Certificate of Compliance

Certificate: 1819674 **Master Contract:** 184981 (103164_0_000)

Project: 70156145 **Date Issued:** 2017-10-27

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: Thong Tong
Thong Tong

PRODUCTS

CLASS - C225802 - PROCESS CONTROL EQUIPMENT-For Hazardous Locations-
CLASS - C225882 - PROCESS CONTROL EQUIPMENT-For Hazardous Locations - Certified to US Standards

Class I, Div. 1, Groups B, C and D; Class II, Div. 1, Groups E, F and G; Class III, Div. 1

Model 685B0X01C14 Electronic Vibration Switch; input supply rated 85-245 Vac, 50/60 Hz, 150 mA max; Output (optional) rated 15 Vdc, 4-20 mA; 5 Vdc, 1 mA; Relay Contact Rated 245 Vac, 10A; 30 Vdc, 5A; Temperature Code T6; -25 Deg. C ≤ Ambient ≤ + 70 Deg. C; installed as per Interconnection drawing 34917; Enclosure Type 4; IP 66.

Notes:
X- is a number that indicates Range, Frequency Response, and number of conduit hubs.

Class I, Div. 2, Groups A, B, C and D
Class I, Zone 2 Group IIC; T6 (optional)

Model 685B0X01A11, 685B0X01A13, 685B0X01D11, 685B0X01D13, and CS685YZZZ Electronic Vibration Switch; input supply rated 85-245 Vac, 50/60 Hz, 150 mA max; Output (optional) rated 15 Vdc, 4-20 mA; 5 Vdc, 1 mA; Relay Contact Rated 245 Vac, 10A; 30 Vdc, 5A; Temperature Code T6; -30 Deg. C ≤ Ambient ≤ + 70 Deg. C; installed as per Interconnection drawing 37476; Enclosure Type 4X.

Notes:
X- is a number that indicates Range, Frequency Response, and number of conduit hubs.
Y- is one letter A to Z Denoting Model Revision level (Minor Revisions not affecting approvals)
ZZZ- Two or three numbers 00 to 999 which depicts sensitivity, filtering, or special sequential number (up to three digits)

Model 685B0X00A11, 685B0X00A13, 685B0X00D11, 685B0X00D13, and CS685YZZZ Electronic Vibration Switch; input supply rated 85-245 Vac, 50/60 Hz, 150 mA max; Output (optional) rated 15 Vdc, 4-20 mA; 5 Vdc, 1 mA; Triac output Contact Rated 245 Vac, 5A; Temperature Code T6; -30 Deg. C ≤ Ambient ≤ + 70 Deg. C; installed as per Interconnection drawing 37476; Enclosure Type 4X.

Notes:
X- is a number that indicates Range, Frequency Response, and number of conduit hubs.
Y- is one letter A to Z Denoting Model Revision level (Minor Revisions not affecting approvals)
ZZZ- Two or three numbers 00 to 999 which depicts sensitivity, filtering, or special sequential number (up to three digits)

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 0-M91	-	General Requirements – Canadian Electrical Code, Part II
C22.2 No. 25-1966	-	Enclosures for Use in Class II, Groups E, F and G Hazardous Locations
C22.2 No. 30-M1986	-	Explosion-Proof Enclosures for Use in Class I Hazardous Locations
CAN/CSA-C22.2 No. 94-M91	-	Special Purpose Enclosures
C22.2 No. 142-M1987	-	Process Control Equipment
C22.2 No. 213-M1987	-	Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
CAN/CSA-C22.2 No. 60529:05	-	Degrees of protection provided by enclosures (IP Code)
UL 50, 11th Ed.	-	Enclosures for Electrical Equipment
UL 916, 3rd Ed.	-	Energy Management Equipment
UL 1203, 4th Ed.	-	Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations
UL 1604 (3rd Ed.)	-	Electrical Equipment for Use in Class I and II, Division 2; Class III Hazardous (Classified) Locations
ANSI/ISA 12.12.01-2000	-	Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations
ANSI/IEC 60529:2004	-	Degrees of Protection Provided by Enclosures (IP Code)

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.

Nameplate adhesive label material approval information:

Marking details for the model 685B0X01C14 are etched onto a mininum 0.02 inch thick metal nameplate, secured in bottomed holes, to the enclosure cover with screws, drive pins or rivets.

The following marking details appear:

Model 685B0X01C14

- CSA Monogram with C/US
- Company Name
- Model number
- Serial number
- Electrical Input ratings
- Electrical Output ratings
- Relay Contact ratings
- Hazardous Location designation
- Min. and Max. ambient rating
- Reference to Installation Drawing
- Caution re. Keep cover tight while circuits are alive
- Caution re. Seal Required within 18 inches
- Caution: The relay outputs may be connected to different phases only for voltages up to 125Vac. For voltages above 125Vac, the relays shall be connected to same phase circuit only (appears in referenced Installation Drawing).

Marking details for the model 685B0X**01**A1X and model 685B0X**00**A1X are etched directly onto the top of the Enclosure Cover.

The following marking details appear:

Model 685B0X**01**A1X

- CSA Monogram with C/US
- Company Name
- Model number
- Serial number
- Electrical Input ratings
- Electrical Output ratings
- Relay Contact ratings
- Hazardous Location designation
- Class I, Zone 2 Group IIC; T6 (optional)
- Min. and Max. ambient rating
- Reference to Installation Drawing
- Caution re. Keep cover tight while circuits are alive
- Caution: The relay outputs may be connected to different phases only for voltages up to 125Vac. For voltages above 125Vac, the relays shall be connected to same phase circuit only (appears in referenced Installation Drawing).

Model 685B0X**00**A1X

- CSA Monogram with C/US
- Company Name
- Model number
- Serial number
- Electrical Input ratings
- Electrical Output ratings
- Triac Contact ratings
- Hazardous Location designation
- Class I, Zone 2 Group IIC; T6 (optional)
- Min. and Max. ambient rating
- Reference to Installation Drawing
- Caution re. Keep cover tight while circuits are alive
- Caution: The triac outputs may be connected to different phases only for voltages up to 125Vac. For voltages above 125Vac, the relays shall be connected to same phase circuit only (appears in referenced Installation Drawing).

ALTERATIONS

1. Markings as above appear.
2. Enclosure base floor is machined such that a minimum of 0.25 inches of wall thickness remains on the bottom.
3. Enclosure ground post is provided with a cup-washer (for wire retention means).
4. Conduit hubs are used on the model 685B0X01A1x and 685B0X01D1x are Cooper/Crouse Hinds/Myer P/N ST-1 and/or STA-1.
5. NBR Gasket is not used for models 685B0X**01**A1X and 685B0X**00**A1X.

Supplement to Certificate of Compliance

Certificate: 1819674 **Master Contract:** 184981 (103164_0_000)

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
70156145	2017-10-27	Update to existing report 1819674 to add Electronic Vibration Switch Model CS685YZZZ. The proposed CS685YZZZ is identical to the 685B0X01A13 model except that the enclosure is larger to accommodate a larger customer requested conduit hub (single hub configuration).
70118605	2017-08-31	Project closed incomplete. No report/CofC issued
1916501	2007-10-11	Update to include Model 685B0X01A1x, 685B0X01D1x, 685B0X00A1x and 685B0X00D1x (Division 2 version of Electronic Vibration Switch) for hazardous locations.
1819674	2007-04-27	Model 685B0X01C14 Electronic Vibration Switch - Explosion-proof for Hazardous Locations.