Certificate of Compliance

Certificate: 1418937 (206947) **Master Contract:** 206947

Project: 70071304 **Date Issued:** 2016-04-28

Issued to: **PR Electronics A/S**
Lerbakken 10
Ronde, 8410
DENMARK
Attention: Peter Bergmann

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: *Semyon Baum*
Semyon Baum

PRODUCTS
CLASS - C225802 - PROCESS CONTROL EQUIPMENT-For Hazardous Locations-
CLASS - C225804 - PROCESS CONTROL EQUIPMENT-Intrinsically Safe, Entity - For Hazardous Locations-
CLASS - C225882 - PROCESS CONTROL EQUIPMENT-For Hazardous Locations - Certified to US Standards
CLASS - C225884 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity-- 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.

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

Class I, Groups A, B, C, D, T6, T5 and T4
Ex ia IIC T6, T5, T4
Ex ib [ia] IIC T6, T5 and T4

Model 5350B and 6350B2a Profibus PA Foundation Fieldbus, temperature transmitter, input rated as outlined in the Electrical Parameter section. Intrinsically safe and provides intrinsically safe outputs. Ambient temperature -40 deg. C to 85 deg. C. Entity parameters (input and output) and temperature code in accordance with Installation Drawing 5350QE01.doc and 6350QE02.doc

Where: a = A (Single Channel) or B (Double Channel)

Note: The units are certified as a component for use within an enclosure where the suitability of the final combination is to be determined by authority having jurisdiction.

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, T5 and T4
Class I, Zone 0, AEx ia IIC T6, T5 and T4
Class I, Zone 1, AEx ib [ia] IIC T6, T5 and T4

Model 5350B and 6350B2a Profibus PA Foundation Fieldbus, temperature transmitter, input rated as outlined in the Electrical Parameter section. Intrinsically safe and provides intrinsically safe outputs. Ambient temperature - 40 deg. C to 85 deg. C. Entity parameters (input and output) and temperature code in accordance with Installation Drawing 5350QE01.doc and 6350QE02.doc

Where: a = A (Single Channel) or B (Double Channel)

Note: The units are certified as a component for use within an enclosure where the suitability of the final combination is to be determined by authority having jurisdiction.

Class 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

Class I, Division 2, Groups A, B, C, D, T6, T5 and T4
Ex nA II T6, T5 and T4

Model 5350A and 6350A2a Profibus PA/Foundation Fieldbus, temperature transmitter input rated as outlined in the Electrical Parameter section. Ambient temperature - 40 deg C to 85 deg C. Temperature Code per Installation Drawing 5350QE01.doc and 6350QE02.doc.

Where: a = A (Single Channel) or B (Double Channel)

Note: The units are Certified as a component for use within an enclosure where the suitability of the final combination is to be determined by authority having jurisdiction.

Class 2258 82 Process Control Equipment - For Hazardous Locations- Certified to US Standards

Class I, Division 2, Groups A, B, C, D, T6, T5 and T4
Class I Zone 2 AEx nA II T6, T5 and T4

Model 5350A and 6350A2a Profibus PA/Foundation Fieldbus, temperature transmitter input rated as outlined in the Electrical Parameter section. Ambient temperature - 40 deg C to 85 deg C. Temperature Code per Installation Drawing 5350QE01.doc and 6350QE02.doc.

Where: a = A (Single Channel) or B (Double Channel)

Note: The units are Certified as a component for use within an enclosure where the suitability of the final combination is to be determined by authority having jurisdiction.

Electrical parameters:

As intrinsically safe apparatus for Class I, Div. 1, Groups A, B, C, and D respectively Class I, Zone 0/1, Group IIC, the Model 5350B and 6350B2a PA/Foundation fieldbus transmitter is intended to be connected to a certified intrinsically safe fieldbus with entity parameters respectively in accordance with the FISCO Model as described in IEC TS60079-27. Following parameters apply, in relation with the maximum ambient temperature and temperature class (minimum ambient temperature – 40 °C):

	Models 5350B, Model 6350B2a for each of both inputs.						M.5350A M.6350A2a Each input
	IS, Class I, Div. 1, Groups A, B, C, D.; Class I, Zone 0 and 1, Ex ia IIC or AEx ia IIC				Class I, Div.2, Groups A, B, C, D Class I, Zone1, Ex ib IIC		Class I, Div. 2, Gps A,B,C,D; Class I, Zone 2 Ex nA IIC or AEx nA IIC
Associated apparatus:	Linear curve	Trapezoidal curve	According to FISCO	According to FISCO	Square curve	FISCO Segment coupler	
T4	+85 °C	+75 °C	+85 °C	+85 °C	+85 °C	+85 °C	+85 °C
T5	+70 °C	+65 °C	+60 °C	+60 °C	+75 °C	+75 °C	+75 °C
T6	+60 °C	+45 °C	+45 °C	+45 °C	+60 °C	+60 °C	+60 °C
Vmax / U_i	30 V	30 V	17,5 V	15 V	30 V	17,5 V	32 V
Imax / I_i	120 mA	300 mA	250 mA	any	250 mA	any	
P_i	0,84 W	1,3 W	2,0 W	any	5,32 W	any	
C_i	2.0 nF						
L_i	1 uH						
	parameters Class I, Div. 1 Groups A, B, C, and D; Class I, Zone 0, [Ex ia] IIC or [AEx ia] IIC						
U_o	5,7 V						
I_o	8,4 mA						
P_o	12 mW						
Ca / C_o	40 µF						
La / L_o	200 mH						
	Each current input of Model 6350B2a						
Vmax / U_i	30 V						

Imax / I_i	140 mA	
P_i	1W	
C_i	0 nF	
L_i	0 mH	

Where: a = A (Single Channel) or B (Double Channel)

APPLICABLE REQUIREMENTS

CSA Std C22.2 No. 142-M1987 - Process Control Equipment
CAN/CSA-C22.2 No. 157-92 - Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
CSA Std C22.2 No. 213-M1987 - Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
CAN/CSA-E60079-0:02 - Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
CAN/CSA-E60079-11:02 - Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety "i"
CAN/CSA-E60079-15:02 - Electrical apparatus for explosive gas atmospheres - Part 15: Electrical apparatus with type of protection "n"
ANSI/UL Std No. 508 17th Ed. - Industrial Control Equipment
UL Std No. 913 7th Ed. - Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1, Hazardous Locations
UL Std No. 1604, Third Ed. – 1994 - Electrical Equipment for Use in Class I and II, Division 2; Class III Hazardous (Classified) Locations
ANSI/UL 60079-0 First Ed. - 2002 - Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements
ANSI/UL 60079-11 First Ed. – 2002 - Electrical Apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety "i"
ANSI/UL 60079-15 First Ed. - 2002 - Electrical Apparatus for Explosive Gas Atmospheres - Part 15: Electrical Apparatus with Type of Protection "n"

MARKINGS

Product markings shall be in accordance with the related standards. In addition, it shall be the responsibility of the manufacturer to provide additional markings on the product to comply with the requirements of the local regulatory authorities. For example, in Canada, any caution and warning markings must be provided in French and English.

Refer to Descriptive Documents, Drawings No. 5350S205, 5350S104, 6350ASC04 and 6350BSC04.