Certificate of Compliance

Certificate: 80210307 **Master Contract:** 206947

Project: 80210307 **Date Issued:** September 09, 2025

Issued to: **PR Electronics A/S**
Lerbakken 10
8410 Ronde
Denmark

Attention: **Thomas Jarl Dencker**

The products listed below 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 US Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only

Issued by: B J Allen

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 I, Division 1, Groups A, B, C, D T6…T4
Ex ia IIC T6…T4
Class I, Zone 0: AEx ia IIC T6…T4
Ex ib [ia] IIC T6…T4
Class I, Zone 1: AEx ib [ia] IIC T6…T4

Profibus PA Temperature Transmitter type 5450D** is Intrinsically Safe for Class I, Division 1, Groups ABCD & Class I, Zone 0: Ex ia IIC and with Intrinsically Safe Outputs for Class I, Division 1, Groups ABCD & Class I, Zone 0: Ex [ia] IIC; Ambient temperature -40°C to +85°C. Install per installation document 5450QC01-V2R0.

Electrical Parameters:

Terminals 1, 2 DIV 1, A,B,C,D or Ex ia, Ex ib	Terminals 1, 2 FISCO
Ui: 30VDC	Ui: 17.5VDC
Ii: 380mA	Ii: 380mA
Pi: Any	Pi:Any
Ci: 1nF	Ci: 1nF
Li: 0µH	Li: 0µH
Temperature Range	**Temperature Range**
T4/110°C: -40°C to +85°C	T4/110°C: -40°C to +85°C
T5/100°C: -40°C to +73°C	T5/100°C: -40°C to +82°C
T6/85°C: -40°C to +58°C	T6/85°C: -40°C to +67°C

	Sensor Terminal Parameter Limits		
	3, 4, 5, 6	3, 7, 8, 9	3, 4, 5, 6, 7, 8, 9
Uo	7.2VDC	7.2VDC	7.2VDC
Io	7.3mA	7.3mA	12.9mA
Po	13.2mW	13.2mW	23.3mW
Co	13.324µF	13.324µF	13.324µF
Lo	667mH	667mH	200mH

CONDITIONS OF ACCEPTABILITY for Exi/DIV1:

IS Installation instructions

1. Install per Installation document 5450QC01-V2R0.
2. Install in accordance with the US the National Electrical Code (NEC) or for Canada the Canadian Electrical Code (CEC).
3. The transmitter must be installed in a suitable enclosure to meet installation codes stipulated in the Canadian Electrical Code (CEC) or for US the National Electrical Code (NEC).
4. For EPL Ga, the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP20 according to IEC 60529, and that it is suitable for the application and correctly installed.

If the outer enclosure is made of non-metallic materials or of painted metal, electrostatic charging shall be avoided.

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations
CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations – certified to US Standards
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 I, Division 2, Groups A, B, C, D T6…T4
Ex ec IIC T6…T4
Class I, Zone 2: AEx ec IIC T6…T4
Ex ec [ic] IIC T6…T4
Class I, Zone 2: AEx ec [ic] IIC T6…T4

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Profibus PA Temperature Transmitter type 5450A** is Suitable for Class I, Division 2, Groups ABCD & Class I, Zone 2, Ex ec IIC and with Class I, Division 2 & Class I, Zone 2, Ex ec IIC. Wiring Practices and with Non-Incendive Field Wiring Outputs for Class I, Division 2 & Class I, Zone 2, Ex [ic] IIC. Ambient temperature -40°C to +85°C. Install per installation document 5450QC01-V2R0.

