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 19.0016X

Issue No: 0

Certificate history:
Issue No. 0 (2019-06-28)

Status: **Current**

Date of Issue: **2019-06-28**

Applicant: **Hall Engineering Services Ltd**
Hall House, Hayfield Close
Dronfield,
Sheffield, S18 8RP
United Kingdom

Equipment: **High Accuracy Sphere Detector: Micro-Set MSD2**

Optional accessory:

Type of Protection: **Flameproof**

Marking:

Ex db IIB T6 Gb -40°C ≤ Tamb ≤ +75°C

Approved for issue on behalf of the IECEx Certification Body: S D'Henin

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

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Manufacturer:	**Hall Engineering Services Ltd** Hall House, Hayfield Close Dronfield, Sheffield, S18 8RP **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 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 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

*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/ExTR19.0021/00

Quality Assessment Report:

GB/EXV/QAR19.0005/00

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The MSDI Micro-Set Sphere Detector comprises a detector tube containing an encapsulated reed switch, which is rated up to 2A at 250VDC. The detector tube is fitted into a housing, referred to as a top housing, which is itself mounted to a separate housing which is comprised of three main components; a lower detector housing, detector plunger, and spring. These three parts are non-electrical components employed to facilitate the mounting of the detector and do not form part of the protection of the equipment.

The lower detector housing is fitted to the associated pipe wall and the top housing, containing the detector tube, sits in the detector plunger. The movement of detector plunger over the detector tube operates the reed switch. The lower and top housings are secured together by two M8 x 25 hexagonal socket head screws. The top housing must be fitted to a suitably approved Ex d terminal enclosure via the M25 threaded section of the top housing.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The sensor must be mounted to a suitably approved earthed metallic Ex db IIB Gb rated flameproof enclosure to facilitate connection of the sensor flying leads.
2. Under the scope of this approval the equipment has been subjected to Overpressure testing at a test pressure of 30 bar.
3. No repairs are permitted to the M25 threaded flameproof joint (external thread).

Annex:

IECEx EXV 19_0016X_0 Annex.pdf

Manufacturer's documents:				
Title:	**Drawing No.:**	**Rev**	**Sheets**	**Date:**
Microset Detector Label Detail Top Housing	D 1234	2	1	2019-05
Hall Engineering Micro-set Label Detail	D1349	7A	1	2019-05
Microset Detector Standard Model Sectional Arrangement	B1192	6	1	2003-06
Microset Detector Standard Model Exploded Assembly	D1757	1	1	2003-06
Pre-Assembly Details of Flameproof Sphere Detector "Micro-Set"	9691	K	1	2003-05-12
Micro-set Meter Prover Sphere Detector IOM Manual	HES-MSD2-IOM-R0	-	8	2019

- Denotes no information provided

ExVeritas, Units 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, United Kingdom LL13 9UZ.