

Certificate of Compliance

Certificate: 2500804 Master Contract: 176847

Project: 2582853 **Date Issued:** January 31, 2013

Issued to: Flowserve Corporation/EMA

Palmstierna International AB

Korta Gatan 9 Solna, 171 54 Sweden

Attention: Mats Ragnarsson

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.



Sorin Tat

Issued by: Sorin Tat

PRODUCTS

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations
CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations -

Certified to US Standards

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

-Model Ultraswitch XCL/XML with followings prefixes: abXcLdeff-27-ghijk, input rated 28Vdc max, 45mA max, 315mW max. Intrinsically Safe with below entity parameters and installed as per Control Drawing X00525-C. Ta=-20°C to +40°C, T5, Type 4X.

Switch model	Ii	Ui	Pi	Ci	Li
Microswitch V7-1D19D8-201 SPDT	45mA	28V	31.5mW	1nF	1uH
Aleph PS-6132 SPST	45mA	28V	31.5mW	1nF	1uH

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Sabre SPDT	45mA	28V	31.5mW	1nF	1uH
BRS SPST	45mA	28V	31.5mW	1nF	1uH
P+F NJ4-12- GK-N	25mA	16V	34mW	45nF	50uH
P+F SJ3,5-N	25mA	16V	34mW	50nF	250uH
P+F SJ3,5-N	25mA	16V	34mW	40nF	50uH

-Model Ultraswitch Aviator II with followings prefixes: abXcdeff-27-ghijklm input rated 28Vdc max, 45mA max, 315mW max. Intrinsically Safe with below entity parameters and installed as per Control Drawing X00525-C. Ta=-20°C to +40°C, T5, Type 4X.

Switch model	Ii	Ui	Pi	Ci	Li
Microswitch	45mA	28V	31.5mW	1nF	1uH
V7-1D19D8-201					
SPDT					
Aleph	45mA	28V	31.5mW	1nF	1uH
PS-6132 SPST					
Sabre SPDT	45mA	28V	31.5mW	1nF	1uH
BRS SPST	45mA	28V	31.5mW	1nF	1uH
P+F NJ4-12-	25mA	16V	34mW	45nF	50uH
GK-N					
P+F SJ3,5-N	25mA	16V	34mW	50nF	250uH
P+F SJ3,5-N	25mA	16V	34mW	40nF	50uH

-Model Ultraswitch Dow Switch with followings prefixes: DNabcd2ef input rated 28Vdc max, 45mA max, 315mW max. Intrinsically Safe with below entity parameters and installed as per Control Drawing X00525-C. Ta=-20 $^{\circ}$ C to +40 $^{\circ}$ C, T5, Type 4X.

Switch model	Ii	Ui	Pi	Ci	Li
BRS SPST	45mA	28V	31.5mW	1nF	1uH

APPLICABLE REQUIREMENTS

CSA C22.2 No. 0-M91 - General Requirements - Canadian Electrical Code, Part II

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CSA C22.2 No. 61010.1 - Safety Requirements for Electrical Equipment for Measurement, Control & Laboratory Use - Part 1: General Requirements

CSA C22.2 No. 157-M1992 - Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations

CSA Standard C22.2 No 25 - Enclosures for Use In Class II, Groups E, F and G Hazardous Locations

FM - 3600 Std. - Electrical Equipment for Use in Hazardous (Classified) Locations, General Requirements

FM - 3610 Std.- Intrinsically Safe Apparatus and Associated Apparatus for use in Class I, II, and III, Division 1, Hazardous (Classified) Locations

FM – 3810 Std. - Electrical and Electronic Test, Measuring and Process Control Equipment

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