Electrical data

For type of protection Ex ec, ic, Zone 2

Terminals 1, 2 Ex ec	Terminals 1, 2 Ex ic	Terminals 1, 2 FISCO
Vmax = 30VDC	Ui: 30VDC	Ui: 17.5VDC
In = 11mA	Ii: 380mA	Ii: 380mA
	Pi: Any	Pi:Any
	Ci: 1nF	Ci: 1nF
	Li: 0µH	Li: 0µH
Temperature Range	**Temperature Range**	**Temperature Range**
T4/110°C: -40°C to +85°C	T4/110°C: -40°C to +85°C	T4/110°C: -40°C to +85°C
T5/100°C: -40°C to +80°C	T5/100°C: -40°C to +85°C	T5/100°C: -40°C to +85°C
T6/85°C: -40°C to +65°C	T6/85°C: -40°C to +70°C	T6/85°C: -40°C to +74°C

Terminal Ex ec	**Terminal Ex ic**		
3, 4, 5, 6, 7, 8, 9	3, 4, 5, 6	3, 7, 8, 9	3, 4, 5, 6, 7, 8, 9
Vmax = 7.2VDC	7.2VDC		7.2VDC
	7.3mA		12.9mA
	13.2mW		23.3mW
	13.324µF		13.324µF
	667mH		200mH

CONDITIONS OF ACCEPTABILITY for Ex ec/DIV 2:

Div 2 / Zone 2 (Ex ec) and Non-Incendive Field Wire (Ex ic) Wiring Practices Installation instructions:

1. Install per Installation document 5450QC01-V2R0.
2. The transmitter must be installed in a certified enclosure providing a degree of protection of at least IP54 according to IEC60529 that is suitable for the application and is correctly installed. Cable entry devices and blanking elements shall fulfil the same requirements.
3. If the enclosure is made of non-metallic materials or of painted metal, electrostatic charging shall be avoided.
4. Use supply wires with a rating of at least 5 K above the ambient temperature.
5. For Temperature Transmitter connection see Installation drawing 5450QC01-V2R0.

The equipment shall only be used in an area of not more than pollution degree 2 as defined in IEC 60664-1.

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APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 60079-0:19	Explosive atmospheres # Part 0: Equipment # General requirement.
CAN/CSA C22.2 No. 60079-11:14	Electrical Apparatus for Explosive Gas Atmospheres # Part 11: Intrinsic Safety "i".
CAN/CSA C22.2 No. 60079-7:16	Electrical apparatus for explosive gas atmospheres — Part 15: Construction, test and marking of type of protection “n” electrical apparatus
CSA 61010-1-12	Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements
ANSI/UL 913-2022, Ed. 8	Intrinsically Safe Apparatus and Associated Apparatus for use in Class I, II, and III, Division 1, Hazardous (Classified) Locations.
UL 60079-0:2020 Ed 7	Explosive atmospheres # Part 0: Equipment # General requirement
UL 60079-11:2018, Ed. 6	Electrical Apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety "i".
UL 60079-7:2017, Ed. 5	Electrical apparatus for explosive gas atmospheres — Part 15: Construction, test and marking of type of protection “n” electrical Apparatus
UL 61010-1 Ed. 3 2012 edition	Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements.

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.

Markings information as shown below and appear on a metal nameplate or adhesive aluminum foil. Separate labels are required for Division and Zone markings.

- Manufacturer’s name: “PR Electronics”, or CSA Master Contract Number “206947”, adjacent to the CSA Mark in lieu of manufacturer’s name.
- Model number: As specified in the PRODUCTS section, above.
- The characters “CSA25CA80210307’’
- Hazardous Location designation: As specified in the PRODUCTS section above (may be abbreviate).
- Method of Protection (Ex) markings: As specified in the PRODUCTS section above.
- Temperature code: As specified in the PRODUCTS section above.
- Electrical rating: Reference is made to the installation manual for the electrical rating.
- Ambient temperature rating: As specified in the PRODUCTS section above.

- Manufacturing date in MMYY format, or serial number, traceable to year and month of manufacture.
- Identification of factory location, when produced at multiple locations.
- For Div2, Cable the temperature at entry or branching point could be above 60°C. The installation document 5450QC01-V2R0 addresses this requirement because the label is too small to contain all the information.
- Because the label is too small to contain all the information, the installation document 5450QC01-V2R0 addresses the requirement to show all warnings are also in French.

See Installation drawing 5450QC01-V2R0, for warning markings, and documentation for detail.

Products certified under Classes CL2258 02, CL2258 04 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca

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