PD4-6600 Series ATEX and IECEx Certified Loop-Powered Meter Intrinsic Safety Control Drawing

SECTION	AGENCY	DESCRIPTION
1.0		Safety Information
2.0	ATEX and IECEx	Special Conditions for Safe Use
3.0	ATEX and IECEx	Hazardous Area Approvals

NOTE: THIS IS AN AGENCY CONTROLLED DOCUMENT NO CHANGES CAN BE MADE WITHOUT PRIOR APPROVAL.

1.0 SAFETY INFORMATION

1.1 Read complete instructions prior to installation and operation of the meter.

1.2 Installation and service should be performed only by trained service personnel.

1.3 Substitution of components may impair hazardous location safety.

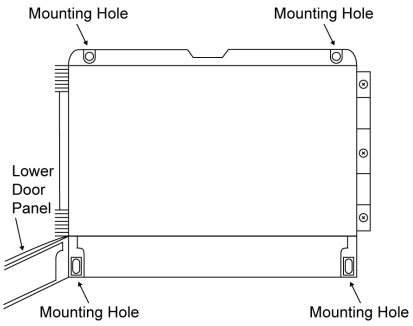
1.4 Service requiring replacement of internal components must be performed at the factory.

1.5 Equipment contains non-metallic materials and therefore special care and consideration should be made to the performance of these materials with respect to chemicals which may be present in a hazardous environment.

1.6 PD4-6600 series indicator does not add capacitance or inductance to loop under normal or fault conditions.

1.7 Hazardous location installation instructions for associated apparatus (barrier) must also be followed when installing this equipment.

Wall Mounting



2.0 ATEX AND IECEx SPECIAL CONDITIONS FOR SAFE USE

2.1 The equipment loop/power port shall be connected to an intrinsically safe barrier with Uo ≥ 5.8V.

2.2 The PD4 enclosure is non-metallic. Under certain extreme circumstances, the plastic enclosure may store an ignition-capable level of electrostatic charge. Therefore, the user/installer shall implement precautions to prevent the build-up of electrostatic charge, e.g. locate the equipment where a charge-generating mechanism (such as wind-blown dust) in unlikely to be present and clean with a damp cloth.

2.3 All cable entries into the equipment shall be via cable glands or conduit which provide a minimum degree of protection of IP54.

2.4 The equipment shall not be opened when a hazardous atmosphere is present.

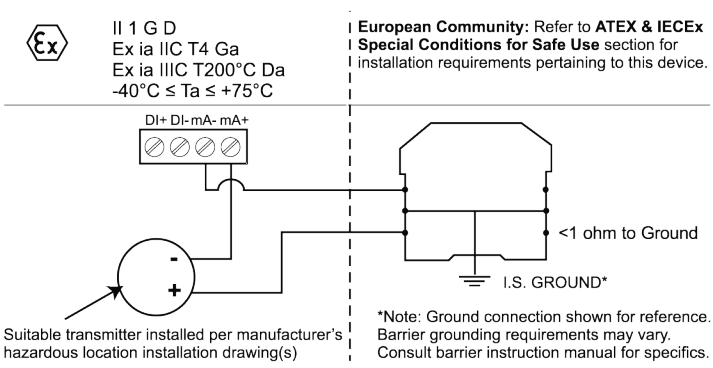
2.5 The remote contact port shall only be connected to voltage free contacts.

2.6 **For European Community:** The PD4-66XX Series must be installed in accordance with the ATEX Directive 2014/34/EU, the product certificates CML 18ATEX2091X and IECEx CML 18.0051X and the product manual. There is no need to remove the meter from its case to complete the installation, wiring, and setup of the meter for most applications.

3.0 HAZARDOUS AREA APPROVALS

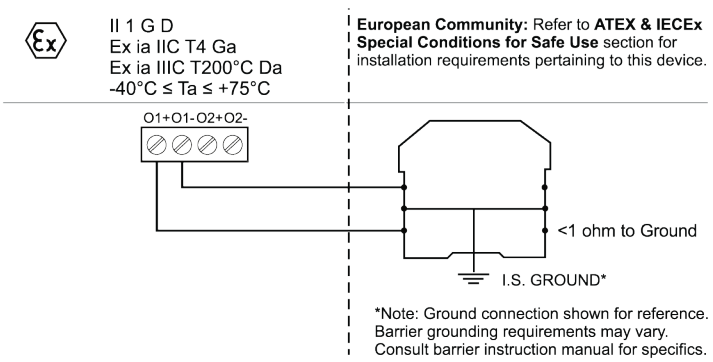
II 1 G D
Ex ia IIC T4 Ga
Ex ia IIIC T200°C Da
-40°C ≤ Ta ≤ +75°C
IP65

mA Input



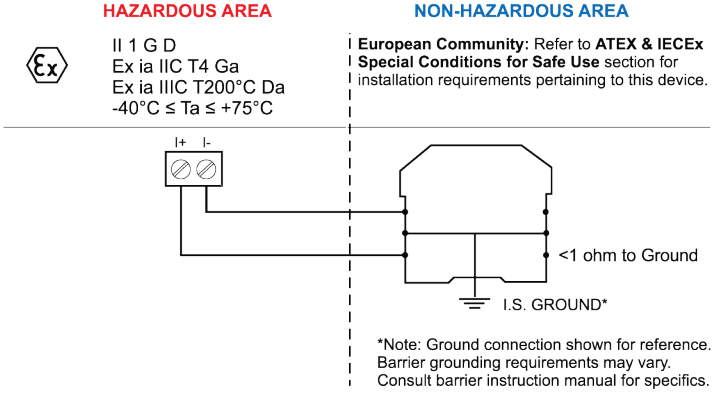
mA Input Connection Entity Parameters:
Ui = 30 V, Ii = 175 mA, Pi = 1 W, Ci = 0, Li = 0

