



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 11.0073** issue No.: **2**
Status: **Current**
Date of Issue: **2013-03-13** Page 1 of 5

Certificate history:
Issue No. 2 (2013-3-13)
Issue No. 1 (2012-5-30)
Issue No. 0 (2011-6-1)

Applicant: **Emerson Process Management Valve Actuation. LLC**
13840 Pike Road
Missouri City
Texas 77489
United States of America

Electrical Apparatus: **Series 2000 Valve Actuators**
Optional accessory:

Type of Protection: **Flameproof and Dust Protection**


Marking: **Ex d IIB T4 Gb**
Ex tb IIIC T135°C Db IP66
(-20°C ≤ Ta ≤ +60°C)

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

Position: **Deputy Certification Manager**

Signature:
(for printed version)

Date:


2013-03-13

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
Rake Lane
Eccleston
Chester
CH4 9JN
United Kingdom

sira
CERTIFICATION



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Manufacturer: **Emerson Process Management Valve Actuation. LLC**
13840 Pike Road
Missouri City
Texas 77489
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 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 : 2007-10** Explosive atmospheres - Part 0: Equipment - General requirements
Edition: 5
- IEC 60079-1 : 2007-04** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition: 6
- IEC 60079-31 : 2008** Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
Edition: 1

*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/ExTR11.0128/00](#)

[GB/SIR/ExTR11.0128/01](#)

[GB/SIR/ExTR13.0056/00](#)

Quality Assessment Report:

[GB/SIR/QAR06.0045/03](#)

[GB/SIR/QAR06.0045/04](#)

[GB/SIR/QAR06.0045/05](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Series 2000 Valve Actuator comprises up to five enclosures:

Refer to EQUIPMENT (continued) for the five types

Externally accessible fixings are Grade 4.6 minimum as ISO 262

CONDITIONS OF CERTIFICATION: NO



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EQUIPMENT(continued):

The Series 2000 Valve Actuator comprises up to five enclosures

- a) An actuator motor comprising a steel housing with aluminium end-caps and containing rotor and stator assemblies. Facings and fixings are provided for attaching the motor to the gear casing to allow mechanical transmission and to the electronics enclosure to allow electrical connections via a potted bushing arrangement.
- b) An electronics enclosure comprising an aluminium housing and a bolt-on cover containing control and monitoring circuitry. The cover incorporates a glass viewing window, indicator lights and control switches. Facings and fixings are provided for attaching the enclosure to the gear casing to allow mechanical transmission and to the motor enclosure to allow electrical connections via a potted bushing arrangement. Cabling to the enclosure is by means of conduit entries with seals.
- c) A gear casing interconnected between the electronics enclosure and the actuating motor. Whilst the casing is itself non-electrical, the facings provided for the fitting of the electronics enclosure and the actuating motor form flamepaths with these assemblies.
- d) Optionally, an additional Control (SCM) enclosure can be fitted to the electronics enclosure. The enclosure is very similar in construction to the electronics enclosure and is mounted and interconnected to the latter by means of a conduit and seal arrangement.
- e) Optionally, a Multi-Port Actuator (MPA) variant incorporates an enclosure mounted on the actuator which contains control and indication equipment. The MPA Enclosure is interconnected with the electronics enclosure by means of conduit. Conduit seals Cooper Electrical Australia EYSA Series certified under the IECEx TSA 07.0015, being provided between the MPA enclosure and the electronics enclosure. The conduit seals are fitted with reducers and nipples between the conduit seals and the enclosure. These are not separately certified components and have been tested and certified as part of the apparatus. Flexible conduit with barrier glands may be installed as an alternative.

The individual equipment type designations are determined as follows:

- i the function/control configuration
- ii the motor power
- iii the gear ratio
- iv valve types
- V motor voltage (or pneumatic pressure)
- vi additional features



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

Issue 1 – this Issue introduced the following changes:	
1.	To correct the description and confirm the conduit reducers and nipples fitted between the conduit seals and the enclosures formed part of the tested apparatus and are not separately marked as components.
Issue 2 – this Issue introduced the following changes:	
1.	The introduction of an electro-pneumatic assembly with a dual output motor shaft.