



# Certificate of Compliance

**Certificate:** 2325749

**Master Contract:** 157123

**Project:** 80118971

**Date Issued:** 2022-06-28

**Issued To:** Precision Digital Corporation  
233 South Street  
Hopkinton, Massachusetts, 01748  
United States

**Attention:** Scott Ewen

*The products listed below are eligible to bear the CSA Mark shown*

**Issued by:** *Tim McCoy*  
Tim McCoy



## PRODUCTS

CLASS - C225802 - PROCESS CONTROL EQUIPMENT For Hazardous Locations

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

Class I, Div. 1, Groups B, C, D; Class II, Div. 1, Groups E, F, G; Class III, Div. 1:  
Ex d IIC T6:

## PART A1:

Model PD68aa-bcd-e-ff-ggggggggg Process Meters; 4-20 mA loop powered, battery powered, and/or DC powered 9-30 Vdc max, 2.2 W; -40 Deg. C ≤ Tamb. ≤ +75 Deg. C; Temperature Code T6; Encl. Type 4X, IP66/68

**Model PD68aa-bcd-e-ff-ggggggggg product code:**

PD68aa-bcd-e-ff-ggggggggg		
<b>PD68</b>	Precision Digital Corporation Series	
	<b>aa</b>	Meter Function



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		00 = Process Meter
		01 = Process Meter
		20 = Rate/Totalizer Meter
		30 = Pulse Rate/Totalizer Meter
		70 = Process Meter
	<b>b</b>	<u>Power Type</u>
		0 = Loop-powered
		A = Low Voltage DC Powered
		B = Battery or DC Powered
		C = Loop Output Powered
		D = Battery or Loop Output Power
	<b>c</b>	<u>Display Type</u>
		K = LDC with backlight
		L = LCD
		M = LCD with backlight
		P = LCD with DC Powered backlight
		T = LCD with Loop Powered backlight
		X = Other LCD
	<b>d</b>	<u>Outputs</u>
		0 = None or pulse outputs
		1 =Open Collectors
		A = Isolated Loop Out (4-20 mA)
		B = Non-isolated Loop Out (4-20 mA)
	<b>e</b>	<u>Communications Protocols</u>
		any alphanumeric suffix, various (extra-low voltage) communication protocols
	<b>ff</b>	<u>Enclosure material</u>
		AL (or None) = Aluminium
		SS = Stainless Steel
		<b>ggggggggg</b> Cosmetic Modification & Conduit Entry combinations
		any alphanumeric combination designating color and conduit entry configuration of the same types as described in the CSA Report.

**Notes:**

- (1) All power supplies and all signal input circuits must be supplied from a CSA Certified Class 2 power source.
- (2) The low range of the Tamb is -55 Deg. C when using the EX Series or EC Series Precision Digital Corporation manufacturer enclosures.
- (3) This equipment has not been evaluated for sealing of process fluids. The final installation must include suitable sealing of the process fluids.
- (4) The Process Temperature Range must not exceed the Ambient Range of this equipment if attached
- (5) Anodized or epoxy coated aluminum models must not be installed in locations where they may be subjected to conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conductive surfaces. Additionally, cleaning of the equipment should only be done with a damp cloth.



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**PART A2:**

Model PD69aa-bb-cc-def-gggggggggg Process Meter (or Flow Rate/Totalizer); 4-20 mA loop powered, battery powered, and/or DC powered 9-30 Vdc max, 2.2 W; -40 Deg. C ≤ Tamb. ≤ +75 Deg. C; Temperature Code T6; Enclosure Type 4X, IP66/68.

**Model PD69aa-bb-cc-def-gggggggggg product code**

PD69aa-bb-cc-def-gggggggggg	
<b>PD69</b>	Precision Digital Corporation Series
<b>aa</b>	Meter Function
	07 = Process Meter
	08 = Process Meter
	28 = Rate/Totalizer Meter
	38 = Pulse Rate/Totalizer Meter
	78 = Process Rate/Totalizer Meter
	80 = Serial Rate/Totalizer Meter
	81 = Serial Rate/Totalizer Meter
	88 = Serial Rate/Totalizer Meter
	89 = Serial Rate/Totalizer Meter
<b>bb</b>	Approvals
	EX = Explosion/Flame Proof
	HA = Dual Hazardous
<b>cc</b>	Enclosure material
	AL = Aluminium
	SS = Stainless Steel
<b>d</b>	Power Type
	A = A Cell Battery Pack or DC powered
	B = C Cell Battery Pack or DC powered
	C = Loop Output powered
	D = Low DC Voltage (SELV)
	L = Loop Powered
	M = A Cell Battery Pack or Loop Powered
	N = C Cell Battery Pack or Loop Powered
<b>e</b>	Outputs
	N = None or pulse outputs
	2 = SSR
	3 = Loop (4-20 mA)
	5 = SSR and Loop Out (4-20 mA)
<b>f</b>	Communications Protocols
	any alphanumeric suffix, various (extra-low voltage) communication protocols
	<b>ggggggggg</b>   Cosmetic Modification & Conduit Entry combinations



