



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEX TUN 11.0006X

Issue No: 1

Certificate history:

Status: **Current**

Issue No. 1 (2019-01-22)

Issue No. 0 (2016-07-27)

Date of Issue: **2019-01-22**

Page 1 of 5

Applicant: **Geopal System A/S**
Skelstedet 10B
2950 Vedbaek
Denmark

Equipment: **Gas Detector types GJ-OX and GJ-EX**

Optional accessory:

Type of Protection: **Flameproof enclosure 'd'**

Marking:

Ex db IIC T6 Gb or

Ex db IIC T5 Gb

Approved for issue on behalf of the IECEX
Certification Body:


Christian Roder

Position:

Head of IECEX Certification Body

Signature:
(for printed version)

Date:


2019-01-22

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](http://www.iecex.com).

Certificate issued by:

TÜV NORD CERT GmbH
Hanover Office
Am TÜV 1, 30519 Hannover
Germany





IECEX Certificate of Conformity

Certificate No: IECEX TUN 11.0006X

Issue No: 1

Date of Issue: 2019-01-22

Page 2 of 5

Manufacturer: **Geopal System A/S**
Skelstedet 10B
2950 Vedbaek
Denmark

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 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 : 2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1 : 2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

*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:

[DE/TUN/ExTR11.0009/00](#)

[DE/TUN/ExTR11.0009/01](#)

Quality Assessment Report:

[SE/RISE/QAR17.0001/01](#)



IECEX Certificate of Conformity

Certificate No: IECEX TUN 11.0006X

Issue No: 1

Date of Issue: 2019-01-22

Page 3 of 5

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Description

Gas detector types GJ-EX and GJ-OX are designed in type of protection flameproof enclosure "d", with permanently connected wires. The flameproof enclosure provides a sinter metal element to allow eventual gas to reach the sensor element, placed inside the flameproof enclosure. Enclosure is made of stainless steel.

GJ-OX is designed with extension AD03100 and adapter AD03110 in order to provide space for the slightly larger sensor.

The detectors can be mounted into various adaptors for optimal position and in order to keep junction boxes within their respective temperature ratings.

Relation between ambient temperature and the temperature class is as follows:

Gas detector model	Ambient temperature range	Temperature class
GJ-OX	-20 °C to +65 °C	T6
GJ-EX	-20 °C to +80 °C	T5

Type Key

GJ-OX is designed for detecting Oxygen concentrations in air with normal oxygen content, typically 21 % v/v.

G J-EX is designed for detecting Methane, Propane, Butane, Hydrogen, Hexane and several other gases.

Electrical data (max. values)

Supply circuit GJ-EX: $U_{\max} = 7 \text{ V}$, $I_{\max} = 300 \text{ mA}$

Supply circuit GJ-OX: $U_{\max} = 200 \text{ mV}$, $I_{\max} = 0.003 \text{ mA}$

SPECIFIC CONDITIONS OF USE: YES as shown below:



IECEX Certificate of Conformity

Certificate No: IECEx TUN 11.0006X

Issue No: 1

Date of Issue: 2019-01-22

Page 4 of 5

1. The sensors are provided with fixed mounted wires which have to be terminated in the provided terminal compartment of EPL "Gb".
2. The gaps of the flameproof joints are in parts smaller than the values which are required in clause 5 of IEC 60079-1 ed. 7. For information of the dimensions of the flameproof joints contact the manufacturer.
3. Fasteners with a property class of at A2-80 (stainless steel) have to be used for all parts of the flameproof enclosure.



IECEX Certificate of Conformity

Certificate No: IECEx TUN 11.0006X

Issue No: 1

Date of Issue: 2019-01-22

Page 5 of 5

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

Issue 1

Update to the current versions of the standards.

Minor constructional modifications.