

## 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 SIR 21.0009X | Page 1 of 3 | Certificate history: |
|------------------|--------------------|-------------|----------------------|
| Status:          | Current            | Issue No: 0 |                      |

Date of Issue: 2021-06-22

Applicant: Viatran Corporation

199 Fire Tower Drive Tonawanda, NY, 14150 United States of America

Equipment: 571 Pressure Transducer

Optional accessory:

Type of Protection: Intrinsic Safety

Marking: Ex ia IIC T5 Ga

Ex ia IIC T4 Ga T4: -20°C <Ta< 80°C T5: -20°C <Ta< 40°C

Approved for issue on behalf of the IECEx

Certification Body:

Neil Jones

Position: Certification Manager

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 www.iecex.com or use of this QR Code.



Certificate issued by:

CSA Group Testing UK Ltd Unit 6, Hawarden Industrial Park Hawarden, Deeside CH5 3US United Kingdom





## IECEx Certificate of Conformity

Certificate No.: IECEx SIR 21.0009X Page 2 of 3

Date of issue: 2021-06-22 Issue No: 0

Manufacturer: Viatran Corporation

199 Fire Tower Drive Tonawanda, NY, 14150 United States of America

Additional 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 Report:

GB/CSAE/ExTR21.0010/00

**Quality Assessment Report:** 

NO/PRE/QAR15.0012/04



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Date of issue: 2021-06-22 Issue No: 0

### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The 571 Series Pressure Transducer is a differential pressure transmitter rated for up to 100,000 psi using strain gage (Wheatstone bridge) and electronics, which provide a 4-20mA signal output proportional to the pressure of the gas or fluid. It is housed in stainless steel welded construction enclosure with epoxy sealed 1/2 NPT male wiring nipple and pressure capsule assembly for process connection. It is rated T4 in ambient of 80°C, and T5 at 40°C ambient.

Refer to Annex for additional information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to Annex.

Annex:

IECEx SIR 21.0009X Annexe Issue 0.pdf

Annexe to: IECEx SIR 21.0009X Issue 0

Applicant: Viatran Corporation

Apparatus: 571 Pressure Transducer



### Equipment

The 571 Series Pressure Transducer is a differential pressure transmitter rated for up to 100,000 psi using strain gage (Wheatstone bridge) and electronics, which provide a 4-20mA signal output proportional to the pressure of the gas or fluid. It is housed in stainless steel welded construction enclosure with epoxy sealed 1/2 NPT male wiring nipple and pressure capsule assembly for process connection. It is rated T4 in ambient of 80°C, and T5 at 40°C ambient.

The electronics consist of three main boards: compensation, signal conditioning, and RFI Cap boards. The RFI Cap board and compensation boards are within the all-welded, hermetically sealed enclosure.

The equipment is to be used only with an IS Shunt Diode Barrier, approved for the Hazardous Location.

```
Entity Parameters
Ui=28V
Ii=100mA
Pi<1W
For 100 m integral wire (571 a bb c CL100):
Li=101.2uH
For < 1 m integral wire (571 a bb c CL1):
Li=1.2uH
Ci = 14nF
 II. PART NUMBER FORMAT:
                                            571 <u>a bb</u>
                Input Voltage Code —
                                                       Option Codes (or Mod Code)
              Pressure Range Code
                                                       Pressure Format Code
    The following includes the approved part number format and all available options.
    Input Voltage
    5 = 24V DC (12 to 28)
 (bb) Pressure Ranges
      Code Range (Minimum diaphragm thickness) in inches [MM] for Standard Wetted Material
      PSI:
                                                                                           BW 0-50K (.0770) [1.956]
BZ 0-60K (.0820) [2.083]
      AM 0-100 (.0100) [.254]
                                 AY 0-1000 (.0428)
                                                     [1.087]
                                                               BM 0-10K (.1352)
                        [.254]
[.419]
[.452]
[.577]
      AN 0-150 (.0100)
                                                                                  [4.204]
                                 AZ 0-1500
                                             (.0525)
                                                     1.333
                                                              BP 0-15K
                                                                         (.1655)
      AP 0-200
                (.0165)
                                 BA 0-2000
                                             (.0606)
                                                     1.539
                                                               BQ 0-20K
                                                                          (.0360)
                                                                                  .914
                                                                                            EC 0-75K (.0940) [2.388]
                                             (.0742)
                                                     1.885
                                                                                  1.067
      AR 0-300
                (.0178)
                                 BC 0-3000
                                                               BR 0-25K
                                                                          (.0420)
      AU 0-500 (.0227)
                                 BF 0-5000 (.0954)
                                                     [2.423]
                                                               BS 0-30K
                                                                                  [1.321]
                                                                         (.0520)
     AW 0-750 (.0371)
                        [.943]
                                 BH 0-7500 (.1171)
                                                     [2.974]
                                                               BU 0-40K
                                                                          (.0640)
      Bar:
                                                                                              FU 0-250
                                 FK 0-16
                                            (.0178)
                                                     [.452]
                                                              FP 0-60
                                                                          (.0428)
                        [.254]
[.254]
[.419]
                                                                          (.0525)
                                                                                   1.333
1.539
                                                                                                         (.1171)
(.1352)
      FH 0-6
               (.0100)
                                 FL 0-25
                                           (.0227)
                                                     .557
                                                              FQ 0-100
                                                                                              FW 0-400
                                                                                                                   2.974
      FI 0-10
                (.0100)
                                 FM 0-35
                                            (.0227)
                                                     .557
                                                              FR 0-130
                                                                          (.0606)
                                                                                              FX 0-600
                                                                                                                   3.434
     FJ 0-13 (.0165)
                                 FN 0-40
                                            (.0371)
                                                     [.943]
                                                              FT 0-160
                                                                          (.0742)
                                                                                   [1.885]
                                                                                              FZ 0-1000 (.1655)
 (c) Pressure Format:
```

