



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 CSA 13.0004 Issue No: 1 Certificate history:
Status: **Current** Page 1 of 4 [Issue No. 1 \(2014-10-17\)](#)
Date of Issue: **2014-10-17** [Issue No. 0 \(2013-03-08\)](#)
Applicant: **Automation Products Group, Inc.**
1025 W 1700 N Logan
Utah, 84321
United States of America
Electrical Apparatus: **4-20mA Pressure Transmitter (HU-L24)**
Optional accessory:
Type of Protection: **Ex ia**
Marking:
Ex ia IIB T4 Ga
Ta: -40°C to +85 °C

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

Dorin Stochitoiu

Position:

Technical Advisor

*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:

CSA International
178 Rexdale Boulevard
Toronto, Ontario M9W 1R3
Canada
and
1707 - 94th Street
Edmonton, AB T6N 1E6
Canada





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Manufacturer: **Automation Products Group, Inc.**
1025 W 1700 N Logan
Utah, 84321
United States of America

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 60079-11 : 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:

[CA/CSA/ExTR13.0004/00](#) [CA/CSA/ExTR13.0004/01](#)

Quality Assessment Report:

[CA/CSA/QAR08.0012/03](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The HU-L24-IS-nnK-PSIS-Enn-Pnn-Knn-Bnn 4-20mA Pressure Transmitter consists of encapsulated electronics on two separate printed circuit boards which connects to a silicon piezoresistive strain gage arranged in a Wheatstone bridge configuration mounted in a two-part housing. The upper half of the housing has one of the two printed circuit boards, dedicated for EMI protection. The bottom half of the two part housing is comprised of the second printed circuit board (main electronics) and the strain gage element which is mounted on a thin walled section of the enclosure. The strain gage connects to the main board in the lower housing via a ribbon cable. There is no direct process connection between the pressure sensor and the external environment being measured. External electrical connections are made to the connector fitted at one end.

The equipment has the following safety description (Entity Parameters):

$U_i = 28V$, $I_i = 110mA$, $P_i = 1W$, $C_i = 60.89nF$, $L_i = 7.7mH$

CONDITIONS OF CERTIFICATION: NO



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

Issue 1 - Modification of the EMI board to add a common mode choke and protective circuitry to better protect the Hammer Union sensor against surges and fast transients. The Li parameter has been modified as a result. Also Ui was lowered.