Open Collector Output



Open Collector Output Connection Entity Parameters:
Ui = 30 V, Ii = 175 mA, Pi = 1 W, Ci = 0, Li = 0

4-20 mA Linear Output



4-20 mA Linear Output Connection Entity Parameters:
Ui = 30 V, Ii = 175 mA, Pi = 1 W, Ci = 0, Li = 0

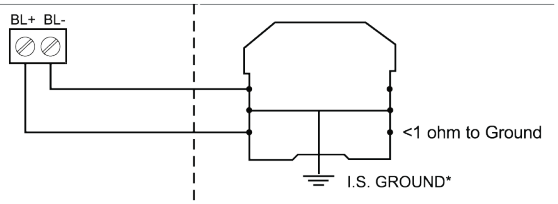
PD4-6600 Series ATEX and IECEx Certified Loop-Powered Meter Intrinsic Safety Control Drawing

Backlight Power Supply

HAZARDOUS AREA | NON-HAZARDOUS AREA

II 1 G D
Ex ia IIC T4 Ga
Ex ia IIIC T200°C Da
-40°C ≤ Ta ≤ +75°C

European Community: Refer to **ATEX & IECEx Special Conditions for Safe Use** section for installation requirements pertaining to this device.



*Note: Ground connection shown for reference. Barrier grounding requirements may vary. Consult barrier instruction manual for specifics.

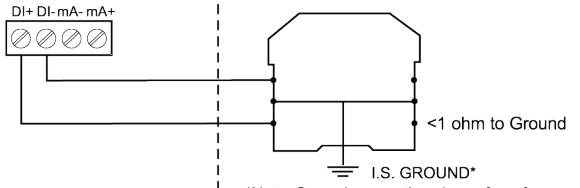
Backlight Power Supply Connection Entity Parameters:
Ui = 30 V, Ii = 175 mA, Pi = 1 W, Ci = 0, Li = 0

Switch Port

HAZARDOUS AREA | NON-HAZARDOUS AREA

II 1 G D
Ex ia IIC T4 Ga
Ex ia IIIC T200°C Da
-40°C ≤ Ta ≤ +75°C

European Community: Refer to **ATEX & IECEx Special Conditions for Safe Use** section for installation requirements pertaining to this device.



*Note: Ground connection shown for reference. Barrier grounding requirements may vary. Consult barrier instruction manual for specifics.

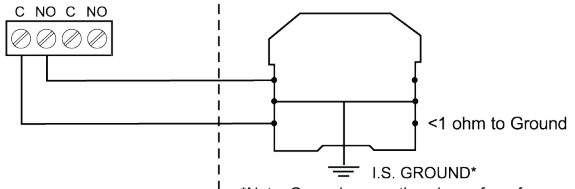
Switch Port Connection Entity Parameters:
Ui = 30 V, Ii = 175 mA, Pi = 1 W, Ci = 0, Li = 0

Relay Output

HAZARDOUS AREA | NON-HAZARDOUS AREA

II 1 G D
Ex ia IIC T4 Ga
Ex ia IIIC T200°C Da
-40°C ≤ Ta ≤ +75°C

European Community: Refer to **ATEX & IECEx Special Conditions for Safe Use** section for installation requirements pertaining to this device.



*Note: Ground connection shown for reference. Barrier grounding requirements may vary. Consult barrier instruction manual for specifics.

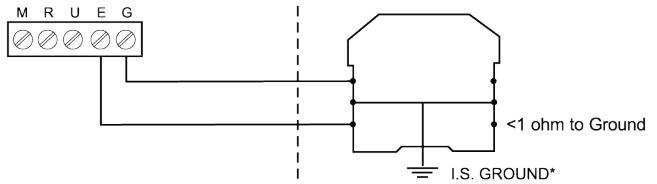
Relay Output Connection Entity Parameters:
Ui = 30 V, Ii = 1.0 A, Pi = 1 W, Ci = 0.013 µF, Li = 0
Uo = 11.55 V, Io = 0.001, A Po = 0.012 W

External Contact

HAZARDOUS AREA | NON-HAZARDOUS AREA

II 1 G D
Ex ia IIC T4 Ga
Ex ia IIIC T200°C Da
-40°C ≤ Ta ≤ +75°C

European Community: Refer to **ATEX & IECEx Special Conditions for Safe Use** section for installation requirements pertaining to this device.



*Note: Ground connection shown for reference. Barrier grounding requirements may vary. Consult barrier instruction manual for specifics.

External Contact Connection Entity Parameters:
Ci = 13.6 µF, Li = 0, Uo = 7.01 V, Io = 0.193 A, Pi = 0.265 W

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PRECISION DIGITAL CORPORATION
233 South Street • Hopkinton MA 01748 USA • Tel (800) 343-1001 • Fax (508) 655-8990
www.predig.com