



Certificate of Compliance

Certificate: 2595441

Master Contract: 169790

Project: 2595441

Date Issued: April 25, 2013

Issued to: Pepperl+Fuchs GmbH

Lilienthalstrasse 200

Mannheim, 68307

Germany

Attention: Mr. Steffen Graber

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.



Marin Banu

Issued by: Marin Banu, P. Eng.

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 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

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



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Class No 2258 04 - PROCESS CONTROL EQUIPMENT – Intrinsically Safe, Entity – For Hazardous Locations

Surge Protector Fisco Field Device, types TCP-LBF-IA1.36.IE.0, TCP-LBF-IA1.36.IE.1, TPH-LBF-IA1.36.DE.0, TPH-LBF-IA1.36.DE.1, SCP-LBF-IA1.36.IE.0 and SCP-LBF-IA1.36.IE.1.

Intrinsically safe when connected as per Control Drawing reference 116-0365 and providing circuits for

Class I, Div 1, Groups A, B, C and D, T4; or

Class I, Zone 0, Ex ia IIC T4; or

Class I, Zone 2, Ex ic IIC T4.

Ambient temperature range: -40 °C to +70 °C for Temperature Code/ Class T4. Environmental Rating: IP 20. Ratings are as follows:

Class I, Div 1, Groups A, B, C and D, T4	Ui	≤ 24 V
	Ii	≤ 500 mA
	Ci	≤ 2 nF
	Li	≤ 100 nH
Class I, Zone 1, Ex ia IIC T4	Ui	≤ 24 V
	Ii	≤ 500 mA
	Ci	≤ 2 nF
	Li	≤ 100 nH
Class I, Zone 2 Ex ic IIC T4	Ui	≤ 33 V
	Ii	≤ 600 mA
	Ci	≤ 2 nF
	Li	≤ 100 nH

Note: See Special Conditions for Safe Use.

Final installation is subject to acceptance of the local inspection authority having jurisdiction.



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Class No 2258 84 - PROCESS CONTROL EQUIPMENT – Intrinsically Safe, Entity – For Hazardous Locations Certified to U.S. Standards

Surge Protector Fisco Field Device, types TCP-LBF-IA1.36.IE.0, TCP-LBF-IA1.36.IE.1, TPH-LBF-IA1.36.DE.0, TPH-LBF-IA1.36.DE.1, SCP-LBF-IA1.36.IE.0 and SCP-LBF-IA1.36.IE.1.

Intrinsically safe when connected as per Control Drawing reference 116-0365 and providing circuits for

Class I, Div 1, Groups A, B, C and D, T4; or

Class I, Zone 0, AEx ia IIC T4; or

Class I, Zone 2, AEx ic IIC T4.

Ambient temperature range: -40 °C to +70 °C for Temperature Code/ Class T4. Environmental Rating: IP20. Ratings are as follows:

Class I, Div 1, Groups A, B, C and D, T4	Ui	≤ 24 V
	Ii	≤ 500 mA
	Ci	≤ 2 nF
	Li	100 nH
Class I, Zone 1, AEx ia IIC T4	Ui	≤ 24 V
	Ii	≤ 500 mA
	Ci	≤ 2 nF
	Li	≤ 100 nH
Class I, Zone 2 AEx ic IIC T4	Ui	≤ 33 V
	Ii	≤ 600 mA
	Ci	≤ 2 nF
	Li	≤ 100 nH

Note: See Special Conditions for Safe Use.

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Class No 2258 02 - PROCESS CONTROL EQUIPMENT – For Hazardous Locations

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Non-Incendive when connected as per Control Drawing reference 116-0365 and providing circuits for

Class I, Div. 2, Group A, B, C and D, T4; or

Class I, Zone 2, Ex nL IIC T4; or

Class I, Zone 2, Ex nA IIC T4

Ambient temperature range: -40 °C to +70 °C for Temperature Code/ Class T4. Environmental Rating: IP 20. Ratings are as follows:

Class I, Div. 2, Group A, B, C and D, T4	Ui	≤ 33 V
	Ii	≤ 600 mA
	Ci	≤ 2nF
	Li	≤ 100nH
Class I, Zone 2, Ex nL IIC T4	Ui	≤ 33 V
	Ii	≤ 600 mA
	Ci	≤ 2 nF
	Li	≤ 100 nH
Class I, Zone 2, Ex nA IIC T4	Ui	≤ 33 V
	Ii	≤ 600 mA

Note: See Special Conditions for Safe Use.

