

EC-TYPE EXAMINATION CERTIFICATE



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[2]

**Equipment or Protective System intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC**

[3]

EC-Type Examination Certificate Number: **DEMKO 09 ATEX 0823124**

[4]

Equipment or Protective System: **Toxic Gas and Oxygen Depletion Detectors: Toxi Pro-NGSG and Toxi LTD-NGSG**

[5]

Manufacturer: **Sperian Protection Instrumentation LLC**

[6]

Address: **651 S Main Street, Middletown, CT 06457 USA**

[7]

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

[8]

UL International Demko A/S, notified body number 0539 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. **10NK08239**

[9]

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2006

EN 60079-11:2007

EN 60079-26:2007

[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 EC-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by the certificate.

[12]

The marking of the equipment or protective system shall include the following:

 **II 1 G Ex ia IIC T4**

Certification Manager

Jan-Erik Storgaard

Date of issue: 2009-11-20

Re-issued: 2010-08-28

Notified Body

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[13]

[14]

Schedule
EC-TYPE EXAMINATION CERTIFICATE No.
DEMKO 09 ATEX 0823124
Report: 10NK08239

[15]

Description of Equipment or protective system

Toxic Gas Detectors and Oxygen Depletion Monitors – portable battery operated monitors intended for the detection of toxic gases and oxygen depletion. The devices contain visual and audible alarms that are activated when conditions exceed preset limits.

Nomenclature for type: Toxi Pro-NGSG (Toxic), Toxi Pro-NGSG (Oxygen), Toxi LTD-NGSG (Toxic) and Toxi LTD-NGSG (Oxygen) gas and oxygen detectors.

Temperature range

The ambient temperature range is -20 °C to +50 °C.

The relation between ambient temperature and the assigned temperature class is as follows:

Ambient temperature range
-20 °C to +50 °C

Temperature class
T4

Electrical data

Intrinsically safe specifications:

The Toxi Pro-NGSG is powered with one Lithium Manganese 3.0 V battery cell manufactured by Panasonic, Part No. CR2. The Toxi LTD-NGSG is powered with one non-replaceable Lithium Thionyl Chloride 3.6 V battery cell manufactured by Xeno, Part No. XL-055FT1.

Installation instructions

A user manual is provided with each unit.

Performance Testing

The measuring function of the Toxi Pro-NGSG and Toxi LTD-NGSG for explosion protection, according to Annex II clause 1.5.5, 1.5.6 and 1.5.7 of the Directive 94/9/EC, is not covered in this certificate.

Mounting instructions

Refer to "Instructions".

Routine tests

No routine tests are required.

[16]

Report No.

Project Report No.: 08NK23124 (Hazardous Location Testing)
10NK08239 (Hazardous Location Testing)

Documents:

Description:

Drawing No.:

Rev. Level:

Date:

Toxi Pro/Ltd Artwork (10 pages)

03-368

J0

None

PCB Fabrication Drawing Toxi Pro/LTD Main Board

03-368

J0

2010-05-07

Housing Bottom NGSG Toxi Pro/LTD (3 pages)

10-549

A0

2008-12-01

Housing, Top, L&R Side Lens NGSG Toxi Pro/LTD (2 pages)

10-551

A0

2008-12-01

Housing, Top, R Side Lens NGSG Toxi Pro/LTD (2 pages)

10-552

A0

2008-12-01

Housing, Top, No Side Lens NGSG Toxi Pro/LTD (2 pages)

10-553

A0

2008-12-01

Toxi Pro Reference Manual (20 pages)

13-264-N3

1.10

2009

Toxi LTD Reference Manual (20 pages)

13-266-N

3.0

2009

[13]

[14]

Schedule
EC-TYPE EXAMINATION CERTIFICATE No.
DEMKO 09 ATEX 0823124
Report: 10NK08239

Description:	Drawing No.:	Rev. Level:	Date:
PCB Assembly Drawing, Toxi Pro-NGSG (Toxic)	35-0860	A0	2009-10-21
PCB Assembly Drawing, Toxi LTD-NGSG, Toxi3 LTD-NGSG (Toxic)	35-0862	A0	2009-10-21
PCB Assembly Drawing, Toxi Pro-NGSG (Oxygen)	35-0864	A0	2009-10-21
PCB Assembly Drawing, Toxi LTD-NGSG, Toxi3 LTD-NGSG (Oxygen)	35-0866	A0	2009-10-21
Next Generation ToxiPro/LTD Main Bd (Schematic)	62-905	J0	2010-08-24
BOM Toxi Pro-NGSG (Toxic) Assembly	BOM-35-0860	D2	2010-08-24
BOM Toxi LTD-NGSG (Toxic) Assembly	BOM-35-0862	D2	2010-08-24
BOM Toxi Pro-NGSG (Oxygen) Assembly	BOM-35-0864	D2	2010-08-24
BOM Toxi LTD-NGSG (Oxygen) Assembly	BOM-35-0866	D2	2010-08-24
Sensor Control Drawing Toxi Pro/LTD	CD-20-TPRO	A0	2004-03-25
Assy, NGSG Toxi LTD	CD-35-44-NX	A1	2009-11-10
Assy, NGSG Toxi PRO	CD-35-45-NX	A1	2009-11-10
Label, Instrument, Toxi LTD-NGSG	LBL-TOXILTLD-NX	B1	2010-07-27
Label, Instrument, Toxi Pro-NGSG	LBL-TOXIPRO-NX	B1	2010-07-27

[17]

Special conditions for safe use:
None.

[18]

Essential Health and Safety Requirements

Concerning ESR this Schedule verifies compliance with the ATEX directive only. The manufacturer's Declaration of Conformity declares compliance with other relevant Directives.

Additional information

The Toxi Pro-NGSG and Toxi LTD-NGSG, toxic gases and oxygen depletion detectors, have in addition passed the tests for Ingress Protection to IP6x in accordance with EN60529: 1991/A1 2001.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.

Certification Manager
Jan-Erik Storgaard

Date of issue: 2010-08-28

Notified Body

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