



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.:	<b>IECEx SIR 12.0073X</b>	Page 1 of 4	<u>Certificate history:</u>
Status:	<b>Current</b>	Issue No: 2	<a href="#">Issue 1 (2016-03-10)</a> <a href="#">Issue 0 (2012-08-30)</a>
Date of Issue:	2023-02-20		
Applicant:	<b>Precision Digital Corporation</b> 233 South Street Hopkinton Massachusetts 01748 <b>United States of America</b>		
Equipment:	<b>PD8 series of industrial meters/controllers</b>		
Optional accessory:			
Type of Protection:	<b>Flameproof and Dust Protection by Enclosure</b>		
Marking:	<b>When using 8117 enclosures</b>  Ex db IIC T* Gb Ex tb III C T90°C Db IP68 Ta = -40°C to +*°C * T6 = -40°C to +60°C * T5 = -40°C to +65°C  <b>When using EC700 or EX700 enclosures</b>  Ex db IIC T* Gb Ex tb IIIC T90°C Db IP68 Ta = -55°C to +*°C *T6 = -55°C to +60°C *T5 = -55°C to +65°C		

Approved for issue on behalf of the IECEx  
Certification Body:

**Michelle Halliwell**

Position:

**Director Operations, UK & Industrial Europe**

Signature:  
(for printed version)

Date:  
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
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Certificate issued by:

**CSA Group Testing UK Ltd**  
Unit 6, Hawarden Industrial Park  
Hawarden, Deeside CH5 3US  
**United Kingdom**





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Manufacturer: **Precision Digital Corporation**  
233 South Street  
Hopkinton  
Massachusetts 01748  
**United States of America**

Manufacturing locations: **Precision Digital Corporation**  
233 South Street  
Hopkinton  
Massachusetts 01748  
**United States of America**

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

## STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

**IEC 60079-0:2017** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

**IEC 60079-1:2014-06** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:7.0

**IEC 60079-31:2013** Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

## TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

**GB/SIR/ExTR12.0206/00**

**GB/SIR/ExTR16.0046/00**

**GB/SIR/ExTR23.0048/00**

Quality Assessment Report:

**GB/SIR/QAR10.0005/13**



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## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The PD8 series of industrial meters/controllers, are microprocessor based industrial process meters, used to measure and display analogue signal-based processes by accepting current, voltage, temperature, pulse and resistance signals.

The PD8 series is manufactured utilising one of two component certified enclosures, which have a maximum internal free volume of 2220 cm<sup>3</sup>, and may be manufactured from cast aluminium or stainless steel depending on enclosure type, these may also include an epoxy paint finish

The enclosures comprise of cylindrical single compartment formed by a base and cover, with the cover containing a circular tempered glass window and the base having up to four conduit openings, of entry sizes selected from 1/2" NPT, 3/4" NPT or M20x1.5.

Variants of the PD8 series are available in the following voltage ranges.

85- 265 V a.c.  
90 - 265 V d.c.  
12/24 V d.c.  
12 - 24 V a.c.  
12 - 36 V d.c.

Refer to the Annexe for additional information.

## SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The equipment label and epoxy coating may generate an ignition-capable level of electrostatic charges under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.
2. flameproof joints are not intended to be repaired
3. All entry closure devices shall be suitably certified as "Ex d", "Ex t" and "IP66/68" as applicable. Suitable thread sealing compound (non-setting, non-insulating, non-corrosive, not solvent based, suitable for the ambient rating) must be used at the NPT conduit entries to achieve the IPx8 rating while maintaining the Ex protection concept.



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Date of issue: 2023-02-20

Issue No: 2

## **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

**This issue, Issue 2, recognises the following changes; refer to the certificate annex to view a comprehensive history:**

1. Following appropriate assessment to demonstrate compliance with the latest technical knowledge: IEC 60079-0:2007 Ed 5, IEC 60079-1:2007 Ed 6 and IEC 60079-31-2008 Ed 1 were replaced by IEC 60079-0:2017 Ed 7, IEC 60079-1:2014 Ed 7 and IEC 60079-31:2013 Ed 2, the markings were updated accordingly. As a result, Specific Conditions of Use were introduced, and an 'X' was added to the certificate number.
2. To allow the addition of optional enclosures covered by the certificates IECEx SIR 19.0075U for use in a low ambient of -55, with the currently certified internal arrangement.

