

1 EU - Type Examination Certificate

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: ExVeritas 20 ATEX 0637 Issue: 2

4 Equipment: Hammer union pressure sensor HUS-ZXXXXXX or HUT-ZXXXXXX

5 Manufacturer: Hohner Automation Ltd

6 Address: Units 14-16, Whitegate Industrial Estate, Wrexham, LL13 8UG

7 This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 ExVeritas, Notified Body number 2804 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems for use in potentially explosive atmospheres given in Annex II to the Directive

9 Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with the following Standards and section 16 of this certificate:

EN IEC 60079-0: 2018

EN 60079-11:2012

10 If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design, construction, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment shall include the following:



II 1G Ex ia IIC T4 Ga
Ta = -40°C to +60°C

The device may be marked with any temperature within this range.

Schedule

13 Description of Equipment or Protective System

The "Hammer union pressure sensor" (HUS-ZXXXXXX or HUT-ZXXXXXX) is a pressure sensor intended for static installation in explosive gas atmospheres classified as ATEX Category 1G. 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 | | Or | Table 2: Option C or D | |
|------------------------|----------|----|------------------------|----------|
| Parameter | Value | | Parameter | Value |
| Ui | 30 V | | Ui | 30 V |
| Ii | 100 mA | | Ii | 100 mA |
| Pi | 0.75 W | | Pi | 0.75 W |
| Ci | 31 nF | | Ci | 31 nF |
| Li | 12 µH | | Li | 12 µH |
| C/m | 200 pF/m | | C/m | 100 pF/m |
| L/m | 1 µH/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.

14 Descriptive Documents

14.1 Associated Report and Certificate History:

| Report | Date | Issue | Comment |
|-----------|------------|-------|--|
| R2357/A/1 | 14/09/2020 | 0 | Initial issue of the Prime Certificate |
| - | 25/01/2021 | 1 | Certificate transferred from ExVeritas 2585 to ExVeritas 2804. |
| R4404/A/1 | 15/06/2023 | 2 | Too many changes to summarise here, please see ExTR for changes. |

14.2 Compliance Drawings:

| 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 |

Certificate: ExVeritas 20 ATEX 0637

Issue 2

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For help or assistance relating to this certificate, contact info@exveritas.com.

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Schedule

| Title | Drawing number | Revision | Date |
|--|-----------------------------------|----------|------------|
| 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 |

15 Conditions of Certification

15.1 Special Conditions for Safe Use

- None

15.2 Conditions for Use (Routine tests)

- None

16 Essential Health and Safety Requirements

Essential Health and Safety Requirements are addressed by the standards listed in section 9 and where required the report listed in section 14.1

The manufacturer shall inform the Notified Body of any modifications to the design of the product described by this schedule.