



Certificate of Compliance

Certificate: 70031613 (103164_0_000)

Master Contract: 184981

Project: 70153084

Date Issued: 2017-11-21

Issued to: Industrial Monitoring Instr. (IMI) A Div. of PCB Piezotronics, Inc.
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: *Marin Banu*
Marin Banu

PRODUCTS

CLASS - C225802 - PROCESS CONTROL EQUIPMENT-For Hazardous Locations-

CLASS - C225882 - PROCESS CONTROL EQUIPMENT-For Hazardous Locations - Certified to US Standards

For details related to rating, size, configuration, etc. reference should be made to the CSA Certification Record or the descriptive report.

PRODUCTS

CLASS 2252 06 - PROCESS CONTROL EQUIPMENT

CLASS 2252 86 - PROCESS CONTROL EQUIPMENT (Certified to U.S. Standards)

Mechanical Vibration Switch, Models 685A09, 685A19 , 685A29, 685A39 and OEM model V6 with variable Part Number xxxxxxxx; rated 24Vdc, 120 Vac, 50/60 Hz, 3 A & 240 Vac, 50/60 Hz 0.25 A. Intermittent Operating Conditions 25% ON and 75% OFF. Ambient Temperature 5°C to +40°C.

Notes:

1. Class I, permanently connected equipment
2. Rated: Pollution Degree 2, Overvoltage Category II.
3. Environmental Conditions: 2000 m max



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CLASS 2258 02 PROCESS CONTROL EQUIPMENT - For Hazardous Locations

CLASS 2258 82 PROCESS CONTROL EQUIPMENT - For Hazardous Locations – Certified to US Standards

Ex d IIB T6 Gb
 Ex tb IIIC T85°C Db IP66
 Class I, Zone 1 A/Ex d IIB T6 Gb

Zone 21 AEx tb IIIC T85°C Db IP66
 Class I, Div 2 Groups A, B, C, D; T6
 Class II, Div 1, Groups E, F, and G

Mechanical Vibration Switch, Models EX685A09, EX685A19, EX685A29 and EX685A39; rated 24Vdc, 120 Vac, 50/60 Hz, 3 A & 240 Vac, 50/60 Hz 0.25 A. Intermittent Operating Conditions 25% ON and 75% OFF. Ambient Temperature -20°C to +60°C.

Note: Installation in Class I, Div. 2 and Class II Div. 1 shall use the same configuration as for Zone 1 and Zone 21, respectively.

APPLICABLE REQUIREMENTS

CSA C22.2 No. 61010-1-12 3 rd Ed.	Safety Requirements for Electrical Equipment for Measurement, Control & Laboratory Use - Part 1: General Requirements
CAN/CSA-C22.2 No. 60079-0: 15	Explosive Atmospheres - Part 0: Equipment - General requirements (Ed 6.0)
CAN/CSA-C22.2 No. 60079-1:11	Explosive atmospheres — Part 1: Equipment protection by flameproof enclosures “d” (Ed 6.0)
CAN/CSA-C22.2 No. 60079-31: 15	Explosive atmospheres — Part 31: Equipment dust ignition protection by enclosure “t”(Ed 2.0)
CAN/CSA-C22.2 No. 60529: 2005	Degrees of Protection provided by Enclosures (IP Code) (Ed 5.0)
UL 61010-1 (3rd Ed.)	Safety Requirements for Electrical Equipment for Measurement, Control & Laboratory Use - Part 1: General Requirements
ANSI/UL 60079-0:13	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements
ANSI/ISA-60079-1 (12.22.01)-2009 (R2013)	Explosive Atmospheres - Part 1: Equipment Protection by Flameproof Enclosures “d”
ANSI/ISA-60079-31 (12.10.03)-2015	Explosive Atmospheres – Part 31: Equipment Dust Ignition Protection by Enclosure “t” (Edition 2)
ANSI/IEC 60529: 2005	Degrees of Protection provided by Enclosures (IP Code) (Ed 5.0)

MARKINGS



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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.

Nameplate adhesive label material approval information: CSA approve adhesive label material used for the nameplate.

The following markings appear on the product:

1. Submitter's identification (company name and/or file number and/or registered tradename);
2. Marking on the unit that indicates the manufacturing location if the equipment is manufactured at more than one factory location. Model designation;
3. Electrical rating;
4. Date of manufacture: Month and year of manufacture or date code. If a serial number is used instead of date of manufacture, a record of serial numbers shall be kept traceable to date of manufacture. (Not related to date of sale).
5. The products listed 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:



Note Jurisdictions in Canada may require these markings to be also in French. It is the responsibility of the Customer to provide bilingual marking, where applicable, in accordance with the requirements of the Provincial Regulatory Authorities. It is the responsibility of the Customer to determine this requirement and have bilingual wording added to the "Markings".

Marking Method: The above markings are made via silk screening, die stamping, moulding or on CSA certified or UL recognized adhesive nameplate material, compatible with the surface used; or other equivalent permanent means that can pass the label rub test.

DOCUMENTATION

Equipment is accompanied by the following documentation.

General:

Technical specifications, instructions for use and details of where technical assistance may be obtained if required.

Equipment Ratings:



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This includes equipment supply, description of I/O connections and operating environmental conditions.

1. Pollution degree 2;
2. Installation category II;
3. Altitude 2000m;
4. Electrical supply 24Vdc, 120 Vac, 240 Vac
5. Temperature 5°C to 40°C
6. Warning: Do not exceed the maximum relay ratings as noted below.

Rated Voltage	Resistive Load	Inductive Load	Motor, Lamp Load	
			N.C	N.O
AC 125V	15A	10A	4A	2A
AC 250V	15A	10A	3A	1.5A
AC 480V	3A	2A	-	-
DC 8V	15A	15A	-	-
DC 14V	15A	10A	-	-
DC 30V	6A	5A	-	-
DC 125V	0.5A	0.05A	-	-
DC 250V	0.25A	0.03A	-	-



Equipment Installation:

This includes instructions for mounting, location requirements, details for special services if any.

HAZ LOC MARKINGS:

The following markings appear:

- Company name
- Model number
- Serial number
- Electrical rating
- Haz loc rating:
- CSA Monogram with C/US indicators
- Ambient temperature range
- Caution re Explosion hazard
- WARNING – DO NOT OPEN WHEN ENERGIZED
- WARNING – A SEAL SHALL BE INSTALLED WITHIN 50 mm OF THE ENCLOSURE
- WARNING – AFTER DE-ENERGIZING, DELAY X* MINUTES BEFORE OPENING.
- CAUTION – USE FASTENERS WITH YIELD STRESS \geq 450 MPa

* Opening time (minute)	2	26
Option	Without remote	With remote reset



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
70153084	2017-11-21	Update 70031613 to revised construction of the Model 685A Series Mechanical Vibration Switch to include Zones and Divisions for North America hazardous locations certification.
70044215	2015-09-10	Update report 70031613 to add model OEM.
70031613	2015-08-11	CSA c-us certification for Mechanical Vibration Switch, models 685M09/685M19/29/39.