issue 4: Standard upgrade top ring design	to add missing T-code to markings ain PCB types ECAD-000106 and EC	AD-000106-01. enclosure modification and addition of alternate GripClip
	Annex: Annex to IECEx UL	D 11 0004X Issue 5 pdf

IECEx ULD 11.0004X Issue No.:5
Crowcon Detection Instruments Ltd.

The Main PCB is divided into separate power limiting nets to distribute power to processor, gas sensors, vibrator, sounder and pump drive circuitry. It interfaces to a charging and communications Interface and to the separate Display PCB. Up to 4 Gas Sensors are fitted of the infrared, pellistor, PID, toxic and oxygen types. The infrared, pellistor and PID type are suitably certified components. All sensors are located within energy limited circuitry.

The equipment is designed to be used with a defined selection of toxic/O2 electrochemical gas sensors and one or more flammable/pellistor gas sensor. The flammable/pellistor gas sensors are 'Ex d' certified components,

The Main PCB types determine the type of sensors fitted as follows:

Main PCB Assy No. (Crowcon Part Number)	Sensors Configuration
1004-1080	Toxic (Universal)
(S013005)	Toxic (Single)
	Combustible (IR)
	Oxygen
1004-1047	Toxic (Universal)
(S013001)	Pellistor or PID (5V max)
	Toxic (Single)
	Oxygen
1004-1047-01	Toxic (Universal)
(S013021)	Pellistor or PID (4.25V max)
	Toxic (Single)
	Oxygen
1004-1042	Toxic (Universal)
(S013002)	Pellistor or PID (5V max)
	Combustible (IR)
	Oxygen
1004-1042-01	Toxic (Universal)
(S013022)	Pellistor or PID (4.25V max)
	Combustible (IR)
	Oxygen
ECAD-000106	Toxic (Universal)
(S013004)	Pellistor or PID (5V max)
	Pellistor or PID (5V max)
	Oxygen
ECAD-000106-01	Toxic (Universal)
(S013024)	Pellistor or PID (4.25V max)
70.11	Pellistor or PID (4.25V max)
	Oxygen

IECEX ULD 11.0004X Issue No.:5
Crowcon Detection Instruments Ltd.

The Display PCB consists of LCD Module, Display Processor, LED backlight, interface circuits to Main PCB and LED lights for displaying status of the unit. The LCD Module consists of LCD with backlight. The Battery is a re-chargeable Li-lon battery wired to the Main PCB. A flow plate used to facilitate the flow of gases over the sensor heads is screwed to the front of the GasPro enclosure.

The ambient temperature ranges are:

Safe Area:

0 °C to +40 °C.

Hazardous Area:

-20 °C to +55 °C.

Electrical data

Intrinsically safe specifications:

U_m:

9.1 V

Conditions of Certification

WARNING – DO NOT CHARGE THE BATTERY OR CONNECT 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 following additional previous editions of the Standards noted under the "Standards" section of this certificate were applied to integral components as itemised below. There are no significant safety related changes between these previous editions and the editions noted under the "Standards" section.

Gas Sensor Head, VQ500 Series, Manufactured by SGX Sensortech (IS) Ltd. (Previously E2V).

Gas Sensor Head, IR1 Series, Manufactured by SGX Sensortech (IS) Ltd. (Previously E2V).

Gas Sensor Head, 4P75 Series, Manufactured by City Technology Limited.

IEC 60079-0: 2007-10, 5th Edition, IEC 60079-1: 2007-04, 6th Edition

IEC 60079-0: 2007-10, 5th Edition,

IEC 60079-1: 2007-04, 6th Edition

IEC 60079-0: 2007-10, 5th Edition, IEC 60079-1: 2007-04, 6th Edition



INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:

IECEx ULD 11.0004X

Issue No: 4

Certificate history:

Status:

Current

Page 1 of 6

Issue No. 4 (2015-05-20) 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:

2015-05-20

Applicant:

Crowcon Detection Instruments Ltd.

172 Brook Drive Milton Park Abingdon Oxfordshire OX14 4SD

United Kingdom

Electrical Apparatus:

Gas-Pro, hand-held battery operated Gas Detector

Optional accessory:

Pump, Flow Plate

Type of Protection:

Flameproof "d" and Intrinsic Safety "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

Certification Body:

Jasmin Omerovic

Position:

Signature: (for printed version)

Date:

Program Manager

- 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





Certificate No:

IECEx ULD 11.0004X

Issue No: 4

Date of Issue:

2015-05-20

Page 2 of 6

Manufacturer:

Crowcon Detection Instruments Ltd.

