1 EU - Type Examination Certificate

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: ExVeritas 16ATEX0141X Issue: 4

4 Equipment: 102 Series Enclosure

5 Manufacturer: Oliver IGD Ltd. (International Gas Detectors)

6 Address: Triton House, Crosby St,
Stockport, SK2 6SH, UK

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

8 ExVeritas, Notified Body number 2804 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, 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 for use in potentially explosive atmospheres given in Annex II to the Directive

9 Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with the following Standards and section 16 of this certificate:

EN IEC 60079-0: 2018 EN 60079-1:2014 EN 60079-31:2014

10 If the sign “X” is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design, construction, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment shall include the following:

Ex II 2 G Ex db IIC T* Gb

Ex II 2 D Ex tb IIIC T* Db

Temperature class dependant upon ambient, see description.

DANAK
PROD Reg.No. 7044
Member of EA MLA

On behalf of ExVeritas

Peter Lauritzen
Managing Director

Schedule

13 Description of Equipment or Protective System

The 102 Series Enclosure can be used to form either:

- a 102 Optical Assembly, maximum power dissipation 2W; this unit utilises a glass window insert and is fitted with an optical unit e.g. camera.
- a 102 Gas Detector Assembly, maximum power dissipation 2W; this unit utilises a sintered element insert and is fitted with a gas sensor.

The 102 Series Enclosure consists of stainless steel body and insert. These two items are retained by a circlip and connected by a threaded flamepath. Whilst the body is a generic item, there are two types of insert; one incorporates a glass window (102 Optical Assembly) and the other a sintered element (102 Gas Detector Assembly). Both the glass window and sintered element are cemented in position. The window is also fitted with a backing ring and circlip.

The rear of the body incorporates a cemented bushing assembly. This allows the passage of permanently connected cable from the inside to the outside of the enclosure. The permanently connected cable is intended to be terminated within a suitably certified enclosure.

T102 Optical Assembly
Ex db IIC T6 Gb
Ex tb IIIC T85°C Db
-20°C ≤ T_{amb} ≤+55°C

T102 Gas detector
Ex db IIC T6 Gb
Ex tb IIIC T85°C Db
-20°C ≤ T_{amb} ≤+40°C

Ex db IIC T5 Gb
Ex tb IIIC T100°C Db
-20°C ≤ T_{amb} ≤+55°C

13.1 Details of change

Issue 2

The following changes are incorporated in issue 2 of the certificate:

- Inclusion of two alternative compounds for the cemented bushing.

Issue 3

The following changes are introduced in issue 3 of the certificate:

- Re-assessment against EN IEC 60079-0:2018.
- Revise manufacturing address to reflect change of post code.
- Transfer of the certificate from ExVeritas UK, Notified Body number 2585 to ExVeritas Denmark, Notified Body number 2804. Certificate number remains unchanged.

Issue 4

The following changes are introduced in issue 3 of the certificate:

- To allow the length of the 102 Series enclosure to be increased to allow inclusion of alternative electronics within the housing.

Schedule

14 Descriptive Documents

14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
EVL0822/A/2	2016.05.27	1	Initial issue of the Prime Certificate
R1106/A/1	2017.01.19	2	Issue of the first variation, section 13.1 details.
R3056/A/1	2021.06.18	3	Issue of the second variation, section 13.1 details.
R3557/A/1	2021-11-26	4	Issue of the third variation, section 13.1 details.

14.2 Compliance Drawings:

Title:	Drawing No.:	Rev. Level:	Date:
T102 Engraving Detail	3449701	7	09.06.21
T102 Engraving Detail Camera Version	3449702	6	18.06.21
Toxic Sensor Concept Drawing Sheet 1 of 2	TOX-1-002	2	2016.10.10
Toxic Sensor Concept Drawing Sheet 2 of 2	TOX-1-002	2	2016.10.10
T102 HOUSING 7S PID VARIANT	TOX-102-005	ISS 1	11/11/2021

15 Conditions of Certification

15.1 Special Conditions for Safe Use

- The free end of the permanently connected cable shall be protected in accordance with EN IEC 60079-0:2018 Clause 14.
- In accordance with EN 60079-1:2014 Annex C, the rear end of the bushing shall be protected by fitting into a suitably certified enclosure. In addition, the bushing shall not be subjected to torque during installation or operation.
- The product shall not be connected to portable equipment.
- The product fitted with a window has been subjected to reduced risk impact tests as detailed in EN IEC 60079-0:2018 Clause 26.4.2, as such it shall only be installed in areas of low risk of mechanical damage.
- The product shall be earthed in accordance with EN IEC 60079-0:2018 Clause 15 when fitted to a suitably certified enclosure.
- The flameproof joints employed in the equipment are not intended to be repaired.

15.2 Conditions for Use (Routine tests)

- None

16 Essential Health and Safety Requirements

Essential Health and Safety Requirements are addressed by the standards listed in section 9 and where required the report listed in section 14.1

The manufacturer shall inform the Notified Body of any modifications to the design of the product described by this schedule.