



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.:	<b>IECEX CSA 20.0014X</b>	Page 1 of 4	<u>Certificate history:</u>
Status:	<b>Current</b>	Issue No: 2	<a href="#">Issue 1 (2022-05-24)</a> <a href="#">Issue 0 (2020-10-22)</a>
Date of Issue:	2023-11-09		
Applicant:	<b>MSA - The Safety Company</b> 1000 Cranberry Woods Dr Cranberry Township, PA 16066-5296 <b>United States of America</b>		
Equipment:	<b>HART Port 5000</b>		
Optional accessory:			
Type of Protection:	<b>Intrinsically Safe, Flameproof and Dust Ignition Protection by Enclosure</b>		
Marking:	Ex db [ia Ga] IIC T5 Gb Ex tb [ia Da] IIIC T100°C Db  IP66		

Approved for issue on behalf of the IECEx  
Certification Body:

**Dave Magee**

Position:

**Senior Director of Operations, Toronto**

Signature:  
(for printed version)

Date:  
(for printed version)

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.
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Certificate issued by:

**CSA Group**  
178 Rexdale Boulevard  
Toronto, Ontario M9W 1R3  
Canada





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Manufacturer: **MSA - The Safety Company**  
1000 Cranberry Woods Dr  
Cranberry Township, PA 16066-5296  
**United States of America**

Manufacturing locations: **MSA - The Safety Company**  
1000 Cranberry Woods Dr  
Cranberry Township, PA 16066-5296  
**United States of America**

**General Monitors (Ireland) Limited**  
Ballybrit Business Park  
Galway  
**Ireland**

**General Monitors, Inc.**  
16782 Von Karman Ave.  
Unit 14  
Irvine CA 92606  
**United States of America**

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 equipment 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 60079-1:2014](#) 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

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

This Certificate **does not** indicate compliance with 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 Reports:

[CA/CSA/ExTR20.0027/00](#)

[CA/CSA/ExTR20.0027/01](#)

Quality Assessment Reports:

[FR/INE/QAR08.0011/13](#)

[GB/CML/QAR22.0009/00](#)

[US/UL/QAR10.0004/10](#)



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## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The HART Port 5000 is an 8 – 30 VDC Class 2 or SELV powered, completely potted associated apparatus contained within a flameproof stainless-steel enclosure intended to be installed in a Zone 1 or Zone 21 area providing controlled Intrinsically Safe (IS) output. The enclosure is approximately 56 mm diameter by 116 mm high, including the threaded neck extension. The two-pin HART keyed external connector is located at one end of the HART Port 5000. The completely potted circuitry section is covered by a cemented joint that provides the enclosure seal at the other end of the HART Port 5000.

The entire internal volume is completely potted including the terminals for the HART connector portion. The minimum enclosure thickness is 2.11mm and the minimum cement joint distance is 28.47mm. Two wires extend from the internal intrinsic safety barrier through the completely potted threaded neck extension for the 4-20 mA HART communications output signal. The HART Port 5000 delivers an Intrinsically Safe (IS) output per the following entity parameters:

Maximum Voltage  
Um = 250 V

Output  
Uo = 6.14V  
Io = 170mA  
Po = 260mW  
Co = 34uF  
Lo = 1.3mH

Ambient Temperature: -40 °C to +60 °C; Enclosure Rating: IP66.

## SPECIFIC CONDITIONS OF USE: YES as shown below:

The Manufacturer shall comply with the following:

1. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.
2. The flameproof joints shall not be repaired.
3. The HART Port 5000 is provided with 3/4"-14 NPT threads and shall only be connected to a suitably certified enclosure. The installation to the certified enclosure shall be with five fully engaged threads, tightened wrench-tight.
4. The HART Port 5000 shall only be fitted to enclosures having a maximum reference pressure of 34.4 bars.
5. The HART Port 5000 shall be connected directly to a suitably certified junction box or instrument for the hazardous area of installation and thereby provide Ex protection for the flying lead connections.
6. The manufacturer is responsible for and shall include in the instruction manual the minimum details of all applicable instructional information required for the equipment by clause 30 of EN/ IEC 60079-0 — i.e., the certificates.
7. The Ingress Protection rating is exclusively based upon the installation instruction for orientation specified in the operating manual.
8. The external bonding of the metallic enclosure may be achieved using the external bonding connection facility and/or threaded entry as part of the installation.



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## **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

This issue, Issue 2, recognises the following change;

1. The QAR was updated, no ExTR was required