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Class No 2258 82 - PROCESS CONTROL EQUIPMENT – For Hazardous Locations Certified to U.S. Standards

Surge Protector Fisco Field Device, types TCP-LBF-IA1.36.IE.0, TCP-LBF-IA1.36.IE.1, TPH-LBF-IA1.36.DE.0, TPH-LBF-IA1.36.DE.1, SCP-LBF-IA1.36.IE.0 and SCP-LBF-IA1.36.IE.1.

Non-Incendive when connected as per Control Drawing reference 116-0365 and providing circuits for

Class I Div. 2, Group A, B, C and D, T4; or

Class I, Zone 2, AEx nAc IIC T4.

Ambient temperature range: -40 °C to +70 °C for Temperature Code/ Class T4. Environmental Rating: IP 20.
Ratings are as follows:

Class I Div. 2, Group A, B, C and D, T4	Ui	≤ 33 V
	Ii	≤ 600 mA
	Ci	≤ 2 nF
	Li	≤ 100 nH
Class I, Zone 2, AEx nAc IIC T4	Ui	≤ 33 V
	Ii	≤ 600 mA

Note: See Special Conditions for Safe Use.

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APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 0-10 (August 2011)	General requirements - Canadian Electrical Code, Part II
CAN/CSA-C22.2 No. 157-92 (Reaffirmed 2012)	Intrinsically safe and non-incendive equipment for use in hazardous locations
C22.2 No. 213-M1987(Reaffirmed 2008)	Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
CAN/CSA-C22.2 No. 60079-0:11 (December 2011)	Explosive atmospheres - Part 0: Equipment — General requirements
CAN/CSA-C22.2 No. 60079-11:11 (December 2011)	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety “i”
CAN/CSA-C22.2 No. 60079-15:12 (January 2012)	Electrical apparatus for explosive gas atmospheres - Part 15: Construction, test and marking of type of protection “n” electrical apparatus
CSA C22.2 No. 142-M1987(Reaffirmed 2009)	Process Control Equipment
CAN/CSA-C22.2 No. 61010-1-12, 3rd Edition (May 11, 2012)	Electrical Equipment for Measurement, Control and Laboratory Use; Part 1: General Requirements
UL 913, 7th Edition,(September 23, 2011)	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1, Hazardous (Classified) Locations
UL 60079-0, 5th Edition(October 21, 2009)	Explosive atmospheres – Part 0: Equipment – General requirements
UL 60079-11, 5th Edition(September 30, 2009)	Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety ‘i’
ANSI/ISA-60079-27 (12.02.04)-2006, (29 January 2007)	Fieldbus Intrinsically Safe Concept (FISCO) and Fieldbus Non-Incendive Concept (FNICO)
UL 60079-15, 3rd Edition (July 17, 2009)	Electrical Apparatus for Explosive Gas Atmospheres – Part 15: Construction, Test and Marking of Type of Protection “n” Electrical Apparatus
ANSI/ISA-12.12.01-2012 (9 July 2012)	Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations
ANSI/ISA 61010-1 (82.02.01),3rd Edition (May 11, 2012) / UL 61010-1, 3rd Edition (May 11, 2012)	Electrical Equipment for Measurement, Control and Laboratory Use; Part 1: General Requirements



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MARKINGS

- Manufacturer's name: "Pepperl + Fuchs", or CSA Master Contract Number "169790", adjacent to the CSA Mark in lieu of manufacturers name.
- Model number: As specified in the PRODUCTS section, above.
- CSA Certificate Number "CSA13.2595441X"
- Electrical ratings: As specified in the PRODUCTS section above or reference to Control Drawing for Electrical Ratings.
- Ambient temperature Range: -40 °C to +70°C.
- Manufacturing date in YY format, or serial number, traceable to Year of manufacture.
- The CSA Mark, with "C" and "US" indicators, as shown on the Certificate of Conformity.
- Hazardous Location designation: As specified in the PRODUCTS section above (may be abbreviated).
- Temperature code: As specified in the PRODUCTS section above.
- Reference to I.S. Control Drawing 116-0365.

