



Certificate of Compliance

Certificate: 2588225

Master Contract: 256053

Project: 80103385

Date Issued: July 25, 2023

Issued To: Positek a division of Variohm Eurosensor Limited
Unit L6 The LinkAndoversford
Cheltenham, Gloucestershire, GL54 4LB
United Kingdom

Attention: Robert Munn



Issued by:

Ian Henderson

PRODUCTS

CLASS - C225804 - PROCESS CONTROL EQUIPMENT Intrinsically Safe, Entity - For Hazardous Locations

Ex ia IIC T4 Ga

Ex ia IIIC T135°C Da

Class I, Division 1, Groups A, B, C, D; T4

Class II, Division 1, Groups E, F, G, T135°C;

Class III Division 1;

Series EX08, models are Gxxx or Hxxx, position Sensors comprising of a range of rotary and linear inductive position sensors. The ambient temperature range is -40°C to +80°C. Intrinsically safe when installed as per G000-19 or H000-19.

The equipment has the following Entity Parameters:

Parameter	EX08
Ui	11.4 V
Ii	0.2 A
Pi	0.51 W
Ci without integral cable	1.16 µF
Ci with integral cable (Max. length)	1.36 µF(1000 m)
Li without integral cable	50 µH
Li with integral cable (Max. length)	860 µH (1000 m)



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CLASS - C225884 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations - Certified to US Standards

Class I, Zone 0, AEx ia IIC T4 Ga
Zone 20, AEx ia IIIC, T135°C Da;
Class I, Division 1, Groups A, B, C, D; T4
Class II, Division 1, Groups E, F, G, T135°C;
Class III Division 1;

Series EX08, models are Gxxx or Hxxx, position Sensors comprising of a range of rotary and linear inductive position sensors. The ambient temperature range is -40°C to +80°C. Intrinsically safe when installed as per G000-19 or H000-19.

The equipment has the following Entity Parameters:

Parameter	EX08
Ui	11.4 V
li	0.2 A
Pi	0.51 W
Ci without integral cable	1.16 µF
Ci with integral cable (Max. length)	1.36 µF(1000 m)
Li without integral cable	50 µH
Li with integral cable (Max. length)	860 µH (1000 m)

The models are Gxxx or Hxxx

Model prefix 'G' designates an intrinsically safe product for use in gas/vapour application

Model prefix 'H' designates an intrinsically safe product for use in dust and gas/vapour applications.

Where xxx = three digit numeric code for specific sensor design

Additional characters indicate further option codes

The final installation of the system shall meet all applicable codes and it shall be subjected to acceptance of local authority having jurisdiction.

CONDITIONS OF ACCEPTABILITY

1. The apparatus does not meet the 500V r.m.s dielectric strength test between circuit and frame, in accordance with clause 6.3.13 of CSA/UL 60079-11. This must be taken into consideration on installation.

2. Maximum permitted cable parameters:



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- Capacitance ≤ 200 pF/m.
- Inductance ≤ 0.81 μ H/m.
- Length ≤ 1000 m.

3. Under certain extreme circumstances, the non-metallic and isolated metal parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. This is particularly important if the equipment is installed in a zone 0 location. In addition, the equipment shall only be cleaned with a damp cloth.

4. When using a Sensor that has an integral cable in a dust application, the free end of the cable shall be appropriately terminated for the zone and division of use.

APPLICABLE REQUIREMENTS

UL 61010-1, 3rd edition (2012), AMD1: 2018	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements
CAN/CSA C22.2 No. 61010-1-12, UPD1: 2015, UPD2: 2016, AMD1: 2018	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements
CANCSA No. 60079-0:19	Explosive atmospheres — Part 0: Equipment — General requirements
CAN/CSA-C22.2 No. 60079-11:14	Explosive atmospheres — Part 11: Equipment protection by intrinsic safety “i”
UL 60079-0: 7th Edition, 2019	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements
UL 60079-11:2013_R2018, Sixth Edition	Electrical apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety “i”
UL913-2022	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations



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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 products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

The following markings are etched onto the EX08 Gxxx or Hxxx sensor body:

- Manufacturer's name or CSA Master Contract Number "256053", adjacent to the CSA Mark in lieu of manufacturer's name.
- CSA certificate number 13.2588225 or CSA12CA2588225
- Model number: As specified in the PRODUCTS section, above.
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- Temperature code: As specified in the PRODUCTS section, above.
- Method of Protection markings (Ex – markings): As specified in the PRODUCTS section, above (abbreviations applied).
- Manufacturing date in MMY format, or serial number, traceable to month of manufacture.
- The CSA Mark with or without "C" and/or "US" indicators, as shown on the Certificate of Conformity.
- The following words:
 - "Ex ia".
- "Install per drawing G000-19 or H000-19 (where the following listed)"
 - Electrical ratings.
 - "WARNING: Substitution of components may impair intrinsic safety."

Notes:

Products certified under Class C225804, C225884 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca

