



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 12.0031X issue No.:2

Certificate history:

Issue No. 2 (2016-9-27)
Issue No. 1 (2013-2-22)
Issue No. 0 (2012-4-3)

Status: **Current**

Date of Issue: **2016-09-27** Page 1 of 4

Applicant: **Emerson Process Management Valve Automation, Inc.**
19200 Northwest Freeway
Houston
Texas 77065
United States of America

Equipment: **Circuit Breaker Module (CBM), Push Button Module (PBM), Remote Display Module (RDM)**
Optional accessory:

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

Marking: Ex d IIB + H2 T6 Gb
Ex tb IIIC T85°C Db IP66

Approved for issue on behalf of the IECEx Certification Body: A G Boyes

Position: Certification Support Officer

Signature:
(for printed version)

Date:

2016-09-27

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

sira
CERTIFICATION





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Manufacturer: **Emerson Process Management Valve Automation, Inc.**
19200 Northwest Freeway
Houston
Texas 77065
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 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*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/ExTR12.0077/00

GB/SIR/ExTR13.0023/00

GB/SIR/ExTR16.0230/00

Quality Assessment Report:

GB/SIR/QAR06.0045/03



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Circuit Breaker Module (CBM) and Pushbutton Module (PBM) enclosures are cast from aluminium alloy. Both module enclosures consist of the same housing and similar bolt-on covers. Four M8 x 1.25, 316 stainless steel screws, 31 mm long are used to secure the PBM cover to the housing, while four M8 x 1.25, 316 stainless steel screws, 25 mm long are used to secure the CBM cover to the housing. The flameproof construction difference between the modules is that the PBM cover may include multiple external operators or pilot lights, whereas the CBM cover contains only one external operator. The housing contains three 1 inch NPT conduit openings for conduit or cable connections. An O-ring is present between the housing and bolt-on cover, as well as between the external operators/pilot lights and covers

The RDM module enclosure is cast from aluminium alloy and consists of a cover that bolts to the enclosure base using 4 M8-1.25 stainless steel bolts. The enclosure contains 3 1 inch NPT conduit openings. An O-ring is present between the enclosure base and bolt-on cover. The free internal volume for the RDM module is 56 cubic inches (918 cubic cm).

The CBM Module has electrical ratings of 480 V, 67 A, the PBM Module is rated 115 V, 10 A and the RDM is rated at 120 V, 1.5 A.

Conditions of Manufacture

The Manufacturer shall comply with the following:

1. The equipment covered by these certificates relies on optional previously certified devices. When these devices are used as part of the equipment, they shall be used within the conditions/limitations of their own certificates.
2. The manufacturer shall take all reasonable steps to ensure that the user/installer complies with the conditions associated with the equipment. In addition, the manufacturer shall provide the user/installer with an appropriate copy of the certificate for each certified device that is fitted to the equipment.
3. Any entry devices installed by the manufacturer shall be suitable for the application and certified

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The M8 fasteners used to secure the cover to the enclosure are of property class (or 'grade') 8.8. Replacement fasteners shall meet this minimum value.
2. The dimensions of the flameproof spigot joint are other than the relevant minimum required by table 2 (for IIB + H2) of IEC 60079-1:2007, as detailed below:

Flamepath Description	Type of joint	Minimum Width 'L' (mm)		Maximum Gap 'ic' (mm)	
		Total	Flanged part	Total	Flanged part
Cover to enclosure (All models)	Spigot	Total	27.7	Total	-
		Flanged part	8.8	Flanged part	0.05
		Cylindrical part	19.8	Cylindrical part	0.18
PB actuator assembly (PBM & CBM)	Cylindrical	14.2		0.08	
SS lock handle assembly (PBM & CBM)	Cylindrical	15.7		0.08	
CKT BKR assembly (PBM & CBM)	Cylindrical	15.7		0.08	

Gaps shall not be machined to be any larger than the values of 'ic', and widths shall not be modified to be any smaller than the values of 'L', shown in the table above

3. The user/installer shall assemble/install this equipment taking into account any restrictions or Special Conditions for Safe Use that are applicable to the previously certified devices that are used in its construction.



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

Issue 1 – this Issue introduced the following change:

1. The recognition of drawing changes that provide information on selection of suitable entry devices
2. The recognition of new Conditions of Manufacture and a Condition of Certification.

Issue 2 – this Issue introduced the following changes:

- 1 The company name and address was changed:

From:

Emerson Process Management Valve Actuation LLC
13840 Pike Road
Missouri City
Texas 77489

To:

Emerson Process Management Valve Automation Inc.
19200 Northwest Freeway
Houston
Texas 77065