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

Additional Manufacturing

location(s):

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

STANDARDS:

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

IEC 60079-0: 2011

Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-1: 2007-04

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

Edition:6

IEC 60079-11:2011

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

Edition:6,0

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

TEST & ASSESSMENT REPORTS:

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

Test Report:

DK/ULD/ExTR11.0005/00 DK/ULD/ExTR11.0005/03 DK/ULD/ExTR11.0005/01

DK/ULD/ExTR11.0005/02

Quality Assessment Report:

GB/BAS/QAR06,0070/04



Certificate No:

IECEx ULD 11.0004X

Issue No: 4

Date of Issue:

2015-05-20

Page 3 of 6

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 manufactured from clear polycarbonate over-moulded with static-dissipative TPE, orange, red, & black, with openings in the TPE providing display windows. 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.

SANTA ON SANTONIA STONE MADE	Sensors Configuration	
Main PCB Assy No. (Crowcon Part Number)	Reference	Туре
1004-1080 (S013005)	S1 ⁽²⁾	Universal Toxic
	S2 ⁽¹⁾	Single Toxic
	S3 ⁽¹⁾	IR
	S4 ⁽²⁾	Oxygen
1004-1047 (S013001)	S1 ⁽²⁾	Universal Toxic
	S2 ⁽¹⁾	Pellistor/PID (5V max)
	S3 ⁽¹⁾	Single Toxic
	S4 ⁽²⁾	Oxygen
1004-1047-01 (S013021)	S1 ⁽²⁾	Universal Toxic
	S2 ⁽¹⁾	Pellistor/PID (4.25V max)
	S3 ⁽¹⁾	Single Toxic
	S4 ⁽²⁾	Oxygen
1004-1042 (S013002)	S1 ⁽²⁾	Universal Toxic
	S2 ⁽¹⁾	Pellistor/PID (5V max)
	S3 ⁽¹⁾	1R
	S4 ⁽²⁾	Oxygen
1004-1042-01 (S013022)	S1 ⁽²⁾	Universal Toxic
	S2 ⁽¹⁾	Pellistor/PID (4.25V max)
	S3 ⁽¹⁾	IR
	S4 ⁽²⁾	Oxygen
ECAD-000106 (S013004)	S1 ⁽²⁾	Universal Toxic
	S2 ⁽¹⁾	Pellistor/PID (5V max)
	S3 ⁽¹⁾	Pellistor/PID (5V max)
e e	S4 ⁽²⁾	Oxygen
ECAD-000106-01 (S013024)	S1 ⁽²⁾	Universal Toxic
	S2 ⁽¹⁾	Pellistor/PID (4.25V max)
	S3 ⁽¹⁾	Pellistor/PID (4.25V max)
	S4 ⁽²⁾	Oxygen
Notes: (1) Suitably Certified Senso	ors; (2) Non Certified Sensors.	90000



Certificate No:

IECEx ULD 11.0004X

Issue No: 4

Date of Issue:

2015-05-20

Page 4 of 6

CONDITIONS OF CERTIFICATION: YES as shown below:

The equipment is X-marked and shall be marked with the followings warnings:



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2015-05-20

Page 5 of 6

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 following additional previous editions of the Standards noted under the "Standards" section of this certificate were applied to integral components as itemised below. There are no significant safety related changes between these previous editions and the editions noted under the "Standards" section.

Gas Sensor Head, VQ500 Series, Manufactured by SGX Sensortech (IS) Ltd. (Previously E2V).

IEC 60079-0: 2007-10, 5th Edition, IEC 60079-1: 2007-04, 6th Edition

Gas Sensor Head, IR1 Series, Manufactured by SGX Sensortech IEC 60079-0: 2007-10, 5th Edition, IEC 60079-1: (IS) Ltd. (Previously E2V).

2007-04, 6th Edition

Gas Sensor Head, 4P75 Series, Manufactured by City Technology IEC 60079-0: 2007-10, 5th Edition, IEC 60079-1:

2007-04, 6th Edition



Certificate No:

IECEx ULD 11.0004X

Issue No: 4

Date of Issue:

2015-05-20

Page 6 of 6

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

Issue 1: Addition of red overmoulded variant

Issue 2: Correction of CoC to add missing T-code to markings on page 1 (T4).

