



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 BAS 18.0087

Issue No: 0

Certificate history:

[Issue No. 0 \(2019-03-22\)](#)

Status: **Current**

Page 1 of 3

Date of Issue: **2019-03-22**

Applicant: **AVT Reliability Limited**
Unit 2, Easter Court
Europa Boulevard
Warrington
Cheshire
WA5 7ZB
United Kingdom

Equipment: **Machine Sentry MSF-1**

Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking:

Ex ia IIB T4 Ga (-20°C ≤ Ta ≤ +60°C)

Ex ic IIC T4 Gc (-20°C ≤ Ta ≤ +60°C)

Approved for issue on behalf of the IECEx
Certification Body:

R.S. Sinclair

D BREARLEY
Certification
Manager


Position:

Technical Manager

Signature:

(for printed version)

Date:


25/3/19

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:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom





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Page 2 of 3

Manufacturer: **AVT Reliability Limited**
Unit 2, Easter Court
Europa Boulevard
Warrington
Cheshire
WA5 7ZB
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 Explosive atmospheres - Part 0: Equipment - General requirements
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:

[GB/BAS/ExTR18.0185/00](#)

Quality Assessment Report:

[GB/BAS/QAR17.0012/01](#)



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Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Machine Sentry MSF-1 is a battery powered measurement device designed to measure the vibration of equipment located in the hazardous area. The equipment uses accelerometers to measure the vibrations in 3-axis of measurement.

The equipment can be either permanently attached to the equipment it is measuring using adhesive or mounting stud, or can be temporarily attached using a permanent magnet. The measurement information is then transmitted using Bluetooth communications to suitably certified data acquisition equipment.

The equipment comprise a single printed circuit board that is fully encapsulated in a plastic sub-assembly which also holds the battery. The assembly is fitted inside a cylindrical stainless steel enclosure with a polycarbonate cap fitted on the top to permit Bluetooth communications. The bottom of the enclosure is fitted with a threaded lid allowing access for the battery to be replaced.

The Machine Sentry MSF-1 is designed to be powered by an EVE ER26500 C Size 3.6V Lithium-thionyl Chloride (Li-SOCl₂) Battery.

SPECIFIC CONDITIONS OF USE: NO