## **Annex:**

[IECEx SIR 12.0073X Annexe Issue 2.pdf](#)

Annexe to: IECEx SIR 12.0073X Issue 2

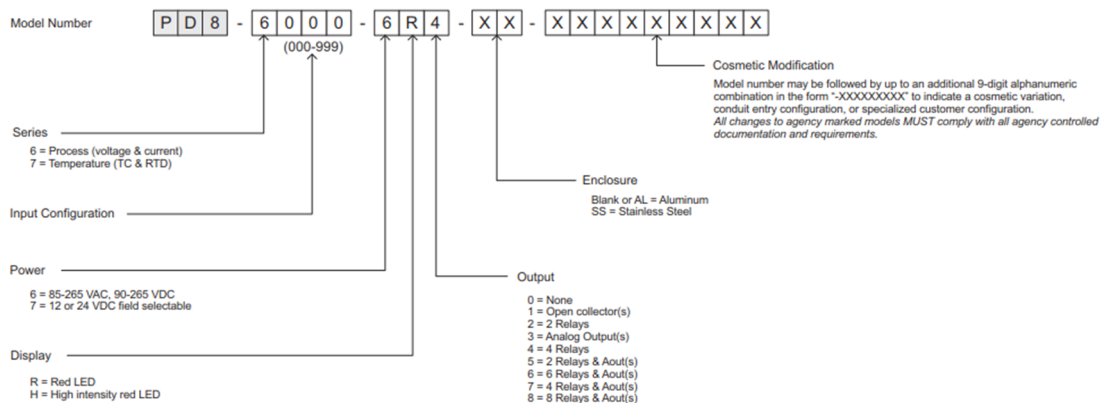
Applicant: Precision Digital Corporation

Apparatus: PD8 series of industrial meters/controllers



#### Model Variations:

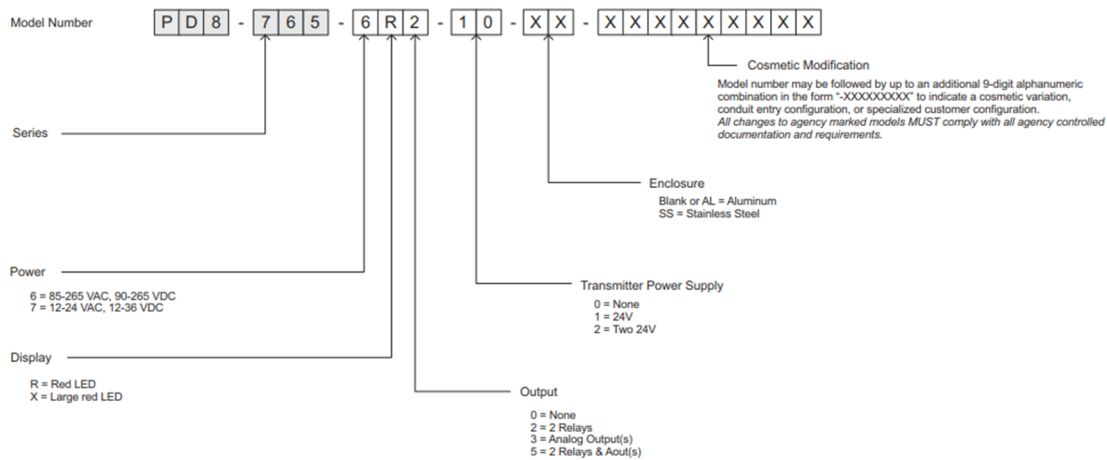
Model	Series Description	Options	Enclosure
PD8-154-6R2-1	4-Point Alarm Annunciator	Two Relays, 24VDC Transmitter Supply	Aluminum
PD8-154-6R2-1-AL	4-Point Alarm Annunciator	Two Relays, 24VDC Transmitter Supply	Aluminum
PD8-154-6R2-1-SS	4-Point Alarm Annunciator	Two Relays, 24VDC Transmitter Supply	Stainless Steel
PD8-154-7R2-0	4-Point Alarm Annunciator	Two Relays	Aluminum
PD8-154-7R2-0-AL	4-Point Alarm Annunciator	Two Relays	Aluminum
PD8-154-7R2-0-SS	4-Point Alarm Annunciator	Two Relays	Stainless Steel
PD8-158-6R2-1	8-Point Alarm Annunciator	Two Relays, 24VDC Transmitter Supply	Aluminum
PD8-158-6R2-1-AL	8-Point Alarm Annunciator	Two Relays, 24VDC Transmitter Supply	Aluminum
PD8-158-6R2-1-SS	8-Point Alarm Annunciator	Two Relays, 24VDC Transmitter Supply	Stainless Steel
PD8-158-7R2-0	8-Point Alarm Annunciator	Two Relays	Aluminum
PD8-158-7R2-0-AL	8-Point Alarm Annunciator	Two Relays	Aluminum
PD8-158-7R2-0-SS	8-Point Alarm Annunciator	Two Relays	Stainless Steel
PD8-865-6R2-06	Modbus Snooper Meter	Two Relays	Aluminum
PD8-865-6R2-06-AL	Modbus Snooper Meter	Two Relays	Aluminum
PD8-865-6R2-06-SS	Modbus Snooper Meter	Two Relays	Stainless Steel
PD8-865-6R5-16	Modbus Snooper Meter	Two Relays, 4-20mA Output with 24VDC Transmitter Supply	Aluminum
PD8-865-6R5-16-AL	Modbus Snooper Meter	Two Relays, 4-20mA Output with 24VDC Transmitter Supply	Aluminum
PD8-865-6R5-16-SS	Modbus Snooper Meter	Two Relays, 4-20mA Output with 24VDC Transmitter Supply	Stainless Steel
PD8-865-6R7-16	Modbus Snooper Meter	Four Relays, 4-20mA Output with 24VDC Transmitter Supply	Aluminum
PD8-865-6R7-16-AL	Modbus Snooper Meter	Four Relays, 4-20mA Output with 24VDC Transmitter Supply	Aluminum
PD8-865-6R7-16-SS	Modbus Snooper Meter	Four Relays, 4-20mA Output with 24VDC Transmitter Supply	Stainless Steel
PD8-865-7R5-06	Modbus Snooper Meter	Two Relays and 4-20mA Output	Aluminum
PD8-865-7R5-06-AL	Modbus Snooper Meter	Two Relays and 4-20mA Output	Aluminum
PD8-865-7R5-06-SS	Modbus Snooper Meter	Two Relays and 4-20mA Output	Stainless Steel
PD8-865-7R7-06	Modbus Snooper Meter	Four Relays and 4-20mA Output	Aluminum
PD8-865-7R7-06-AL	Modbus Snooper Meter	Four Relays and 4-20mA Output	Aluminum
PD8-865-7R7-06-SS	Modbus Snooper Meter	Four Relays and 4-20mA Output	Stainless Steel