Issue 3: Addition of new Main PCB types ECAD-000106 and ECAD-000106-01.

Issue 4: Standard upgrade, change of address, Polycarbonate enclosure modification and addition of alternate GripClip top ring design.



INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres for ules and details of the IECEx Scheme visit www.lecux.com

Certificate No

IECEx ULD 11.0004X

Current

Page 1 of 4

Crowcon Detection Instruments Ltd. 2 Blacklands Way Abingdon Business Park. ABINODON, Oxfordshire, OX14 1DY United Kingdom

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

Type of Protection.

Exid ia IIC T4 Gb Tamb. -20 °C to +55 °C IECEx ULD 11.0004X

Approved for issue on behalf of the IECEx Certification Body:

Jasmin Omerovic

Position.

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

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





IECEx ULD 11,0004X

2013-12-02

Issue No 3

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 appetitied in the schodule 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

Technol 5 1: 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Explosive atmospheres - Part 11 Equipment protection by Intrinsic safety "T 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



IECEX ULD 11 0004X

Date of Issue:

2013-12-02

Issue No. 3

Page 3 of 4

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

Gas-Pro is a portable, hand-held, re-chargeable battary operated Gas Detector used for the detection of Combustible and Toxic gasses, and oxygen depletion. The unit functions as an alarm and data-logger when secured to a person by means of a metal Grip Cip. The circuitry is housed within a polymeric enclosure with approximate dimensions of 130 mm by 83 mm by 45 mm manufactured from clear polycarbonate over-moulded with static-dissipative TPE, orrange, red, & black, with openings in the TPE providing display windows. 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 Configu	ration
(Crowcon Part Number)	Reference	Туре
1004-1080 (S013005)	S1 ⁽²⁾	Universal Toxic
	S2 (1)	Single Toxic
	S3 ⁽¹⁾	IR
	S4 ⁽²⁾	Oxygen
1004-1047 (S013001)	S1 ⁽²⁾	Universal Toxic
	52 (1)	Pelistor/PID (5V max)
	53 (1)	Single Taxic
	54 (2)	Oxygen
1004-1047-01 (5013021)	S1 (2)	Universal Toxic
	52 (1)	Pelistor/PID (4.25V max)
ONDITIONS OF CERTIFICATION; YES	aggirown below:	Single Toxic
he equipment is X marked and shall MANING 2 58 NO92 CHARGE THE BA	TERT OR CONNE	CTUTOTHE FORSPMENT IN A HAZABROUS LOC
ARMING - BENEFEHARGE THE BA ARNING - READ AND UNDERSTAND he Gas-Pro shall only be connected uilably rated cables as defined in the 10°C to ±40°C	TEER? OR CONNE THE MANUAL BEF O 19 4 Frairing Circ Circles of Dola, in S4 (2)	CTUTOTHE FORSPMENT IN A HAZABROUS LOC
IARMING LINE WORLCHARGE THE BA IARNING - READ AND UNDERSTAND the Ges-Pro shall only be connected uilably rated cables as defined in the	TEFF OR CONNE THE MANUAL BEF O LIGHT TRIPING CITE CONTROL DOLL, IN S4 (2) S1 (2)	TYPOTRE EXTERMENT IN A HAZARDOUS LOCA PREMISSIPPID (5V max) PURPLE COMMUNICATIONS INTERIOR CITCUIT, USING OR
ARMING - BENEFEHARGE THE BA ARNING - READ AND UNDERSTAND he Gas-Pro shall only be connected uilably rated cables as defined in the 10°C to ±40°C	TEER? OR CONNE THE MANUAL BEF O 19 4 Frairing Circ Circles of Dola, in S4 (2)	THO THE ESTIPMENT IN A HAZARDOUS LOCA PRESUSERPID (SV max) Unper communications interface circuit, using of Case and within a maximum emblem tempor Case and within a maximum emblem tempor