V - Vacuum (See agency marking)

G - Gage

S - Sealed Gage

A - Absolute

Annexe to: IECEx SIR 21.0009X Issue 0

Applicant: Viatran Corporation

571 Pressure Transducer Apparatus:



(dd) Option Codes:

Any combination of option codes can be used unless stated otherwise. These may be listed individually or as a mod code. If there is a mod. code, options will be listed on that document

Alternate Electrical Connections:

B(A-Z), C(A-Z), Z(A-Z) alternate electrical connections approved [Class I, DIV I and/or Zone 0 only] provided the following is met (not applicable to NZ, TJ, TK or ME) ZU & ZL can be used with NG, ZU can be used with NY:

1. Standard uses the following RFI cap electronics (i.e. no other inductors or capacitors):
PCBD assby 643538 with 050065 header and (4) 1500007196 RFI pins
2. A minimum spacing of 3mm between all uninsulated parts and enclosure
3. Alternate RFI assembly number is 2 digit connection code followed by 5245

All alternate pressure ports [Option codes Y(A-Z), W(A-Z), S(A-Z), V(A-Z)] are approved provided the following conditions are met:

Typical sensors are called out in the pressure capsule assemblies listed on page 1.
 The pressure cap minimam wall thickness is not less than that depicted in pressure

range table in Section II (bb)

3. PEO Category I— Parts listed on FR0165
PED Category III — Parts listed on FR0193

Atternate Electrical Connection Wiring: (A-Z)(A-Z)(A-Z) at end of part number. To designate wiring other than standard as noted in Table 1.0. Each 3-digits code combination represents a unique wiring configuration

Performance Options: CL Extra Lead Length

DF Bleed Port (10K PSI Max)
DG Improved Temperature Compensation
[to: <0.5%100°F for Zero/Span]
DK Special Calibration Shunt \_\_\_\_%
DP Submersible Housing

DQ Cleaning For Oxygen Service DZ Non-Interactive Control Module

EA Special Calibration

Exotic Metals, Wetted Parts QA Stainless Steel 316L

QB Incohel X-750

QC Hastelloy C-276 QJ 17-4PH NACE QL VASCO MAX C-250

QK INCONEL 718

MD FM Suitable for/IS ME CSA Explosion Proof Label

MR Modified Electrical Damping (Fixed)

ND Submersion Test

NG ATEX Flameproof Label

NH Customer Specified Identification

NJ CE Label

NK ATEX IS Label

NSR Non Standard Range

NX CSA Intrinsically Safe Label NY FM Explosion Proof Label

NZ FM Non-Incendive Label

TA Assembly Of Transmitter To Conduit Connection Box

TB Flame Arrestor

TF FM Intrinsically Safe Label

TJ CSA Div/Zone 2 Label

TK ATEX Type n Label TW EAC Ex Label

ZU Direct Coupled Cable

### Specific Conditions Of Use

1. The equipment must only be connected to intrinsically safe equipment certified as an associated apparatus for installation in the intended hazardous location per the installation drawing.

22 June 2021 Page 2 of 2 Date: