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

Certificate No.: **IECEx EXV 20.0013**

Certificate history:
Issue 0 (2020-09-25)

Status: **Current**

Issue No: 1

Date of Issue: 2023-07-19

Applicant: **Hohner Automation**
Units 14-16 Whitegate Industrial Estate
Wrexham
LL13 8UG
United Kingdom

Equipment: **Hammer Union Pressure Sensor**

Optional accessory:

Type of Protection: **Ex 'i'**

Marking: Ex ia IIC T4 Ga (Ta = -40°C to +60°C)

(equipment may be marked with any temperature within this range)

Approved for issue on behalf of the IECEx Certification Body: **Sean Clarke CEng MSc FIET**

Position: **Certification Manager**

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.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

ExVeritas Limited
Units 16-18 Abenbury Way
Wrexham Ind. Est.
Wrexham LL 139UZ
United Kingdom

IECEx Certificate of Conformity

Certificate No.: **IECEx EXV 20.0013**

Date of issue: 2023-07-19 Issue No: 1

Manufacturer: **Hohner Automation**
Units 14-16 Whitegate Industrial Estate
Wrexham
LL13 8UG
United Kingdom

Manufacturing locations:

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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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:

GB/EXV/ExTR20.0021/00 GB/EXV/ExTR23.0034/00

Quality Assessment Report:

GB/SIR/QAR06.0038/16

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Hammer Union Pressure Sensor HUS-ZXXXXXX or HUT-ZXXXXXX (see part number disambiguation)

SPECIFIC CONDITIONS OF USE: NO
None.

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Equipment (continued):

The “Hammer union pressure sensor” (HUS-ZXXXXXX or HUT-ZXXXXXX) is a pressure sensor intended for static installation in explosive gas atmospheres classified as IECEx Zone 0. It contains a pressure sensing element and complimentary circuitry. The device translates the sensor output to a 4-20 mA output signal which can be input into other industrial standard applications (such as a programmable logic controller). The electronics are housed in a metallic enclosure which is welded together to provide a hermetic seal when filled with encapsulating resin. The device can be manufactured to have a hermetically sealed connector or a cable to accommodate field wiring.

The part number includes the following disambiguation: HUS-ZXXXXXX or HUT-ZXXXXXX

Where:
- HUS/HUT = Product type identification
- Z = one of the following types:
  - A or C for connector versions (see table 1 & 2)
  - B or D permanently connected cable versions (see table 1 & 2)
- X = Optional Alphanumeric characters not affecting certification

The device is intended to be powered via a linear intrinsically safe barrier with the following entity parameters: SEE APPENDIX.

When in service the device only uses the pins PWR+/SIG+ (A) and PWR-/SIG- (B). The programming pins are not used when the device is commissioned.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
This variation is to introduce electronic and mechanical changes to the equipment design.

All schedule drawings are revised and reissued as part of this variation.

Annex:

IECEx Certificate Annex.pdf

Description continued:

The "Hammer union pressure sensor" (HUS-ZXXXXXX or HUT-ZXXXXXX) is a pressure sensor intended for static installation in explosive gas atmospheres classified as IECEx Zone 0. It contains a pressure sensing element and complimentary circuitry. The device translates the sensor output to a 4-20 mA output signal which can be input into other industrial standard applications (such as a programmable logic controller). The electronics are housed in a metallic enclosure which is welded together to provide a hermetic seal when filled with encapsulating resin. The device can be manufactured to have a hermetically sealed connector or a cable to accommodate field wiring.

The part number includes the following disambiguation: HUS-ZXXXXXX or HUT-ZXXXXXX.

Where:

- HUS/HUT = Product type identification
- Z = one of the following types:
  - A or C for connector versions (see table 1 & 2)
  - B or D permanently connected cable versions (see table 1 & 2)
- X = Optional Alphanumeric characters not affecting certification

The device is intended to be powered via a linear intrinsically safe barrier with the following entity parameters:

Table 1: Option A or B	
Parameter	Value
Ui	30 V
Ii	100 mA
Pi	0.75 W
Ci	31 nF
Li	12 µH
C/m	200 pF/m
L/m	1 µH/m

Or

Table 2: Option C or D	
Parameter	Value
Ui	30 V
Ii	100 mA
Pi	0.75 W
Ci	31 nF
Li	12 µH
C/m	100 pF/m
L/m	1 µH/m

When in service the device only uses the pins PWR+/SIG+ (A) and PWR-/SIG- (B). The programming pins are not used when the device is commissioned.

Routine tests:

1. None.

Manufacturer's documents:

Technical Documents			
Title	Drawing number	Revision	Date
HMRU-PCB-COM-001-02 Gerber	HMRU-PCB-COM-001-02 Gerber	2	27/01/2022
HMRU-PCB-IDT-001-03 Gerbers	HMRU-PCB-IDT-001-03 Gerbers	3	18/05/2023
Hammer Union BOM	HMRU-BOM-001-03.pdf	3	12/06/2023
Hammer Union Compensation PCB	HMRU-PCB-COM-001-02.pdf	2	18/05/2023
Hammer Union Amplifier PCB	HMRU-PCB-IDT-001-03.pdf	3	08/06/2023
HUS/HUT Pressure Sensor Label (UKCA, IECEx & ATEX)	HUX-LB-001-02.pdf	2	19/06/2023
General Assembly for Hammer Union Sensor - HUT	RM-AS-002-01.pdf	1	20/06/2023
General Assembly for Hammer Union Sensor - HUS	RM-AS-001-02.pdf	2	19/06/2023
Cage for Hammer Union	RM-CG-001-01.pdf	1	16/06/2023
Elastic Element - HUS	RM-EL-001-02.pdf	2	18/05/2023
Elastic Element - HUT	RM-EL-002-01.pdf	1	18/05/2023
Assembly & Epoxy Location for Elastic Elements	RM-EP-001-01.pdf	1	18/05/2023
Hammer Union 3D Printed Insert (Block Version)	RM-IN-001-01.pdf	1	20/06/2023
Replaceable Connector Standoff	RM-RB-001-01.pdf	1	18/05/2023
Standoff for Connector and PCB	RM-SC-001-02.pdf	2	19/05/2023
Standoff for Replaceable Block and PCB	RM-SC-002-01.pdf	1	18/05/2023
Hammer Union 3D Printed Spiral	RM-SP-001-01.pdf	1	20/06/2023
Hammer Union 3D Printed Spiral (block version)	RM-SP-002-01.pdf	1	20/06/2023
Top section	RM-TS-001-02.pdf	2	18/05/2023
Top section (tube version)	RM-TS-002-01.pdf	1	18/05/2023
User Instructions HUS-ZXXXXXX	User Instructions HUS-ZXXXXXX.pdf	2	June 2023

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