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 EXV 16.0003X	Issue No: 0	Certificate history: Issue No. 0 (2016-05-20)
Status:	**Current**	Page 1 of 4	
Date of Issue:	**2016-05-20**		

Applicant: **Oliver IGD Ltd (International Gas Detectors)**
Triton House
Crosby Street
Stockport
SK2 6TS
United Kingdom

Equipment: **102 Series Enclosures**
Optional accessory:

Type of Protection: **Flameproof 'db', Dust ignition protection by enclosure 'tb'**

Marking:

T102 Optical assembly	T102 Gas Detector Assembly
Ex db IIC T6 Gb	Ex db IIC T* Gb
Ex tb IIIC T85°C Db	Ex tb IIIC T**°C Db
-20°C≤ T_{amb} ≤+55°C	Temperature class dependant upon ambient range, see description

Approved for issue on behalf of the IECEx Certification Body: Sean Clarke CEng MSc MIET

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.

Certificate issued by:

ExVeritas Limited
Units 16-18 Abenbury Way
Wrexham Ind. Est.
Wrexham LL 139UZ
United Kingdom

IECEx Certificate of Conformity

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Manufacturer: **Oliver IGD Ltd (International Gas Detectors)**
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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 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	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:

GB/EXV/ExTR16.0003/00

Quality Assessment Report:

GB/EXV/QAR16.0001/00

IECEx Certificate of Conformity

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The free end of the permanently connected cable shall be protected in accordance with IEC 60079-0:2011 Clause 14.1
2. In accordance with IEC 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.
3. The product shall not be connected to portable equipment.
4. The 102 optical enclosure, fitted with a window has been subjected to reduced level impact tests as detailed in IEC 60079-0:2011 Clause 26.4.2, as such it shall only be installed in areas of low risk of mechanical damage.
5. The product shall be earthed in accordance with IEC 60079-0:2011 Clause 15 when fitted to a suitably certified enclosure.

IECEx Certificate of Conformity

EQUIPMENT (continued):

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.

The optical assembly has a single Temperature Class and ambient range as detailed in the marking section. The gas detector assembly has two possible ambient ranges and associated Temperature classes:

$-20°C \leq T_{amb} \leq +40°C$ T6/T85ºC $-20°C \leq T_{amb} \leq +55°C$ T5/T100ºC

Annex:

IECEx EXV 16.0003X Certificate Annex .pdf

Manufacturer's documents:				
Title:	Drawing No.:	Rev	Sheets	Date:
T102 Engraving Detail	3449701	5	1 of 1	2016.4.19
T102 Engraving Detail Camera Version	3449702	6	1 of 1	2016.04.19
Toxic Sensor Concept Drawing	TOX-1-002	1	1 of 2	2016.04.19
Toxic sensor concept drawing	TOX-1-002	1	2 of 2	2016.04.19

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