

Type Examination Certificate

[2] EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 94/9/EC

[3] Type Examination Certificate Number: Presafe 15 ATEX 7446 Issue 0

[4] Equipment: Laser Gas II SP monitor, SP Compact, OP

[5] Applicant – Manufacturer or Authorized representative: NEO Monitors AS

[6] Address: Prost Stabels vei 22
2019 Skedsmokorset
Norway

[7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV Nemko Presafe AS certifies that this equipment or protective system has been found to comply with the Essential Health and Safety requirements relating to the design of Category 3 equipment, which is intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential reports listed in section 14.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: EN 60079-0:2012, EN 60079-15:2010, EN 60079-28:2007, EN 60079-31:2014

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This TYPE EXAMINATION CERTIFICATE relates only to the design, examinations and tests of the specified equipment. If applicable, further requirements of this Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

[12] The marking of the equipment shall include the following:

 II 3 G see Ex code, page 2
II 3 D

Date of issue: 2014-12-21

Bjørn Spongsveen
For DNV Nemko Presafe AS
Information on electronic signature www.presafe.com



Type Examination Certificate

[13]

Schedule

[14] TYPE EXAMINATION CERTIFICATE No.: Presafe 15 ATEX 7446 Issue 0

Certificate History

Issue	Description	Report no.	Issue date
0	Original issue	D0001176	2015-12-18

[15] Description of Equipment or Protective System

SP:

The LaserGas Monitor is an optical instrument based on transmitting infrared laser light from a transmitter unit on one side of the stack to a receiver unit in the diametrically opposite side of the stack. The measurement principle is called infrared single-line absorption spectroscopy.

OP:

The LaserGas II OP Monitor is also an optical instrument based on transmitting infrared laser light similar to SP but transmitter and receiver housed in a single enclosure (Trans- receiver).

Type Identification	Ex code	Ambient Temperature
LaserGas II SP	Ex nA nC [op is Ga] IIC T5 Gc Ex tc [op is Ga] IIIC T100°C Dc	-20°C ≤ Ta ≤ +55°C

Electrical Data

U=18 to 36VDC

Degrees of protection (IP Code)

IP 66

Type Examination Certificate

[16] Project No.: D0001176

Descriptive Documents

Title:	Drawing No.:	Sheets	Rev. Level:	Date:
BOM, Receiving Unit	13282A		A	2004-10-27
AuxBoard	12932	2	0	2003-01-23
With alignment and purging unit , LaserGas II SP Ex version(Ex p for zone 1, Ex n for Zone 2) Sheet :1/7	13778B	7	B	2005-08-03
Transmitter Unit LaserGas II SP Ex version(Ex p for zone 1, Ex n for Zone 2) Sheet :2/7				
Receiver Unit LaserGas II SP Ex version(Ex p for zone 1, Ex n for Zone 2) Sheet : 3/7				
Power Supply Unit, LaserGas II SP Ex version(Ex p for zone 1, Ex n for Zone 2) Sheet : 4/7				
Alignment and purging unit DN50/PN10, LaserGas II SP Ex version(Ex p for zone 1, Ex n for Zone 2) Sheet : 5/7				
Electrical diagram trasmitter, LaserGas II SP Ex version(Ex p for zone 1, Ex n for Zone 2) Sheet : 6/7				
Electrical diagram receiver, LaserGas II SP Ex version(Ex p for zone 1, Ex n for Zone 2) Sheet : 7/7				
ATEX gasket information, Transmitter Laser Gas II Sheet 1/2	17373	2	-	2014-06-06
ATEX gasket information, Receiver Laser Gas II Sheet 2/2				
ATEX gasket information, Laser Gas II OP	17414	1	-	2014-09-02
Mainboard-E	Assy No : 12945	12 sheets	F	2012-09-11
	PCB No : 12944		E	

[17] Special Conditions for Safe Use -

[18] Essential Health and Safety Requirements

See part 9 of this certificate

END OF CERTIFICATE