

(1) EU-TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**
- (3) EU-Type Examination Certificate Number

TÜV 16 ATEX 7908 X

Issue: 02

- (4) Equipment: **Gas Detector,model XGard Bright**
- (5) Manufacturer: **Crowcon Detection Instruments Ltd.**
- (6) Address: **172 Brook Drive, Milton Park, Abingdon, Oxfordshire, OX14 4SD
United Kingdom**

- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report GC/Ex7908.02/16

- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0:2018

EN 60079-1:2014

EN 60079-31:2014

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:



II 2 G Ex db IIC T6 Gb

II 2 D Ex tb IIIC T80°C Db (Aluminium variant)

II 2 G Ex db IIC T4/T3 Gb

II 2 D Ex tb IIIC T80°C Db (Stainless Steel variant)

TÜV Rheinland, Zertifizierungsstelle für Explosionsschutz

Cologne, 2022-10-24

Dipl.-Ing. He Mei



This EU-Type Examination Certificate without signature and stamp shall not be valid.
This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the
TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln
Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114

(13) Annex

(14) **EU Type Examination Certificate**
TÜV 16 ATEX 7908 X Issue: 02

(15) Description of equipment

15.1 Equipment and type:

Gas Detector,model XGard Bright

15.2 Description / Details of Change

General Description:

XGard bright gas detector is for fixed installation.

XGard bright gas detector has a flameproof enclosure and dust enclosure,it comprises an base and threaded top cover(material SUS316 or ADC12).There are one Sintered Metal Element assembly threaded into enclosure base as one unit.Sinter DISC is fixed on the Sinter Retainer by threaded Sinter clamping ring.

There are four PCB board located in the enclosure:terminal board,display board,main board and sensor board. One flameproof chamber is designed.

There are two M20*1.5 or two 1/2NPT entry ports on the surface of enclosure base(internal thread).One entry port used for power supply(by ATEX/IECEX certified cable gland), other one maybe install alarm device or connect with other external devices(these devices should be considered with the gas detector together with relevant Ex standards so that the integrity of flameproof enclosure and dust enclosure is guaranteed).The unused entry port shall be blocked by ATEX/IECEX certified solid plug with minimum IP65 ingress protection.

XGard Bright gas detector is available with either flammable, toxic or oxygen gas sensor modules which are installed within the enclosure base. The sensor modules consist of the sensor and sensor holder; the different sensor holder used to fix the different sensor type as below,

Sensor assemblies available are CON-01500-A4-CN(Gas sensor assembly),CON-01600-A4-CN(Combustible gas sensor assembly),CON-01800-A4-CN(PID sensor assembly),4702-A2(IR sensor assembly),CON-01E00-A4-CN(IR sensor assembly) and CON-01F00-A4-CN(MPS sensor assembly).

This EU Type Examination Certificate without signature and official stamp shall not be valid.
This certificate may be circulated without alteration. Extracts or alterations are subject to approval by:
Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH

Details of Change:

- Added a new Stainless steel 316 threaded top cover. The length of cemented joints is changed to 16mm instead of 13mm;
- The external earthing symbol is modified (only for the previous Aluminium Xgard Bright);
- Added entry device with 1/2"NPT thread form on the surface of base assembly (for Stainless steel enclosure only);
- Added new sensor type: IR sensor and MPS sensor;
- Standard EN 60079-0:2012/A11:2013 is updated to EN IEC 60079-0:2018;
- New Stainless steel 316 enclosure;

Technical Data

Elektrische Daten/ Electrical data
Rating: 10~30VDC / 0~100mA / 3W Max

Environmental data

Gas atmosphere:

Aluminium variant:

Tamb: -40°C to +70°C (Classification T6)

Stainless Steel variant:

Tamb: -40°C to +70°C (Classification T3) and Tamb: -40°C to +50°C (Classification T4)

Dust atmosphere: T80°C

IP Ratings:

Aluminium variant: IP65/IP66 (without or with weather proof cap assembly)

Stainless Steel variant: IP65

(16) Test-Report No. GC/Ex7908.02/16

(17) Special Conditions for safe use

1. WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS.
2. The only suitable certified cable gland with minimum IP65/IP66 rating can be used for installation purpose by end user.
3. The flameproof properties of the enclosure shall be maintained when an external alarm device is used.
4. Unused cable entries must be sealed using an ATEX/IECEx Ex db and Ex tb certified stopping plug with minimum IP65/IP66 ingress protection.
5. Only the cables/wires which are specified in the user manual can be used.
6. External earthing should be considered and installed according to user manual before use.
7. WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT.

This EU Type Examination Certificate without signature and official stamp shall not be valid.
This certificate may be circulated without alteration. Extracts or alterations are subject to approval by:
Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2022-10-24

Dipl.-Ing. He Mei



This EU Type Examination Certificate without signature and official stamp shall not be valid.
This certificate may be circulated without alteration. Extracts or alterations are subject to approval by:
Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH