



Certificate of Compliance

Certificate: 2677299

Master Contract: 232180

Project: 70028781

Date Issued: November 20, 2015

Issued to: Neo Monitors AS
Prost Stabels vei 22
2019 Skedsmokorset
NORWAY

Attention: Lars Broendbo

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only



Issued by: 
Sarita Singh

PRODUCTS

CLASS 2258 02 – PROCESS CONTROL EQUIPMENT - For Hazardous Locations

CLASS 2258 82 – PROCESS CONTROL EQUIPMENT - For Hazardous Locations - Certified to US Standards

Class I Division 1 Groups B, C, D

LaserGas III - Rated 18 - 32Vdc, 10W max, Class 2 Supply; Ta = -20°C to +55°C; T4; IP65

LaserGas III Ext (Extended) - Rated 18 - 32Vdc, 10W max, Class 2 Supply; Ta = -40°C to +60°C; T4; IP65

Notes:

- 1) Each unit shall be provided with a factory installed epoxy filled (UL certified 3M DP190 Gray) certified Class I Div 1 Hawke 753 M20 cable gland. Cable PUR-C-(TP)-513 rated for temperatures -30°C to +80°C shall only be used with the LaserGas III. Cable SD 200 CTP rated for temperatures -40°C to +90°C can be used with the LaserGas III or the LaserGas III Ext. Cable Munflex-C-Spezial-O 47100 rated for temperatures -50°C to +90°C in fixed installation can be used with the LaserGas III or the LaserGas III Ext. Other suitable cables may be used as long as the rated temperature is exceeding the Tamb of the instrument and cables are correctly rated electrically.
- 2) The fasteners used on the explosion-proof enclosure must be the type specified by the manufacturer: M5x10 DIN912 A4-80.



Certificate: 2677299
Project: 70028781

Master Contract: 232180
Date Issued: November 20, 2015

- 3) Repairs of the flameproof joints must be made in compliance with the structural specifications provided by the manufacturer.
- 4) Inside explosion-proof enclosure for transmitter and receiver there is an optical instrument providing Ex [op is] beam into Zone 1 (See IECEx Report # NO/DNV/ExTR10.0004/00 which references the laser certificate DNV 09 ATEX 57893) or an optical instrument providing Ex [op is] beam into Zone 0 (See IECEx Certificate IECEx PRE 15.0043X which references the Laser Certificate DNV 12 ATEX 14659 and is covered under IECEx report # NO/PRE/ExTR14.0013/00).
- 5) Enclosure is fitted with a glass lens in the lid. The lens options available are Thick Lens and Tox-Lens. The Tox-Lens is permanently secured using a UL certified epoxy 3M DP190 Gray.
- 6) Mounting according to manufacturer's instructions must be followed to ensure proper protection of lens.
- 7) The unit is powered with a Class 2 power supply.

APPLICABLE REQUIREMENTS

CSA Standard C22.2 No 0-10	General Requirements - Canadian Electrical Code, Part II
CSA Standard C22.2 No 142-M1987	Process Control Equipment
CSA Standard C22.2 No 30-M1986	Explosion-Proof Enclosures for Use in Class Hazardous Locations
ANSI/UL Standard 508, 17 th Ed.	Electric Industrial Control Equipment
ANSI/UL Standard 1203, 5 th Ed.	Explosion-Proof and Dust-Ignition-Proof Electrical Equipment For Use in Hazardous (Classified) Locations
CAN/CSA-C22.2 No. 60529:05	Degrees of protection provided by enclosures (IP Code)
ANSI/IEC 60529-2004	Degrees of Protection Provided by Enclosures (IP Code)

MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Certificate: 2677299
Project: 70028781

Master Contract: 232180
Date Issued: November 20, 2015

The following markings appear on a laser-engraved stainless steel plate, spot-welded to the housing:

- Manufacturer's name: "Neo Monitors AS", or CSA Master Contract Number "232180", adjacent to the CSA Mark in lieu of manufacturer's name.
- Model number: As specified in the PRODUCTS section, above.
- Electrical ratings: As specified in the PRODUCTS section, above.
- The following wording: "Class 2 Supply"
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- Manufacturing date in MMY format, or serial number, traceable to year and month of manufacture.
- Enclosure ratings: As specified in the PRODUCTS section, above.
- The CSA Mark, with or without the "c" and "us" indicators, as shown on the Certificate of Conformity.
- Hazardous Location designation: As specified in the PRODUCTS section, above.
- Temperature code: As specified in the PRODUCTS section, above.
- The following words, or suitable equivalent:
 - "WARNING: DO NOT OPEN WHEN AN EXPLOSION ATMOSPHERE MAY BE PRESENT" and "AVERTISSEMENT: NE PAS OUVRIR SI UNE ATMOSPHERE D'EXPLOSION PEUT ETRE PRESENTE"
 - "WARNING: DO NOT OPEN WHEN ENERGIZED" and "AVERTISSEMENT: NE PAS OUVRIR SOUS TENSION"
 - "FACTORY SEALED"

An Operational/ Installation manual shall be supplied with each unit, containing the following minimum marking information:

- Manufacturers name and address
- Model number: As specified in the PRODUCTS section, above.
- Electrical ratings: As specified in the PRODUCTS section, above.
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- Hazardous Location designation: As specified in the PRODUCTS section, above.
- Temperature code: As specified in the PRODUCTS section, above.
- Specification for appropriate wiring, including definition of connections and specification for wire gauge.
- Mounting, installation and maintenance instructions.
- The following words, or suitable equivalent:
 - "WARNING: DO NOT OPEN WHEN AN EXPLOSION ATMOSPHERE MAY BE PRESENT" and "AVERTISSEMENT: NE PAS OUVRIR SI UNE ATMOSPHERE D'EXPLOSION PEUT ETRE PRESENTE"
 - "WARNING: DO NOT OPEN WHEN ENERGIZED" and "AVERTISSEMENT: NE PAS OUVRIR SOUS TENSION"
 - The unit must be powered by a Class 2 power supply.



Supplement to Certificate of Compliance

Certificate: 2677299

Master Contract: 232180

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
2677299	March 28, 2014	Original Certification of LaserGass III & LaserGas III Ext for Class I, Division 1, Groups B,C,D; T4; IP65, Hazardous Locations
70028781	November 20, 2015	Modifications to include alternative material for thick lens, addition of a new laser source, revised electronic boards, introduction of alternative cable and O-ring material.