



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx SIR 19.0052X

Issue No: 0

Certificate history:

Issue No. 0 (2019-06-24)

Status: **Current**

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Date of Issue: **2019-06-24**

Applicant: **Dixon Bayco USA Division of DVCC Inc.**
4690 Interstate Dr,
Ste F
Cincinnati
Ohio 45246
United States of America

Equipment: **FT7000 Level Monitor**

Optional accessory:

Type of Protection: **Flameproof and Intrinsically Safe**

Marking:

Ex db ib [ia Ga] IIB T4 Gb
Ta = -20°C to +60°C

*Approved for issue on behalf of the IECEx
Certification Body:*

Neil Jones

Position:

Certification Manager

*Signature:
(for printed version)*

Date:

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.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden, Deeside, CH5 3US
United Kingdom

sira
CERTIFICATION





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Manufacturer: **Dixon Bayco USA Division of DVCC Inc.**
4690 Interstate Dr,
Ste F
Cincinnati
Ohio 45246
United States of America

Additional Manufacturing location(s):

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 apparatus 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 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*This Certificate **does not** indicate compliance with electrical 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 Report:

[GB/SIR/ExTR19.0169/00](#)

Quality Assessment Report:

[GB/SIR/QAR09.0010/10](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The FT7000 is an electronic device for the specific purpose of continuous monitoring of liquid levels and the prevention of electrical grounding while filling of transportable liquid tanks. It consists of a single compartment flameproof enclosure with an external intrinsically safe lighted display board.

The FT7000 has an internal PCB mounted power supply rated for 110-240 VAC, 50-60 Hz and a maximum power draw of 13 watts. The FT7000 is rated for ambient temperatures from -20°C to +60°C.

The FT7000 enclosure is rectangular, single-compartment, cast metal housing comprised of low copper aluminium alloy (ASTM A356-T6) (which does not contain more than 7.5% magnesium, titanium and zirconium by mass). A portion of the exterior is coated with an epoxy-polyester powder-coating paint.

Refer to the Annexe for Entity Parameters and Additional Information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to the Annexe

Annex:

[IECEX SIR 19.0052X Annexe Issue 0.pdf](#)

Annexe to: IECEx SIR 19.0052X Issue 0
Applicant: Dixon Bayco USA Division of DVCC Inc.
Apparatus: FT7000 Level Monitor



Entity Parameters:

Pm= 13 W Um = 250 V
Uo= 12.6 V Io= 0.187 A Po= 0.589 W Co= 7.4 µF Lo=9.1 mH

Description Continued:

The overall dimensions of the enclosure are approximately 12.443 inches by 13.130 inches by 4.046 inches (316.04mm by 333.50mm by 102.78mm).

Four 1/2-14 NPT entries are provided for installation to threaded conduit or use with cable glands supplied with each unit.

The following accessories are shipped with the following equipment and are intended for use in the final installation as applicable.

Cable Glands - EXN04ALC2 (KPX-EX), Nickel Plated Brass, manufactured by ABB Installation Products. Ex d IIC Gb; Ex e IIC Gb; Ex tb IIC Db, for use only with unarmoured TC-ER-HL cable and Ex e IIC, for use only with unarmoured TC, TC-ER and TC-ER-HL cable. IP66/IP68. Operating temperature -20°C to 100°C.

Stopping plugs EXN/050/SP 1/2-14 NPT Nickel Plated Brass. By ABB Installation Products. Ex d I Mb Ex d IIC Gb. Operating temperature -20°C to 200°C.

Mounting Hardware:

- (4) M10 x 70mm S.S. threaded bolt.
- (4) M10 S.S. split spring washer.
- (4) M10 S.S hex nut.

Specific Conditions of Use

- i. The enclosure is manufactured from low copper aluminium alloy. In rare cases, ignition sources due to impact and friction sparks could occur
- ii. Cover bolts:
 - a. Property class: C-50
 - b. Yield Strength: 70,000 psi (482MPa)
 - c. Type: M10x1.5 30 mm long SHCSFasteners shall only be replaced with identical M10x1.5 DIN 912 fasteners
- iii. Instructions are provided with each shipment, identifying proper torque values of 35 lb-ft. (47.5 Nm) for cover bolts.
- iv. Instructions are provided with each shipment, identifying proper torque values of 25 lb-ft. (32 Nm) for conduit stopping plugs / blanking elements and conduit adapter.
- v. Cross-sectional area of PE conductors must be equal to or greater than the cross-sectional area of phase conductors.
- vi. For installations using cable glands provided with this equipment:
 - a. When insert tap is removed in order to install the proper cable, the integrity of sealing rings have to be checked, in order to guarantee the correct tightness.
 - b. If necessary, sealing rings have to be replaced with new ones (original spare parts only).
 - c. Only EPDM rubber or Silicone sealing rings are permitted for installations with this equipment.
 - d. Polyamide dome plug is not permitted for installation with this equipment.
- vii. The supply connection to the FT7000 must be made with rigid metal conduit or armoured cable or other means which provides adequate equipotential bonding of the equipment.

Date: 24 June 2019

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Form 9530 Issue 1

Sira Certification Service

Unit 6 Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900
Email: ukinfo@csagroup.org
Web: www.csagroupuk.org

Annexe to: IECEx SIR 19.0052X Issue 0

Applicant: Dixon Bayco USA Division of DVCC Inc.



Apparatus: FT7000 Level Monitor

- viii. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of 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.

Conditions of Manufacture

- i. The manufacturer shall inform CSA Group / Sira of any modifications to the device that may impinge upon the explosion safety or intrinsically safe design of the Model FT7000.