



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 08.0019X** issue No.:5

Status: **Current**

Date of Issue: **2017-04-27** Page 1 of 4

Certificate history:
Issue No. 5 (2017-4-27)
Issue No. 4 (2015-1-21)
Issue No. 3 (2012-9-12)
Issue No. 2 (2010-6-24)
Issue No. 1 (2008-12-17)
Issue No. 0 (2008-4-15)

Applicant: **Bristol Inc. dba Remote Automation Solutions**
1100 Buckingham St.
Watertown
Connecticut 06795
United States of America

Equipment: **DL8000 (Model W40176)**
Optional accessory:


Type of Protection: **Flameproof**

Marking: **Ex db IIB T6 Gb IP66 (Ta = -40°C to +65°C)**
(The labelling of these products includes the comment “(-20 TO +65°C FOR LCD DISPLAY)”, for clarification, this restriction only refers to the practical operation of the LCD Display.)

Approved for issue on behalf of the IECEX Certification Body: **N Jones**

Position: **Certification Manager**

Signature: **(for printed version)**

AD 

Date: **2017-04-27**

- 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





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Manufacturer: **Bristol Inc. dba Remote Automation Solutions**
1100 Buckingham St.
Watertown
Connecticut 06795
United States of America

Additional Manufacturing location(s):

Fromex S.A. de C.V.
Avenida Industrias N°6025
Zd 88275 Nuevo Laredo
Tamaulipas
Mexico

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 electrical 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 : 2011 Explosive atmospheres - Part 0: General requirements
Edition: 6.0

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

*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/ExTR08.0030/00
GB/SIR/ExTR12.0195/00

GB/SIR/ExTR08.0165/00
GB/SIR/ExTR15.0003/00

GB/SIR/ExTR10.0147/00
GB/SIR/ExTR17.0072/00

Quality Assessment Report:

FR/LCI/QAR07.0011/00



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Refer to Annexe for Equipment Description.

Conditions of manufacture

The Manufacturer shall comply with the following:

1. An electrical strength test of $(1000 + 2 U_n)$ V, rms. Shall be applied, for at least 10 seconds to a maximum of 60 seconds, as required by clause 26.4.5.1 of IEC 60079-0: 2011.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The user/installer shall comply with the following:

1. The fastener with yield stress greater than 240 N/mm² shall be used.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1 – this Issue introduced the following changes:

1. The addition of the Series 2 CPU module.
2. The recognition of minor drawing changes associated with W38286, W38294, W38305, 7FSC1024, 7FSC1048, 7FSC1050, 7FSC1055 and W40176.

Issue 2 – this Issue introduced the following changes:

1. The introduction of an AC input line filter and associated schematic changes, this includes the addition of a 16 bit quad analogue input module; in consequence drawings 7FSC1047, 7FSC1028, 7FSC1004 and 7FSC1036 have been replaced by drawings 7FSC1070, 7FSC1069, 7FSC1067, and 7FSC1044 respectively.
2. The introduction of a clarifying note in the marking section that recognises a practical limitation that restricts the use of LCD Display.

Issue 3 – this Issue introduced the following changes:

1. The recognition of a change of company name from Fisher Controls, 1612 South 17th Avenue, Marshalltown, Iowa to that currently shown.
2. The DL8000 display part number was changed from P/N W15000X0012 to P/N W15513X0012 because of the manufacturing discontinuity and therefore the schematic diagram (W38305) and the pcb assembly layout (W48081) of the DL8000 display were updated.

Issue 4 – this Issue introduced the following change:

1. It was noted that the case and cover are chromated and painted. Paint thickness is typically 0.076 mm.
2. The introduction of an alternative label that shows additional information that applies to the product, but is not required by this certification.
3. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, the document previously listed, IEC 60079-0:2004 Ed 4, was replaced by IEC 60079-0:2011 Ed 6, the markings were updated accordingly and the condition of manufacture was amended to recognise the new standard.

Issue 5 – this Issue introduced the following change:

1. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-1:2007 Ed 6 was replaced by IEC 60079-1:2014 Ed 7, as a result, the markings were updated, a Specific Condition of Use was introduced and therefore an 'X' suffix was added to the certificate number.
2. The standard IEC 60079-0 in the Condition of Manufacture was amended to correct a typographical error.

Annexe to: IECEx SIR 08.0019X Issue 5
Applicant: Bristol Inc. dba Remote Automation Solutions
Apparatus: DL8000 (Model W40176)



The DL8000 comprises a two piece, lid and body, cast aluminium enclosure. The two pieces of the enclosure form a flanged flamepath and are secured together by sixteen, M10, stainless steel, hexagonal socket head screws. The lid incorporates a window and a keypad, the window also forms a flanged flamepath and the keypad utilises 'hall effect' sensors. The body of the enclosure is equipped with two, 1-1 1/2" NPSM cable entries and one, 2-1 1/2" NPSM cable entry in the bottom of the enclosure. These may be optionally fitted with M25 and M50 certified conduit adaptors. The internally fitted, microprocessor-based controller comprises a fixed backplane and an internal card cage. The unit has a number of power module, input/output module and communication module options.



The electrical ratings are:
100/240 VAC, 50/60 Hz, 0.75 A max.

The DL8000 has been tested to IP66.