

Certificate of Compliance

Certificate: 70167494 Master Contract: 174756

Project: 70167494 **Date Issued:** July 24, 2018

Issued to: Emerson Process Management

Valve Automation Division, EL-O-Matic B.V.

Postbus 223 Hengelo, 7550 AE

THE NETHERLANDS

Attention: Mr. Jort Zordrager

The products listed below are eligible to bear the CSA Mark shown



Issued by:

Sripriya

Kalyanasundaram

PRODUCTS

CLASS 2258-03 – Process Control Equipment – Intrinsically Safe and Non-Incendive System – For Hazardous Locations

Intrinsically safe

Intrinsically safe Class I, Division 1, Groups A, B, C and D T4; Class I, Division 2, Groups A, B, C and D, T4

Ex ia IIC T4 Ga

Ex ia IIIC T80°C Da

Valve Actuator Bettis Q Module QC54 and Valve Actuator FieldQ Module QC54; $-20^{\circ}\text{C} \le \text{Tamb} \le +50^{\circ}\text{C}$; Temperature code T4, T80°C; enclosure type 4X, IP66.

With IS I/P entity parameters at J1 bus connector for type of protection intrinsic safety, only for connection to a certified intrinsically safe circuit:

Ui/Vmax = 30V; Ii/Imax = 380mA; Pi = 1.5W; Ci = 5nF; Li = $10\mu H$ (linear power supply)

With IS I/P entity parameters at J1 bus connector for type of protection intrinsic safety, only for connection to a certified intrinsically safe circuit or a circuit in accordance with FISCO:

Ui/Vmax = 17.5V; Ii/Imax = 380mA; Pi = 5.32W; Ci = 5nF; $Li = 10\mu H$.



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Non Incendive

Class II, Division 1, Group E, F and G, T80°C; Class III, Division 1, T80°C Ex nA IIC T4 Gc Ex tb IIIC T80°C Db

Valve Actuator Bettis Q Module QC54 and Valve Actuator FieldQ Module QC54; input rated 32V; -20° C \leq Tamb \leq +50°C; Temperature code T4, T80°C; enclosure type 4X, IP66.

Notes:

- 1. The above models are permanently connected, Pollution Degree 2, Installation Category I.
- 2. Mode of operation: Continuous
- 3. Environmental Conditions: Normal & Extended (-25°C to 60°C for QC40 and -25°C to 50°C for QC54)
- 4. Powered from NEC Class 2 Power Source or Limited Energy/Power Source
- 5. Pressure exist in the equipment's Pneumatic Chamber is maximum 8 bar with maximum total volume of 100 cu cm or 0.1 liter.

Conditions of Acceptability:

Ordloc

- 1. Equipment is only to be installed by manufacturer trained personnel.
- 2. If at any time there is a conflict between the system safety provisions and any relevant local (national or regional) requirements, the local requirements always take precedence.
- 3. Equipment is not to be used with flammable liquids.
- 4. Equipment is to be supplied from NEC Class 2 Power Supply or Limited Power Source of Limited Energy Circuit.
- 5. The equipment is for indoor and outdoor used. Assessment is to be considered under Project No. 70167494 (main hazardous location project).
- 6. Equipment's stability is to be considered at end application.
- 7. Equipment's pressure rating is 8 bar, where air or inert gasses is to be used as pressure operating media.

Hazloc

- 8. Under certain extreme circumstances, the painted enclosure and the non-metallic label 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.
- 9. The enclosure is manufactured from aluminium. When installed in an area where the use of equipment with EPL Ga is required, in rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered during installation.



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APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 60079-0:2015 Explosive atmospheres – Part 0: Equipment – General requirements Explosive atmospheres- Part 31: Equipment Dust Ignition Protection CAN/CSA-C22.2 No. 60079-31:2015 by Enclosure 't' CAN/CSA-C22.2 No. 60079-15:2016 Explosive atmospheres – Part 1: Equipment protection by flameproof enclosure "d" CAN/CSA-C22.2 No. 60079-11:2014 Explosive atmospheres- Part 11: Equipment protection by intrinsic safety "i" CAN/CSA C22.2 No. 94.2:2015 second Enclosure for electrical equipment, environmental considerations edition CAN/CSA-C22.2 No. 61010-1-12 Safety Requirements for Electrical Equipment for Measurement, (May 2012) Control, and Laboratory Use — Part 1: General Requirements

MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown without an indicator for Canada only (indicating that products have been manufactured to the requirements of Canadian Standards).

- CSA Monogram w/C Indicator
- Submittor's identification (company name and/or file number and/or registered tradename);
- Model designation.
- Date of manufacture: Month and year of manufacture or date code. If a serial number is used instead of date of manufacture, a record of serial numbers shall be kept traceable to date of manufacture. (Not related to date of sale).
- Electrical Input rating.
- Hazardous location designations.
- Temperature code rating.
- Minimum and Maximum ambient temperature.
- Certificate Reference (i.e. "CSA 17CA70167494X")
- Special Purpose Enclosure Rating "Type 4X"
- Ingress Rating "IP 66"
- The statement: "Warning: See instructions" and 'Voir le manuel'.

Instruction Manual are bilingual and have the following warnings:



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Non Incendive

- Do not open when the module is energized.
- Potential electrostatic charging hazard, clean only with a damp cloth.
- Use installation wiring connections with admitted maximum operating temperature of at least 20°C higher than the maximum ambient.

Intrinsically safe

• Potential electrostatic charging hazard, clean only with a damp cloth.