



Certificate of Compliance

Certificate: 2493476 (111518_0_000)

Master Contract: 161047

Project: 70081468

Date Issued: 2016-06-14

Issued to: Computational Systems, Inc.
835 Innovation Dr
Knoxville, Tennessee 37932
USA

Attention: Dwayne Beeler

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: Konstantin
Rybalko
Konstantin Rybalko

PRODUCTS

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

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

Ex ia IIB T4 Ga:

AEx ia IIB T4 Ga:

Class I, Division 1, Groups C & D:

• Vibration Monitor Model CSI 9420. Battery Operated (7.8Vdc max). Intrinsically Safe when powered by Battery Pack Model 701PBKKF or A0701PBU and with the following entity parameters: Hart Connector: Voc/Uo = 7.8 V, Isc/Io = 155 mA, Po = 303 mW, Ca/Co = 2 μ F, La/Lo = 5 mH; Vmax/Ui = 7.8 V, Imax/Ii = 5 mA, Pmax/Pi = 9.75 mW, Ci = 54 μ F, Li = 5.1 mH; Accelerometer Connector: Voc/Uo = 7.8 V, Isc/Io = 158 mA, Po = 309 mW, Ca/Co = 2 μ F, La/Lo = 5 mH; installed per Control Drawing No. D25418. Temperature Code T4 (135°C), -40°C \leq Ta \leq +85°C; Type 4X Enclosure.

Ex ic IIC T4 Gc

AEx ic IIC T4 Gc

Class I, Division 2, Groups A, B, C & D



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• Vibration Monitor Model CSI 9420. Battery Operated (7.8Vdc max). Intrinsically Safe when powered by Battery Pack Model 701PBKKF or A0701PBU and with the following entity parameters: Hart Connector: Voc/Uo = 7.8 V, Isc/Io = 155 mA, Po = 303 mW, Ca/Co = 2 µF, La/Lo = 3mH; Vmax/Ui = 7.8 V, Imax/Ii = 5 mA, Pmax/Pi = 9.75 mW, Ci = 54 µF, Li = 3.1 mH; Accelerometer Connector: Voc/Uo = 7.8 V, Isc/Io = 158 mA, Po = 309 mW, Ca/Co = 2 µF, La/Lo = 3 mH; installed per Control Drawing No. D25418. Temperature Code T4 (135°C), -40°C ≤ Ta ≤ +85°C; Type 4X Enclosure.

Note:

The enclosure may be opened to operate the push buttons, rotate the display or change the battery pack despite the following warning which appears on the cover "IN EXPLOSIVE ATMOSPHERE KEEP TIGHT WHEN CIRCUIT ALIVE". This warning is present as it is required for other products which use the same enclosure.

APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 0-M91	-	General Requirements - Canadian Electrical Code, Part II
CAN/CSA-C22.2 No. 94-M91	-	Special Purpose Enclosures
CSA Std. C22.2 No. 142-M1987	-	Process Control Equipment
CAN/CSA-C22.2 No. 157-92	-	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
CSA C22.2 No. 213-M1987	-	Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
CAN/CSA-C22.2 No. 60079-0:11	-	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements
CAN/CSA-C22.2 No. 60079-11:11	-	Electrical Apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety "i"
UL 50:2007	-	Enclosures for Electrical Equipment, Non-Environmental Considerations
UL 913:7 th Ed.	-	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous Locations
UL 916:2007	-	Energy Management Equipment
ANSI/UL 60079-0:2009	-	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements
ANSI/UL 60079-11:2009	-	Electrical Apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety "i"



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
70081468	2016-06-14	Update to CSA Report 2493476 to include optional battery cover material, clarification of antenna options and documentation updates.
70041103	2016-03-22	Update to CSA Report 2493476 to include the revised power module (from IECEx component certificate) and to assess the new enclosure for a Type 4X rating.
70050369	2015-11-11	Update to Report 2493476 to Update nameplate drawing and antenna details.
70037210	2015-10-14	Update report 2493476 to revised document list based on mechanical and note changes to new version of drawings.
70018091	2015-05-28	Update to include the evaluation of Vibration Monitor Model CSI 9420 to Class I Div.2 Gr. A,B,C,D; Ex ic IIC, AEx ic IIC , CSA-us mark for North America.
70008234	2015-03-31	Update to include revised bill of material documents that show only the safety critical components rather than all components.
2582041	2012-11-29	Update to include revised control drawing.
2537311	2012-07-13	Update to include revised schematics, layouts and assembly documents.
2493476	2012-04-16	cCSAus Certification of Vibration Monitor, Model CSI 9420; Intrinsically Safe for Class I, Zone 0 and Class I, Div. 1 hazardous locations.