Annexe to: IECEx SIR 12.0073X Issue 2

Applicant: Precision Digital Corporation

Apparatus: PD8 series of industrial meters/controllers



Conditions of Manufacture

- 1. The equipment covered by this certificate incorporates previously certified devices, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform CSA Group of any modifications of the devices that may impinge upon the explosion safety design of their products.

They shall also provide the end user with the appropriate certification documents.

Description	Certificate Number
Model 8117PD enclosure	IECEX SIR 10.0102U
EC700 / EX700 enclosure	IECEX SIR 19.0075U

- 2. The maximum power dissipated within the equipment is set to a maximum of 13.73 Watts.
- 3. The equipment shall be marked for an ambient temperature range dependent of the enclosure type used in the construction as detailed below:

Model 8117PD (IECEX SIR 10.0102U) T6 = -40°C to +60°C  
Model 8117PD (IECEX SIR 10.0102U) T5 = -40°C to +65°C  
Model EC/EX700 (IECEX SIR 19.0075U) T6 = -55°C to +60°C  
Model EC/EX700 (IECEX SIR 19.0075U) T5 = -55°C to +65°C

Full certificate change history

Issue 1 – this Issue introduced the following change:

- 1. The company address was changed from 89 October Hill Road, STE 5, Holliston, Massachusetts 01746-1378, USA to 233 South Street, Hopkinton, Massachusetts 01748, USA.

Issue 2 – this Issue introduced the following changes:

- 1. Following appropriate assessment to demonstrate compliance with the latest technical knowledge: IEC 60079-0:2007 Ed 5, IEC 60079-1:2007 Ed 6 and IEC 60079-31-2008 Ed 1 were replaced by IEC 60079-0:2017 Ed 7, IEC 60079-1:2014 Ed 7 and IEC 60079-31:2013 Ed 2, the markings were updated accordingly. As a result, Specific Conditions of Use were introduced, and an 'X' was added to the certificate number.
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