

# **Certificate of Compliance**

Certificate:

70181221

Master Contract: 184981

Project:

70181221

Date Issued:

2018-07-12

Issued to:

**PCB** Piezotronics 3425 Walden Ave

Depew, New York 14043

USA

Attention: Carrie Termin

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.



Issued by:

Anil Sodhi Anil Sodhi

### **PRODUCTS**

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

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

Class I, Div. 1, Group A, B, C & D; Ex ia IIC T6 ...482°C Ga; Class I, Zone 0, AEx ia IIC T6 ... 482°C Ga

Models EX356XYYY/MNNNZZ series High Temperature Accelerometer; intrinsically safe with combined entity parameters for three axis as shown below; must be installed as per installation drawing 62992; temperature code as shown below. Ambient temperature –55°C to +472°C



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Entity Parameters	Temperature Code
<u>Version with Connectors</u>	
Ui: 28 V, Ii: 120 mA, Pi: 1 W, Ci: 750 pF, Li: 0	T6 (-55°C to +80°C)
or	T5 (-55°C to +95°C)
Ui: 15 V, Ii: 900 mA, Pi: 1 W, Ci: 750 pF, Li: 0	T4 (-55°C to 130°C)
	T3 (-55°C to 195°C)
<u>Version with integral cables</u>	T2 (-55°C to 290°C)
Ui: 28 V, Ii: 120mA, Pi: 1 W, Ci: 6nF, Li: 30 μH	T1 (-55°C to 440°C)
or	482°C (-55°C to 472°C)
Ui: 15 V, Ii: 900 mA, P1: 1W, Ci: 6 nF, Li: 30 μH	

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations - Certified to U.S. Standards

Class I, Div. 2, Group A, B, C and D; Ex nA IIC T6 ...482°C Gc; Class I, Zone 2, AEx nA IIC T6 ...482°C Gc:

Models EX356XYYY/MNNNZZ series High Temperature Accelerometer; must be installed as per installation drawing 62992. Ambient temperature –55°C to +472°C.

Electrical ratings: 28Vdc, 120mA max. 1W max.

#### **Conditions of Acceptability:**

- 1. For Canadian Installations, sensor case must be bonded to ground according to the requirements of CEC, Part 1.
- 2. For US Installations, sensor case must be bonded to ground according to the requirements of NEC.
- 3. The sensor must only be connected to a certified associated apparatus.
- 4. The cable used must have an operating temperature compatible with the environment in which the sensor is installed.
- 5. The combined Entity parameters for EX356XYYY/MNNNZZ shall not exceed the safe limit requirements for Gas Group IIC.
- 6. The above accelerometer model EX356XYYY/MNNNZZ is certified as a component for use in the final assembly. The final application shall be subjected to approval of local authority having jurisdiction.



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## APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 60079-0:15	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"
CAN/CSA C22.2 No. 60079-15:12	Electrical apparatus for explosive gas atmospheres - Part 15: Construction, test and marking of type of protection "n"
CAN/CSA-C22.2 No. 61010-1-12	Safety Requirements For Electrical Equipment For Measurement, Control, And Laboratory Use - Part 1: General Requirements
ANSI/ISA-60079-0-2013	Explosive Atmospheres - Part 0: Equipment - General Requirements
ANSI/ISA-60079-11-2014	Explosive Atmospheres - Part 11: Equipment Protection By Intrinsic Safety "I"
ANSI/ISA-60079-15 -2012	Explosive atmospheres – Part 15: Equipment protection by type of protection "n"
ANSI/ISA-61010-1 Third Edition	Safety Requirements For Electrical Equipment For Measurement, Control, And Laboratory Use - Part 1: General Requirements
C22.2 No. 213-17	Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
ANSI/ISA-12.12.01-2015	Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations



# Supplement to Certificate of Compliance

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The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

## **Product Certification History**

Project	Date	Description
70181221	2018-07-12	Original Certification (cCSAus) for Triaxial high temperature accelerometers model EX356XYYY/MNNNZZ for following markings: Ex ia IIC T6482°C Ga; Class I, Zone 0, AEx ia IIC T6482°C Ga; Class I, Division 1, Groups ABCD Ta:-55°C ≤ Tamb ≤ +472°C; Ex nA IIC T6482°C Gc; Class I, Zone 2, AEx nA IIC T6482°C Gc; Class I Division 2, Groups ABCD Ta:-55°C ≤ Tamb ≤ +472°C.