



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 FTZU 15.0002U Issue No: 2 Certificate history:
Status: **Current** Page 1 of 5 Issue No. 2 (2017-04-26)
Date of Issue: **2017-04-26** Issue No. 1 (2016-04-11)
Applicant: **Dynamant Ltd** Issue No. 0 (2015-02-10)
Hermitage Lane Industrial Estate
Kingsmill Way
Mansfield
Nottinghamshire
NG18 5ER
United Kingdom

Equipment: **Gas Sensors type MSH2 *** and MSH2ia *****
Optional accessory:

Type of Protection: **flameproof enclosure**

Marking:
for type MSH2 ***
Ex db I Mb, Ex db IIC Gb

for type MSH2ia ***
Ex db ia I Ma, Ex db IIC Gb

*Approved for issue on behalf of the IECEx
Certification Body:*

Dipl.Ing. Martin Zámrský

Position:

Vice Head of Certification Body

*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](http://www.iecex.com).

Certificate issued by:

**Fyzikálne technický zkusební ústav
(Physical -Technical Testing Institute)
Pikartská 7, 71607 Ostrava - Radvanice
Czech Republic**





IECEx Certificate of Conformity

Certificate No: IECEx FTZU 15.0002U Issue No: 2

Date of Issue: 2017-04-26 Page 2 of 5

Manufacturer: **Dynamant Ltd**
Hermitage Lane Industrial Estate
Kingsmill Way
Mansfield
Nottinghamshire
NG18 5ER
United Kingdom

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 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-1 : 2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:7.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

*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:

[CZ/FTZU/ExTR15.0002/00](#) [CZ/FTZU/ExTR15.0002/01](#)

Quality Assessment Report:

[GB/BAS/QAR07.0004/05](#)



IECEx Certificate of Conformity

Certificate No: IECEx FTZU 15.0002U

Issue No: 2

Date of Issue: 2017-04-26

Page 3 of 5

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The component Gas Sensors type MSH2 *** and MSH2ia *** is a range of 'plug-in' sensors which is rated at up to 30 V with a maximum power dissipation of up to 0.8 W. The component comprise a small cylindrical enclosure manufactured in stainless steel with integral electrical connection pins at the rear and a stainless steel two-layer mesh to facilitate the ingress of the sample gas at the front. The interior of the enclosure comprises a small chamber, which may contain a range of infrared lamps and pyroelectric gas detectors, all with energy storage capability no greater than 0.04 mJ.

SPECIFIC CONDITIONS OF USE: NO



IECEx Certificate of Conformity

Certificate No: IECEx FTZU 15.0002U

Issue No: 2

Date of Issue: 2017-04-26

Page 4 of 5

EQUIPMENT (continued):

Schedule of Limitations:

1. The component have been assessed as suitable for use within an ambient temperature range of -20°C to +60°C, whilst producing a maximum external surface rise of 45 K in normal operation.
2. The component shall be effectively protected from impact.
3. This component is intended for use at atmospheric pressure and shall not be used in pressures exceeding 1.1 bar.
4. The connection pins shall be protected from dust and moisture by an enclosure with an Ingress Protection rating of at least IP 54.
5. The component shall not be installed or removed when an explosive gas atmosphere is present.
6. The component may be supplied with a metallic closing disc around the connection pins. This may need to be considered with respect to creepage and clearance distance when the device is incorporated into equipment.
7. The type MSH2ia *** shall be supplied by an intrinsically safe supply Ex ia with a maximum output voltage of 6.0 V and a maximum output power of 0.8 W.



IECEx Certificate of Conformity

Certificate No: IECEx FTZU 15.0002U

Issue No: 2

Date of Issue: 2017-04-26

Page 5 of 5

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 2:

1. A change of the manufacturer's address.
2. The list of standards have been updated. The standard IEC 60079-1 has been updated.
3. The marking has been updated. The "d" has been superseded by "db".