

Certificate of Compliance

Certificate: 2534055 **Master Contract:** 256053

Date Issued: Project: 80103389 August 02, 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: Jan Henderson

PRODUCTS

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

IS Associated Apparatus for supply to Class I, Div 1, Group A,B,C,D; Class II, Div1, Group E,F,G; Class III, Div 1;

[Ex ia Ga] IIC

[Ex ia Da] IIIC

G005 3-Port Galvanic Isolation Amplifier rated 30 Vdc max, 200mA max. Ambient temperature -20°C to +60°C. Provides Intrinsically Safe outputs with the following entity parameters:

Um/Umax=	30Vdc			
Imax=	200mA			
Uo/Voc =	10.66 V			
Io/Isc =	50.5 mA			
Po/Pout =	121 mW			
Group	IIC	IIB	IIA	
Co/Ca =	2.23	15.6	69.0	μF
Lo/La =	14	53	112	mH
OR				
L / R ratio	295	1178	2357	$\mu H / \Omega$

The G005 3-Port Galvanic Isolation Amplifier shall be connected according to the installation drawing nos. G005-19; in ordinary location and represents the associated apparatus that provides intrinsically safe circuits Ambient Temperature Range: -20°C=<Ta=<+60°C.



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Conditions of Acceptability:

1. The equipment shall be supplied with Limited Energy Circuit (LEC), Class 2 as defined in article 725.121 of NFPA70, or Limited Power Source (LPS) as defined in CAN/CSA C22.2 No. 60950-1.

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

IS Associated Apparatus for supply to Class I, Div 1, Group A,B,C,D; Class II, Div1, Group E,F,G; Class III, Div 1;

[AEx ia Ga] IIC [AEx ia Da] IIIC

G005 3-Port Galvanic Isolation Amplifier rated 35 Vdc max, 200mA max. Ambient temperature -20°C to +60°C. Provides Intrinsically Safe outputs with the following entity parameters:

Um/Umax=	30V			
Imax=	200mA			
Uo/Voc =	10.66 V			
Io/Isc =	50.5 mA			
Po/Pout =	121 mW			
Group	IIC	IIB	IIA	
Co/Ca =	2.23	15.6	69.0	μF
Lo/La =	14	53	112	mH
OR				
L / R ratio	295	1178	2357	$\mu H / \Omega$

The G005 3-Port Galvanic Isolation Amplifier shall be connected according to the installation drawing nos. G005-19; in ordinary location and represents the associated apparatus that provides intrinsically safe circuits Ambient Temperature Range: -20°C=<Ta=<+60°C.

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 equipment shall be supplied with Limited Energy Circuit (LEC), Class 2 as defined in article 725.121 of NFPA70, or Limited Power Source (LPS) as defined in CAN/CSA C22.2 No. 60950-1.



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APPLICABLE REQUIREMENTS

UL 61010-1, 3rd edition (2012),

AMD1: 2018

CAN/CSA C22.2 No. 61010-1-12, UPD1: 2015, UPD2: 2016, AMD1:

2018

CSA No. 60079-0:19

CAN/CSA-C22.2 No. 60079-11:14

UL 60079-0-ed 7 2020 revision

UL 60079-11:2013-2018

UL913-2022

Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements

Explosive atmospheres — Part 0: Equipment — General requirements Explosive atmospheres — Part 11: Equipment protection by intrinsic

safety "i"

Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General

Requirements

Electrical apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic

Safety "i"

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 found on the G005 3-Port Galvanic Isolation Amplifier:

- Full product part number (G005-nnn, nnn three digit numeric code for input span and output type)
- Serial number
- Year of manufacture

The above are provided on a CSA Certified or UL Recognized for Canada, and CSA Certified for U.S. or UL Recognized adhesive nameplate, which is suitable for indoor and outdoor use on polycarbonate, at a service temperature of range of 20°C to +60°C or greater. The nameplate is affixed as depicted in drawing G005-12.

Screen printed:

- Manufacturer's name or CSA Master Contract Number "256053", adjacent to the CSA Mark in lieu of manufacturers name.
- CSA certificate number 12.2534055 or CSA12CA2534055
- Model number: As specified in the PRODUCTS section, above.
- Electrical ratings: As specified in the PRODUCTS section, above.
- Hazardous Locations: As specified in the PRODUCTS section, above.
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- The CSA Mark with or without "C" and/or "US" indicators, as shown on the Certificate of Conformity.
- The following words:
 - o "[Ex ia Ga] IIC & [Ex ia Da] IIIC".
 - o The words: "ASSOCIATED EQUIPMENT"
- "Install per drawing G000-19 or H000-19 (where the following listed)"
 - o Electrical ratings.
 - o "WARNING: Substitution of components may impair intrinsic safety."



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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