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**Project:** 80118971

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									any alphanumeric combination designating color and conduit entry configuration of the same types as described in the CSA Report.
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**Notes:**

- (1) All power supplies and all signal input circuits must be supplied from a CSA Certified Class 2 power source.
- (2) The low range of the Tamb is -55 Deg. C when using the EX Series or EC Series Precision Digital Corporation manufacturer enclosures.
- (3) This equipment has not been evaluated for sealing of process fluids. The final installation must include suitable sealing of the process fluids.
- (4) The Process Temperature Range must not exceed the Ambient Range of this equipment if attached
- (5) Anodized or epoxy coated aluminum models must not be installed in locations where they may be subjected to conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conductive surfaces. Additionally, cleaning of the equipment should only be done with a damp cloth.



**Certificate:** 2325749  
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**PART B:**

Model PD663-0ab-00-cc-ddddddddd Loop Powered Meters; power/input 4-20 mA loop powered, 30 Vdc max; -40 Deg. C ≤ Tamb. ≤ +75 Deg. C; Temperature Code T6; Encl. Type 4X, IP66/68.

**Model PD663-0ab-00-cc-ddddddddd, product code:**

PD663-0ab-00-cc-ddddddddd	
<b>PD663-0</b>	Precision Digital Corporation Series
<b>a</b>	Backlight
	K = LDC with backlight
	L = LCD
<b>b</b>	Switches
	0 = Push buttons
	A = Magnetic buttons
<b>cc</b>	Enclosure material
	00 or None = Aluminium
	SS = Stainless Steel
<b>dddddddd</b>	Cosmetic Modification & Conduit Entry combinations
	any alphanumeric combination designating color and conduit entry configuration of the same types as described in the CSA Report.

**Notes:**

- (1) All power supplies and all signal input circuits must be supplied from a CSA Certified Class 2 power source.
- (2) The low range of the Tamb is -55 Deg. C when using the EX Series or EC Series Precision Digital Corporation manufacturer enclosures.
- (3) This equipment has not been evaluated for sealing of process fluids. The final installation must include suitable sealing of the process fluids.
- (4) The Process Temperature Range must not exceed the Ambient Range of this equipment if attached
- (5) Anodized or epoxy coated aluminum models must not be installed in locations where they may be subjected to conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conductive surfaces. Additionally, cleaning of the equipment should only be done with a damp cloth.



**Certificate:** 2325749  
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**PART C:**

Model PD31a-bc-dd-eeeeeeee Process Meters; power/output 4-20 mA loop powered, 30 Vdc max; -40 Deg. C ≤ Tamb. ≤ +75 Deg. C; Temperature Code T6; Encl. Type 4X, IP66/68.

**Model PD31a-bc-dd-eeeeeeee product code:**

PD31a-bc-dd-eeeeeeee				
<b>PD31</b>	Precision Digital Corporation Series			
	<b>a</b>	System Configuration		
		0 = Transmitter with Display		
		2 = Transmitter with Temperature Inputs		
	<b>b</b>	Enclosure Type		
		A = aluminium		
		S = Stainless steel		
	<b>c</b>	Conduit Type		
		1 = 3/4" NPT conduit & 1/2" NPT process sensor connection port		
		2 = 1/2" NPT conduit & process sensor connection port		
		3 = 3/4" NPT conduit & process sensor connection port		
		8 = M20 conduit & 1/2" NPT process sensor connection port		
		X = Other		
	<b>dd</b>	Factory Configuration		
		C0 = Factory Default		
		C1 = Custom Configuration		
		C2 = Custom Configuration		
		CX = Custom Configuration		
	<b>eeeeeeee</b>	Cosmetic Modification & Conduit Entry combinations		
		any alphanumeric combination designating color and conduit entry configuration of the same types as described in the CSA Report.		

**Notes:**

- (1) All power supplies and all signal input circuits must be supplied from a CSA Certified Class 2 power source.
- (2) The low range of the Tamb is -55 Deg. C when using the EX Series or EC Series Precision Digital Corporation manufacturer enclosures.
- (3) This equipment has not been evaluated for sealing of process fluids. The final installation must include suitable sealing of the process fluids.
- (4) The Process Temperature Range must not exceed the Ambient Range of this equipment if attached
- (5) Anodized or epoxy coated aluminum models must not be installed in locations where they may be subjected to conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conductive surfaces. Additionally, cleaning of the equipment should only be done with a damp cloth.



