



# 1 EU-TYPE EXAMINATION CERTIFICATE

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: Sira 16ATEX2084X Issue: 0

4 Equipment: PRO Series of Proximity Probe Assemblies

PRO DP100\* Probes, PRO DC100\* Extension Cables & PRO DD\* Drivers PRO DX330\* Probes, PRO DX330\* Extension Cables & PRO DX\* Drivers

5 Applicant: CTC - Connection Technology Center, Inc.

6 Address: 7939 Rae Blvd.

Victor NY 14564 USA

- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- Sira Certification Service, notified body number 0518 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2012/A11:2013 EN 60079-11:2012

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.
- 11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- The marking of the equipment shall include the following:



II 10

Ex ia IIC T4 Ga (Ta = -45°C to +100°C) Ex ia IIC T5 Ga (Ta = -35°C to +85°C)

Project Number 70019485

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C Ellaby

**Deputy Certification Manager** 

Sira Certification Service

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#### **SCHEDULE**

#### **EU-TYPE EXAMINATION CERTIFICATE**

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# 13 DESCRIPTION OF EQUIPMENT

The PRO Series of Proximity Probe Assemblies consist of a Driver, a Probe, and an optional Extension Cable. Proximity Probe assemblies are assembled from either a DP Series Probe, a DC series extension cable and a DD Series Driver, or from a DX series probe, extension cable and driver. Only the calibration differs between these two types of product assemblies.

The PRO DD\* Series and DX\* Series of Drivers can be ordered with different calibrations for different probe types. The Driver aluminum enclosure measures 25 mm wide x 87mm x 84mm and has three external connectors - a brass SMA connector for connecting the Extension Cable/Probe, a BNC output (not used in Hazardous Location applications), and a 4 position Terminal Block that interfaces to Group IIC IS barrier(s).

The Probe connects to the SMA connector on the Driver through the optional extension cable. The PRO DP100\* and DX330\* Series of Probes are provided with or without armor. The Probes are up to 12m long and come in 4 probe tip diameter sizes of 5 mm, 8 mm, 11 mm, and 25 mm. The PRO DC100\* and DX330\* Series are Extension Cables up to 11 m long, with or without armor.

The equipment has the following entity parameters shown on Drawing INS10060:

# PARAMETER 1 VT (-) from a Gas Group IIC approved barrier

Ui = 30 Vdc

Ii = 140 mA

Pi = 757 mW

Ci = 50 pF

Li = 1 mH

#### PARAMETER 2 OUT from a Gas Group IIC approved barrier

Ui = 30 Vdc

Ii = 35 mA

Pi = 263 mW

Ci = 50 pF

 $Li = 500 \mu H$ 

# 14 DESCRIPTIVE DOCUMENTS

# 14.1 Drawings

Refer to Certificate Annexe.

#### 14.2 Associated Sira Reports and Certificate History

Issu	e Date	Report no.	Comment
0	21 July 2016	R70019485A	The release of the prime certificate.

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- 15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)
- 15.1 Under certain extreme circumstances, the non-metallic cabling on the probe and extension cable incorporated in this this equipment may generate an ignition-capable level of electrostatic charge. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth.
- 15.2 The Driver enclosure of the Proximity Probe Assembly is manufactured from aluminium. In rare cases, ignition sources due to impact and friction sparks could occur. The user must ensure that the enclosure is suitably protected against danger from impact or friction, particularly when installed in a zone 0 location (See clause 8.3 of EN 60079-0).
- 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

- 17 CONDITIONS OF MANUFACTURE
- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

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# **Certificate Annexe**

Certificate Number: Sira 16ATEX2084X

Equipment: PRO Series of Proximity Probe Assemblies
Applicant: CTC - Connection Technology Center, Inc.



# Issue 0

Drawing	Sheets	Rev.	Date(Sira stamp)	Title
INS10060	1 to 2	E	17 May 16	CONTROL DRAWING PROXIMITY PROBE SYSTEM
INS10061	1 to 7	D	17 May 16	LAYOUT, PROXIMITY PROBE DRIVER
INS10062	1 of 1	С	17 May 16	SCHEMATIC, PROXIMITY PROBE DRIVER
INS10063	1 to 2	E	17 May 16	BOM, PROXIMITY PROBE DRIVER
INS10064	1 of 1	Α	17 May 16	ASSEMBLY, PROXIMITY PROBE DRIVER
INS10065	1 of 1	Α	17 May 16	ASSEMBLY, PROXIMITY PROBE EXTENSION CABLE
INS10066	1 to 4	Α	17 May 16	ASSEMBLY, PROXIMITY PROBE
INS10067	1 to 2	Α	17 May 16	PART MATRIX, PROXIMITY PROBE
INS10068	1 of 1	Α	17 May 16	PART MATRIX, PROXIMITY PROBE EXTENSION CABLE
INS10069	1 of 1	Α	17 May 16	PART MATRIX, PROXIMITY PROBE DRIVER
INS10070	1 of 1	В	17 May 16	LABELING, PROXIMITY PROBE
INS10072	1 of 1	Α	17 May 16	LABELING, PROXIMITY PROBE DRIVER
PXP 10262	1 of 1	D	17 May 16	COAXIAL PROXIMITY PROBE CABLE

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