# Certificate of Compliance

**Certificate:** 70004793 **Master Contract:** 259620

**Project:** 70004793 **Date Issued:** 2015-02-24

**Issued to:** **Sensy SA**
**Z.I Jumet**
**Allee Centrale**
**Charleroi, Hainaut 6040**
**Belgium**
**Attention: M. Puigdellivol**

***The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only***

C US

**Issued by:** Raymond Papiah

**PRODUCTS**

**CLASS 2258-04** -PROCESS CONTROL EQUIPMENT – Intrinsically Safe, Entity - For Hazardous Locations

Ex ia IIC T6 Ga
Ex ia IIIC T80°C Da
Class I, Division 1, Groups A, B, C and D; Class II Division 1, Groups E, F, G; Class III

**CLASS 2258-84** -PROCESS CONTROL EQUIPMENT – Intrinsically Safe, Entity -For Hazardous Locations – Certified to US Standards

AEx ia IIC T6 Ga
AEx ia IIIC T80°C Da
Class I, Division 1, Groups A, B, C and D; Class II Division 1, Groups E, F, G; Class III

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Type 5000,5100, 5105, 5300, 5600,5560, 2600, 2960 Shear Beam Force Transducers, -40°C ≥Ta≥ +60°C, intrinsically safe when installed with the with following options and entity parameters:

| Option | OPTION 1 | OPTION 2 | OPTION 3 | OPTION 4 |
|---|---|---|---|---|
| BODY | CE-5000-XXXXXXXXXXX<br>CE-5300-XXXXXXXXXXX<br>CE-5600- XXXXXXXXXXX<br>CE-5560- XXXXXXXXXXX<br>CE-2600- XXXXXXXXXXX<br>CE-2960- XXXXXXXXXXX<br>CE-5100-XXXXXXXXXXX<br>CE-5105-XXXXXXXXXXX | CE-5000-XXXXXXXXXXX<br>CE-5300-XXXXXXXXXXX<br>CE-5600- XXXXXXXXXXX<br>CE-5560- XXXXXXXXXXX<br>CE-2600- XXXXXXXXXXX<br>CE-2960- XXXXXXXXXXX<br>CE-5100-XXXXXXXXXXX<br>CE-5105-XXXXXXXXXXX | CE-5000-XXXXXXXXXXX<br>CE-5300-XXXXXXXXXXX<br>CE-5600- XXXXXXXXXXX<br>CE-5560- XXXXXXXXXXX<br>CE-2600- XXXXXXXXXXX<br>CE-2960- XXXXXXXXXXX | CE-5000-XXXXXXXXXXX<br>CE-5300-XXXXXXXXXXX<br>CE-5600- XXXXXXXXXXX<br>CE-5560- XXXXXXXXXXX<br>CE-2600- XXXXXXXXXXX<br>CE-2960- XXXXXXXXXXX |
| STRAIN GAUGES | Transducer-class strain gauges (no resistance limitation > 350Ω) | Transducer-class strain gauges:<br>* Resistance > 1000Ω | Transducer-class strain gauges:<br>* Resistance > 1000Ω | Transducer-class strain gauges:<br>* Resistance > 1000Ω |
| CORRECTION CIRCUIT | CI-5000XXX<br>CI-5510XXX<br>CI-2712XXX | CI-5000XXX<br>CI-5510XXX<br>CI-2712XXX | CI-5000XXX<br>CI-5510XXX<br>CI-2712XXX | CI-5000XXX<br>CI-5510XXX<br>CI-2712XXX |
| AMPLIFIER | - | - | ICA5A amplifier | ICA5A amplifier |
| OUTPUT WIRE | Refer to conditions of applicability. | Refer to conditions of applicability. | Refer to conditions of applicability. | Refer to conditions of applicability. |
| Cable | 4 wire cable<br>(6 wires if Sense) | 4 wire cable<br>(6 wires if Sense) | 2 wire cable | 4 wire/2 wire cable |
| The total combination of Ui/Vmax, Ii/Imax and Pi at Power supply and signal output lines) shall not exceed | Ui/Vmax = 28V<br>Ii/Imax = 160 mA<br>Pi = 1 W<br>Ci = 0<br>Li = 0 | Ui/Vmax = 28V<br>Ii/Imax = 160 mA<br>Pi = 1 W<br>Ci = 0<br>Li = 0 | Ui/Vmax = 28V<br>Ii/Imax = 160 mA<br>Pi = 1 W<br>Ci = 0<br>Li = 15.92 µH | Ui/Vmax = 28V<br>Ii/Imax = 160 mA<br>Pi = 1 W<br>Ci = 0<br>Li = 15.92 µH |

**Conditions of Applicability**

i When the apparatus is used in dust atmospheres, connectors, plugs and cable glands used shall have an ingress protection of at least IP6X.

ii The equipment is not capable of withstanding the 500V dielectric strength requirement in accordance with clause 6.3.13 of ANSI/UL 60079-11:13, 6th Edition or CAN/CSA-C22.2 No. 60079-11:14 . This shall be taken into account when installing the equipment.

## APPLICABLE REQUIREMENTS

Canadian Standards

| | |
|---|---|
| CAN/CSA-C22.2 No. 0-10 | General Requirements - Canadian Electrical Code Part II |
| C22.2 No.142-M1987 | Process Control Equipment |
| CAN/CSA-C22.2 No. 60079-0:11<br>(IEC 60079-0:2007 5th Ed., MOD) | Explosive atmospheres — Part 0: Equipment — General requirements |
| CAN/CSA-C22.2 No. 60079-11:14<br>(IEC 60079-11:2011 6th Ed., MOD) | Explosive atmospheres — Part 11: Equipment protection by intrinsic safety “i” |

US Standards

| | |
|---|---|
| ANSI/UL 508, 17th Edition | Industrial Control Equipment |
| ANSI/UL Standard 913 | Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations |
| ANSI/UL 60079-0:13, 6th Edition | Explosive Atmospheres - Part 0: Equipment - General Requirements |
| ANSI/UL 60079-11:13, 6th Edition | Explosive Atmospheres – Part 11: Electrical Protection by Intrinsic Safety "i" |

The certified equipment appearing in this classification is judged to comply with the applicable requirements of the NFPA 70 National Electrical Code (NEC) for use in hazardous locations.

## MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The marking is engraved onto the equipment and includes the following:

- CSA file number "259620".
- Model designation.
- Entity parameters
- Date code/serial number traceable to month and year of manufacture.
- The CSA Mark with adjacent C_US qualifiers.

- Hazardous Location markings for Canada as follows:
  Ex ia IIC T6 Ga
  Ex ia IIIC T80°C Da
  Class I, Division 1, Groups A, B, C and D; Class II Division 1, Groups E, F, G; Class III

- Hazardous Location markings for United States (US) as follows:
  Class I, Zone 0, AEx ia IIC T6 Ga
  Zone 20, AEx ia IIIC T80°C Da
  Class I, Division 1, Groups A, B, C and D; Class II Division 1, Groups E, F, G; Class III

- Ambient temperature for Canada and United States (US): 40°C ≥Ta≥ +60°C