ARMING - BENEFEHARGE THE BA ARNING - READ AND UNDERSTAND he Gas-Pro shall only be connected uilably rated cables as defined in the 10°C to ±40°C	TEFF OR CONNE THE MANUAL BEF O LIGHT TRIPING CITE CONTROL DOLL, IN S4 (2) S1 (2)	다가야케한 ERBIPMENT IN A HAZARDOUS LOCA PREMISERPID (SV max) Imper commiscations interface circum, using or Selfa area, within a maximum embiant temper Drygen. Universal Toxic
ARRHING - NEAD AND UNDERSTAND ARRHING - READ AND UNDERSTAND the Gas-Pro shall only be connected uitably rated cables as defined in the (1 °C to +40 °C 1004-1042-01 (S013022)	TEET? OR CONNE THE MANUAL BEF O DESTRUCTION OF CON- SA (2) S1 (2) S2 (1)	TYPOYPHE EPISIPMENT IN A HAZARDOUS LOC/ PREMISEPPID (5V max) Inject Constitutionation interface circuit, using or optiones, within a maximum ambient tempor bygon on the circuit of the circuit of Universal Toxic Pelistor/PID (4.25V max)
ARMING - BENEFEHARGE THE BA ARNING - READ AND UNDERSTAND he Gas-Pro shall only be connected uilably rated cables as defined in the 10°C to ±40°C	EFFT OR CONNE THE MANUAL BEF O DESTRUCTION CITY STATE OF THE PROPERTY OF THE STATE OF THE PROPERTY OF THE PROP	TYPOYME EMPLOYMENT IN A HAZARDOUS LOC. PREMEMBERTO (SV max) INFO COMMUNICATIONS INTERESE CIRCUIT, USING DI POST COMMUNICATION INTERESE CIRCUIT, USING DI POST COMMUNICATION DE MANIMUM EMPLOYMENT DE
ARRHING - NEAD AND UNDERSTAND ARRHING - READ AND UNDERSTAND the Gas-Pro shall only be connected uitably rated cables as defined in the (1 °C to +40 °C 1004-1042-01 (S013022)	TERM OR CONNE THE MANUAL BEF OM STATEMENT OF CITY TO SERVICE OF CITY SA (2) S2 (1) S3 (1) S4 (2) S4 (2) S5 (2) S5 (2) S5 (2) S5 (3)	CMOVIME EMBPMENT IN A HAZARDOUS LOCATION OF THE MASSETPID (5V most not received to the control of the control o
ARRHING - NEAD AND UNDERSTAND ARRHING - READ AND UNDERSTAND the Gas-Pro shall only be connected uitably rated cables as defined in the (1 °C to +40 °C 1004-1042-01 (S013022)	THE MANUAL BET THE MANUAL BET O MENTANCING CITY SA (2) S2 (1) S3 (1) S4 (2) S1 (2)	CHOYME ENGINEET IN A HAZARDOUS LOCATE LABORITY OF THE LABORITY
ASSMIKE'S 4 DE WEST-CHARGE THE BA ARNING - READ AND UNDERSTAND he Ges-Pro shall only be connected uitably rated tables as defined in the 1.0 °C to ±40 °C 1004-1042-01 (S013022)	TERM OR CONNE THE MANUAL BEF OM STATEMENT OF CITY TO SERVICE OF CITY SA (2) S2 (1) S3 (1) S4 (2) S4 (2) S5 (2) S5 (2) S5 (2) S5 (3)	CHOYME EXPERIENT IN A HAZARDOUS LOC. PER LABERPIO (SV max) INFO COMMUNICATIONS INTERESE CIRCUIT, USING OI POST CASE AND A MARINAM AND
ARRHING - NEAD AND UNDERSTAND ARRHING - READ AND UNDERSTAND the Gas-Pro shall only be connected uitably rated cables as defined in the (1 °C to +40 °C 1004-1042-01 (S013022)	TERMOR CONNE TUE MANUAL BEF OF THE MANUAL BEF SA (2) SA (2)	C-VPOYME ENDEMIENT IN A HAZARDOUS LOCATE INTERPRETATION OF THE MEDITAL OF THE MED
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ASSMIKE'S 4 DE WEST-CHARGE THE BA ARNING - READ AND UNDERSTAND he Ges-Pro shall only be connected uitably rated tables as defined in the 1.0 °C to ±40 °C 1004-1042-01 (S013022)	TERMOR CONNE TUE MANUAL BEF OF THE MANUAL BEF SA (2) SA (2)	CHOYME EXPERIENT IN A HAZARDOUS LOC. PRENDERPIN (SV max) IMP COMMUNICATIONS INTERFACE CIRCUIT, USING OF Disperse, within a manimum embient temper Universal Toxic Pelistor/PID (4.25V max) IR Oxygen Universal Toxic Pelistor/PID (5V max) Pelistor/PID (5V max) Oxygen Universal Toxic



