

### INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification Scheme for Explosive Atmospheres**

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

Certificate No.: IECEx CSA 15.0053X Issue No: 1 Certificate history:

Issue No. 1 (2018-07-20) Status: Current

Issue No. 0 (2015-12-21)

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Bristol, Inc. dba Remote Automation Solutions Applicant:

1100 Buckingham St., Watertown, CT, 06795

**United States of America** 

Model W40135 Flow Computer Equipment:

Optional accessory:

Type of Protection: Non-sparking

Marking:

Ex nA IIC T4 Gc

Tamb =  $-40 \degree C$  to  $+75 \degree C$ 

Approved for issue on behalf of the IECEx Dorin Stochitoiu

Certification Body:

**Technical Advisor** Position:

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.

Certificate issued by:

**CSA Group** 178 Rexdale Boulevard Toronto, Ontario M9W IR3 Canada





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Manufacturer: Fromex S. A. de C. V., A Division of Emerson Process Management

Aveinida Industrias No 6025, Zd 88275 Nueva Laredo, Tamaulipas.

Mexico

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 : 2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the

### **TEST & ASSESSMENT REPORTS:**

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

Test Report:

Quality Assessment Report:

FR/LCI/QAR07.0011/06



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Schedule

### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

The Model W40135 Flow Computer is a microprocessor-based controller that provides the functions required for a variety of field automation applications. The controller is used for applications requiring general logic and sequencing control, historical data archiving, multiple communication ports, PID control and flow measurements on up to twelve meter runs.

The unit consists of the main enclosure containing a fixed backplane (there are three options) and with an integral card-cage that can accommodate:

- a power supply module
- up to 27 i/o and communications cards
- W48071 CPU or W48093 Series 2 CPU & W28142 License Key
- W48088 Foundation Fieldbus Interface CPU

All the cards communicate with each other on a common SPI bus. Empty slots are covered by blanks secured to the enclosure with screws and moulded from the same material as the enclosure.

The three possible backplanes are:

- W48072 ROC 809 Backplane
- W38263 ROC 803 Backplane
- W38266 ROC 803 Expansion Backplane
- W48090 ROC 827 Backplane, Series 2
- W48091 ROC 827 Expansion Backplane, Series 2

The unit has a number of power module options:

- nominal 12 Vdc input module (W38185 PS-DC-12)
- nominal 24 Vdc input module (W38245 PS-DC-24)
- nominal 30 Vdc input module (W38372 PS-DC-30)

The unit has the following i/o module options:

- W38189 5-Channel J/K Thermocouple Input Module (TC)
- W38191 5-Point Relay Output Module (DO-R)
- W38193 5-Point Digital Output Module (DO)
- W38195 8-Point Digital Input Module (DI)
- W38197 16-Bit Pulse Input Module (PI)
- W38201 12-Bit Quad Analog Input Module (AI-12)
- W38203 16-Bit Quad Analog Input Module (AI-16)
- W38205 2-Point 16-Bit RTD Input Module (RTD)
- W38269 AO High
- W38207 Multi-Variable Sensor (MVS)
- W38257 Power
- W38272 Power Daughter Board
- W38304 MVS I/O Module



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- W48089 AC I/O Module
- W48094 16 Bit Quad analogue Input Module
- W48097 Hart Module
- W28161X0012 FF H1 Module
- W28161X0022 FF H1 Power Module

The unit has the following communication module options:

- W38211 EIA-232 (RS-232C)
- W38209 EIA-422/EIA-485 (RS-422/RS-485)
- W38213 Dial-Up Modem
- W38251 Max Stream Radio (900 MHz and 2.4 GHz)
- W38260 Hart
- W38275 Hart Daughter Board
- Smart Wireless
- W48095 MVS I/O Module
- WiHart Module, part number: 397203-01-2.

The enclosure offers a degree of ingress protection in excess of IP20 but is designed to be installed in a suitably-approved housing in the hazardous area.

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

- 1. The equipment shall be fitted in an IP54 or better enclosure or be installed in an equivalent location. Any enclosure shall be suitably-certified or otherwise approved for the zone of use (zone 2).
- 2. The user/installer shall ensure that the rated input voltage is not exceeded in service.
- 3. Information regarding fuse replacement is marked adjacent to the fuse holder F1 on board PS-DC.
- 4. The following +24/+12 voltage selector jumpers shall be conformally coated to secure them in place:

Jumper #	Board a
J4	AO-16
J7	MVS
J4	AI-12
J3	AI-16
1.4	Б.



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

Issue 1: Modification of APM module