



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 PRE 15.0020X Issue No: 0 Certificate history:
Issue No. 0 (2015-08-21)

Status: **Current** Page 1 of 3

Date of Issue: **2015-08-21**

Applicant: **NEO Monitors AS**
Prost Stabels vei 22
2019 Skedsmokorset
Norway

Electrical Apparatus: **Laser gas detector**
Optional accessory:

Type of Protection: **Ex d, tb and op-is**

Marking:
Ex d [op is] IIC T4 Gb, -40°C ≤ Ta ≤ +65°C
Ex tb IIIC T88°C Db

Approved for issue on behalf of the IECEx
Certification Body:

Asle Kaastad

Position:

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

Certificate issued by:

DNV Nemko Presafe AS
Gaustadalleen 30
P.O.Box 73 Blindern
0314 Oslo
Norway





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Manufacturer: **NEO Monitors AS**
Prost Stabels vei 22
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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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-28 : 2006-08 Edition:1	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31 : 2008 Edition:1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*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:

NO/DNV/ExTR10.0001/00	NO/DNV/ExTR10.0001/01	NO/DNV/ExTR10.0001/02
NO/DNV/ExTR10.0004/00	NO/DNV/ExTR10.0004/01	NO/DNV/ExTR10.0007/00
NO/PRE/ExTR15.0022/00		

Quality Assessment Report:

[NO/DNV/QAR12.0012/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

This certificate covers an Open Path detector for gas concentration monitoring on potentially hazardous gases. The gas detector LaserGas III OP comprises two Ex-d enclosures with one transmitter unit and one receiver unit.

Inside Ex d enclosure for transmitter there is an optical instrument providing Ex [op is] beam into zone 1 (covered by the following report :NO/DNV/ExTR10.0007). Both transmitter and receiver enclosures are fitted with glass lens in the lid, and permanently connected cable. Mounting according to manufacturers instructions must be followed to ensure protection of lens.

LaserGas LG III OP uses GD1 housing and electronic (Simtronics) and optic equipped with laser diode.

Refer to original test report (for GD-1) NO/DNV/ExTR10.0001/02

Compliance with IEC 60079-31 covered in ExTR checklist (product previously certified according to expired standard EN/IEC 61241-0/1),

La ser-diode -covered by NO/DNV/ExTR10.0007/00 . (DNV09 ATEX 57893),

According to NO/DNV/ExTR10.0007/00 maximum temperature increase measured during fault condition is 34.9K, which results with 99.9 ° C for Tamb +65. (T4-class)

Enclosure is fitted with glass lens in the lid, and permanently connected cable must be terminated in a suitable ATEX certified enclosure. Mounting according to manufacturer's instructions must be followed to ensure protection of lens.

The fasteners used on the Ex-d enclosure must be the type specified by the manufacturer: M5x10 DIN912 A4-80.

Electrical Data

U=18 to 32 V DC, P ≤ 20W (2 x 10W)

Degrees of protection (IP Code)

IP 66/67

Routine tests:

- The cover of the Ex-d enclosures for the receiver unit shall be subjected to a routine pressure test of at least 18,75 bar.

CONDITIONS OF CERTIFICATION: YES as shown below:

Repairs of the flameproof joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in tables 1 and 2 of EN 60079-1.

The glass on the receiver unit only complies with the impact test for low energy, and must be placed in area with low risk of mechanical danger.