Special Conditions for Safe Use

- Pay attention to avoid electrostatic discharges while operating the installed device. Avoid electrostatic charge.
- Intrinsically safe circuits must be suitable for the ambient temperature and be wired and separated in accordance with the wiring methods of National Electrical Code ANSI/NFPA 70, Canadian Electrical Code C22.1 or in accordance with the authority having jurisdiction.
- The Surge Protection Devices are open type devices and shall be installed in a tool-secured enclosure suitable for the application in accordance with the National Electrical Code ANSI/NFPA 70, the Canadian Electrical Code C22.1 or in accordance with the authority having jurisdiction.

Class I, Division 1

- The Surge Protection Devices do not meet the requirement of CAN/CSA-C22.2 No. 157-92 or UL913 (ANSI/UL 60079-11), Dielectric Strength Requirements, between the intrinsically safe circuit and the parts that may be earthed, due to presence of Gas Discharge Tubes.

Class I, Zone 0

- Equipment shall be installed in accordance with IEC 60079-25 or ISA 60079-25 (12.02.05), Clause 12, 'Protection against lightning and other electrical surges'.

Class I, Zone 1, Intrinsic safety 'ia' and 'ib'

- The Surge Protection Devices do not meet the requirement of CAN/CSA-C22.2 No. 60079-11 or ANSI/UL 60079-11, Dielectric Strength Requirements, between the intrinsically safe circuit and the parts that may be earthed, due to presence of Gas Discharge Tubes.
- Equipment shall be installed in accordance with IEC 60079-25 or ISA 60079-25 (12.02.05), Clause 12, 'Protection against lightning and other electrical surges'.

Class I, Zone 2, Intrinsic safety 'ic'

- The Surge Protection Devices do not meet the requirement of CAN/CSA-C22.2 No. 60079-11 or ANSI/UL 60079-11, Dielectric Strength Requirements, between the intrinsically safe circuit and the parts that may be earthed, due to presence of Gas Discharge Tubes.



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- The Surge Protection Devices shall be fitted in a protective enclosure providing a degree of protection of at least IP54, which shall comply with CAN/CSA-C22.2 No. 60079-0 or ANSI/UL 60079-0.
- Equipment shall be installed in accordance with IEC 60079-25 or ISA 60079-25 (12.02.05), Clause 12, 'Protection against lightning and other electrical surges'.

Class I, Zone 2, Non incendive 'nAc' and nA'

- The Surge Protection Devices do not meet the requirement of CAN/CSA-C22.2 No. 60079-15 or ANSI/UL 60079-15, Electric Strength, Insulation from Earth or Frame, due to presence of Gas Discharge Tubes.
- The Surge Protection Devices shall be fitted in a protective enclosure providing a degree of protection of at least IP54, which shall comply with CAN/CSA-C22.2 No. 60079-0 or ANSI/UL 60079-0 and CAN/CSA-C22.2 No. 60079-15 or ANSI/UL 60079-15.
- Connection or disconnection of energized non-intrinsically safe circuits is only permitted in the absence of hazardous atmosphere.
- The field wiring connections shall either be mechanically secured or shall require a separation force of at least 15 N.
- Equipment shall be installed in accordance with IEC 60079-25 or ISA 60079-25 (12.02.05), Clause 12, 'Protection against lightning and other electrical surges'.

Class I, Zone 2, Energy Limited 'nL'

- The Surge Protection Devices do not meet the requirement of CAN/CSA-C22.2 No. 60079-15 or ANSI/UL 60079-15, Electric Strength, Insulation from Earth or Frame, due to presence of Gas Discharge Tubes.
- The Surge Protection Devices shall be fitted in a protective enclosure providing a degree of protection of at least IP 54, which shall comply with CAN/CSA-C22.2 No. 60079-0 or ANSI/UL 60079-0 and CAN/CSA-C22.2 No. 60079-15 or ANSI/UL 60079-15.
- Equipment shall be installed in accordance with IEC 60079-25 or ISA 60079-25 (12.02.05), Clause 12, 'Protection against lightning and other electrical surges'.