Certificate N

Date of Issue

IECEx ULD 11 0004X

2013-12-02

Issue No. 3

Page 4 of 4

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 for tubes and details of the IECE'S Scheme visit winds lectal scen

Certificate No	SECERULD 11 0004X	Europe No. 2	Certificate busing Issue No. 2 (2012-7-2)
Status	Current		Issue No 1 (2012-2-12) Issue No 0 (2011-6-1)
Date of Issue	2012-07-02	Page 1 of 4	
Аррісані	Crowcon Dytection: 2 Blacklands Way Abingdon Business Par ABINGDON, Osfordshire, OX14 TDY United Kingdom		
Electrical Apparatus Optional acceptory	Gas Pre, hand-held b: Pump, Flow Plats	attery operated Gas Detector	
Type of Protection	du		
Aunking:	Exidia IIC T4 Gb Tar IECEx ULD 11.0004)		
Approved for issue on Certification Body	behalf of the IECEs	Jasmin Omerovic	
Position.		Certification Project Engineer	
Signature, (for printed version)		2	
Date			
2. This certificate is no	schedule may only be repri t transferable and remains enditing of this certificate in	oduced in full. the property of the issuing body say be verified by visiting the Otlo.	ntieces Wabiqu
Gertificals respect by			
ÚC Ia	ternational DEMKO A/3 Berupyang SA, DK-2750 Ballerup Denmark	(VL	Underwriters Laboratories Inc.*



IECEX ULD 11 0004X

Date of Issue.

2012-07-02

Issue No 2

Manufacturer

Crowcon Detection Instruments Ltd. 2 Blacklands Way Abingdon Businets Park. ABINGDON Odotshile OX14 10Y United Kingdom

Additional Manufacturing location

This cartificate it issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard fit below and that the mathiticituring quality system, relating to the Ex products covered by this certificate, was assessed and found is comply with the IECE CAUSHy system requirements. In certificate is granted subject to the conditions as set out in IECEs Scheme Rules, IECEs Q2 and Operational Documents as serviced in the Conditions as set out in IECEs Scheme Rules, IECEs Q2 and Operational Documents as manded.

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

IEC 60079-0: 2004 Electrical apparatus for explosive gas atmospheres - Part 0: General requirements Edition: 4.0

Edition: 4.0
IEC 60079-0: 2007-10
Explosine almospheres - Part O Equipment - General requirements Earlier - Part O Equipment - Owneral requirements Earlier - Part O Equipment - Owneral requirements - Part O Equipment - Owneral requirements - Part O Equipment -

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[EC 60073-1]: 2007-04
Explorite abtrouphers. Part 1: Equipment protection by itsmeption enclosures of Eddont. 6

Explosers atmospheres - Part 11: Equipment protection by attribute safety T Entiron; 5

This Certificate down not indicate compliance with oversical 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 successfuly met the examination and lest requirements as recorded in

Test Report: OKAR D'EsTRIT 0005-00

DKALDE/TRU COSOL

Quality Assessment Report,

GB-BAS/QAR06 D07C-03



ECE# ULD 11 0004X

Date of Issue:

2012-07-02

Issue No : 2

Page 3 of 4

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

Gas-Pro is a portable, hand-held, re-changeable bettery operated Gas Defector used for the detection of Combusible and Toric gases, and organ depiction. The soft functions as an atom and data logger when secured to a person by means of a metal Crip Crip. The circuity is housed within a polyment endown with approximate dimensions of 130 metals by 5 me and with renge or to do ver-moultaining and display window. Balbery changing and data transfer to the occupant is by the use of an optional charging and commandications cables, for use in a sale were optional pump & flow plant is available to facilitate gas pampling.