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## **APPLICABLE REQUIREMENTS**

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
CSA C22.2 No. 61010-1:2012	- Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements
CAN/CSA-C22.2 No. 60079-0:07	- Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
CAN/CSA-C22.2 No. 60079-1:07	- Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures "d"

## **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, without any adjacent indicators, indicating that products have been manufactured to the requirements of Canadian Standards.

Markings for the Model PD6xxx, PD663, and PD310 Series made using the IME manufacturer enclosures appear on 0.5 mm minimum thick stainless steel or aluminum nameplate mechanically secured with non-removable fasteners, or on a CSA Accepted Adhesive Nameplate, manufactured by Industrial Labeling Systems, Type ILS-320 White Polyester or ILS-324 Metalized Polyester; Royal Label, Type T/C-329 White or Silver Polyester with L-23 adhesive; Advanced Labelworx, Inc., Type T/C-387 White or Silver Polyester with L-23 adhesive; or F.B. Johnston Group, Type Dataplate 668. Markings for the Model PD6xxx, PD663, and PD310 Series made using the Precision Digital Corporation manufacturer enclosures appear on 0.5 mm minimum thick stainless steel or aluminum nameplate mechanically secured with non-removable fasteners. Refer to Drawings DW1893 and DW1894.







The following marking details appear:

- CSA Monogram
- Manufacturer's name or CSA Master Contract in lieu of the manufacturer name.
- Model designation.
- Date code and/or Serial number.
- Certificate reference ("CSA 11 2325749") on equipment marked with Zones classification;
- Electrical Input rating, input in volts (where applicable), amps (where applicable) and watts.
- Hazardous location designations.

- Temperature code rating.
- Minimum and Maximum ambient temperature.
- Ingress Rating “IP 66/68” or “IP66” or “IP68”
- Special Purpose Enclosure Rating “Type 4” or “Type 4X”
- The statement: “DO NOT OPEN WHEN AN EXPLOSION ATMOSPHERE MAY BE PRESENT” and “NE PAS OUVRIR SI UNE ATMOSPHERE D'EXPLOSION PEUT ETRE PRESENTE” or equivalent when battery is present inside the enclosure.
- The statement: “Install conduit seals within 18 in. (450 mm) of enclosure”
- The statement: “Wiring in this compartment may reach 80°C in an ambient of 75°C”
- The statement: “All input circuits must be derived from a CSA Approved Class 2 source”

Note: Also see the description section for models provided with a battery.

*Other markings, as appropriate:*

- ISO 3864 Symbol B.3.1  or ISO 7000 symbol 0434  (triangle with exclamation point) indicating to read and follow user instructions.
- Terminal Designations adjacent to each field wiring terminal.
- The designation “GND” adjacent to the equipment ground terminal, if applicable.
- ISO 60417, Symbol 5019  adjacent to the equipment ground (protective conductor) terminal.
- ISO 60417, Symbol 5032  adjacent to the AC input terminal rating.
- The words “ON” and “OFF”, adjacent to the power switch, is applicable.
- ISO 60417, Symbols 5007,  and 5008 , adjacent to the power switch, is applicable.

Notes:

Products certified under Class C225802 have been certified under CSA’s ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). [www.scc.ca](http://www.scc.ca)







## Supplement to Certificate of Compliance

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*The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.*

### Product Certification History

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Project	Date	Description
80118971	2022-06-28	Evaluation for revision to 2325749 (last update 80041289) to update model numbers and include new battery option with 1 cell. Includes revisions to DWGs DW1893 Rev E and DW1894 Rev E.
80041289	2021-02-24	Evaluation to update report 2325749 to add the EX/EC Series empty enclosures (certified under 80011200 and IECEx SIR 19.0075U) to models PD31x, PD663, PD68xx. Update of applicable requirements from CSA Standard C22.2 No. 142 to CSA Standard C22.2 No. 61010-1:2012. Changes to the nomenclature section and model code not affecting the currently certified design. Addition of alternate batteries and battery pack.
70006416	2014-07-22	Evaluation for update of report 2325749 to investigate XP testing previously conducted with possible revision to the markings specifying seal within 18 inches for all installations. Any testing deemed required will be additional.
2525507	2012-09-12	Update of report 2325749 to rev nomenclature and report updates for models PD6800, PD310 and PD663
2325749	2011-03-08	Model PD6800, PD6820, PD6830, PD6870, PD663 and PD310 Series Explosion-proof Process Meters and Temperature Transmitter for Div. 1 and Zone 1 hazardous locations.