	Main PCB Axay No. (Crevicos Part Number)	Sensors Configuration	
		Reference	Туре
	1004-1080(\$013005)	51 (2)	Toxic (Universal)
		25 (s)	Toxic (Single)
		33 ⁽¹⁾	Combustole (IR)
		34 (2)	Oxygen
	1004-1047(31013001)	51 (2)	Toxic (Universal)
		32 ⁽¹⁾	Pelistor or PIO (SV must)
		EJ (II)	Texts (Single)
		54 (2)	Oxygen
	1004-1047-01(5013021)	51 ⁽²⁾	Texic (Universel)
		57 (I)	Petisfor or PiD (4.25V max)
1900	707 10	53 (1)	Toris (Single)
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ins-Pro	Puzz not been assessed for Pers	collected and in Class Class	L-Ballistor or PID (4.25V mm)
Gas-P	to has not been assessed	ogjete as a Safety	Dante chickenty Related device.
200	ZONONE	54 (A)	Oxygen
	Notes:(1) Surtably Corased Se	mors(2) Non Certified	Sensors



Certificale No Date of have

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2012-07-02

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for Haues 1 and above); Correction of CoC to add creating T-code to markings on page 1 (T4)



INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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Date of Issue	2912-92-19	Page 3 at 4			
Appropri	Cipricon Dylection 3 Buckleds Visy Abrydon But (**** ?** AbiNGOM Calerahim, CX14 107 United Kingdom				
Object of the 18th A	Gas-Pre, hand-hole b Pump Flore Plate	allegy operated the Detect	w		
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turing	Exid in the Gb Tenth -70 °C in +55 °C in CELLO 11 cools				
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2012-47-18

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STANDARDE:
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Page 1 of 1

EQUIPMENT: Equipment and systems southed by this circles for he forces

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Cromena Pari Mimber	Helerance	Type	
ו פניכל ובל אום ושלם שבים	3117	Tests (Universal)	
	52(1)	Taxia (Single)	
	4114	Combustoletin	
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(10001015)140140	310	Toda (Universal)	
	\$2111	Palietorer PtD (SV max)	
	5314	Toda (Sirgia)	
	34 CB	Caypen	
DL1047-01[5013021]	31(7)	Total (Universit)	
	5214	Pensite of PiO (4 25V mac)	
	23(1)	Your (Single)	
	\$412	(Asygne)	
04-1042/31013002/3	31(1)	These (Universel)	
	37(1)	Patrick of PiO (SV max)	
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IssueNe I

Page 4 et 4

DETAILS OF DERTHICATE CHANGES (IN house I predering

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STANDARDS; The purchase proposes and any accomplable numbers to it according in the atherine of the contrast and sing conclude documents was found to comply must the following standards

IEC 80879-0; 2004

Edward 40

IEC 80879-0; 2007-10

Especine atmospherics - Part Q Equipment - General anniholes (Edward 40)

IEC 80879-1; 2007-10

Especine atmospherics - Part Q Equipment - General anniholes (Edward 40)

IEC 80879-1; 2007-04

Equipment atmospherics - Part 1 Equipment publication by functions of the particular of the

Edition 8
IELD 60078-15: 2004 Explorer almospheres - Part II: Equipment protection by recipional visitions
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TEST 8, ASSESSMENT REPORTS: A sumplify of the perturned lited has assessed by not the destruction and testingues notes as incorted as

Int Report.

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Page 3 cd 3

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reverse Part Humber	Reference	Type	
004-1010(5013005)	211/1	Torpe (Universal)	
	52(1)	Tour (Single)	
	33(1)	Coretuatale (III)	
	MALIT	Organi	
וופכנוסנבולופיו	\$1 (Z)	Tame (Universal)	
	23(1)	Promot or PiO (SV max)	
	33 (1)	Toda (Single)	
	STAL	Osygen	
04-1047-01(3013021)	3100	Force (Chryspiale)	
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	\$2())	Yane (Bright)	
	341h	Coypus	
4-1042(3-1013022)	31(7)	Yame (Unyrefeet)	
	17(1)	Path plant of PIO ISV mad	
	83 [11	Combustale (IR)	
	G4 LEI	Ongen	
24-1645-01120 (3033)	31 (1)	Total (Limitarial)	
	37 (r)	Patralog or PrD (4.25V mars)	
	42 [1]	Combustole (Nt)	
-	SAIT THE CON	Orygen	

DINDITIONS OF CERTIFICATION: YES ME SHOWN BEING:

The populative X-marked and shart be pushed with the followings warnings: § WARRING - DO NOT CHARGE THE LATTERY OR CONFECT TO THE EQUIPMENT ON A WARRING LOCATION § WARNING - READ AND UNDERSTAND THE MANNESS REPORT LISE.

The Gas-Pro shart only be connected in the charging circuit or communications interface piccis, using only suitably rated cables as defined in the Electrical Date, in a safe size, within a maximum ambient immorrature of 0 °C to 140 °C.

The Gas-Pro has not been assessed for proposed as a Date Devictor.