



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 02ATEX1147X** Issue: **5**

4 Equipment: **Circuit Breaker Module (CBM) Pushbutton Module (PBM)
Remote Display Module (RDM)**

5 Applicant: **Emerson Process Management Valve Automation, Inc.**

6 Address: 19200 Northwest Freeway
Houston
Texas 77065
USA

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2009

EN 60079-1:2007

EN 60079-31:2009

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 2 GD

Ex d IIB + H₂ T6 Gb

Ex tb IIIC T85°C Db IP68

Ta -20°C to +60°C

Project Number 70078750


A G Boyes
Certification Support Officer

This certificate and its schedules may only be reproduced in its entirety and without change.



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

Sira 02ATEX1147X
Issue 5

13 DESCRIPTION OF EQUIPMENT

The CBM and PBM module 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, 13 inch (31 mm) long are used to secure the PBM cover to the housing, while four M8 x 1.25, 316 stainless steel screws, 1 inch (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 CBM Module has electrical ratings of 480V, 67A, while the PBM Module is rated 115V, 10A.

Variation 1 - This variation introduced the following changes:

- i. To recognise the change of the Applicant's name from EIM Company Inc to Emerson Process Management Valve Actuation, LLC.

Variation 2 – this variation introduced the following changes:

- i. It was recognised that the equipment complies with the documents currently listed in section 9, these standards replace EN 50014:1997 (amendment A1 and A2), EN 50018:2000 (amendment A1) and EN 50281-1-1:1998 (amendment A1), in consequence the product marking has been adjusted and a Special Condition For Safe Use has been introduced.
- ii. To recognise retrospectively that the PBM and CBM modules meet the requirements of degree of protection IP68.
- iii. The RDM module was included into the certificate. This module was originally assessed under certificate Sira 03ATEX1510X. The description is as follows:
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 in³ (918 cm³).

Variation 3 – this variation introduced the following changes:

- i. The recognition of drawing changes that provide information on selection of suitable entry devices.
- ii. The recognition of new Conditions of Certification and a Special Condition for Safe Use.
- iii. The drawings were consolidated to bring the drawing revisions and approval dates into line with the IECEx certificate associated with this equipment.



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

**Sira 02ATEX1147X
 Issue 5**

Variation 4 – this variation introduced the following changes:

i. The recognition that the company name and address has changed:

From: Emerson Process Management Valve Actuation LLC 13840 Pike Road Missouri City Texas 77489 USA	To: Emerson Process Management Valve Automation Inc 19200 Northwest Freeway Houston Texas 77065 USA
---	--

14 **DESCRIPTIVE DOCUMENTS**

14.1 **Drawings**

Refer to Certificate Annexe.

14.2 **Associated Sira Reports and Certificate History**

Issue	Date	Report number	Comment
0	24 October 2002	R53F8913A	The release of the prime certificate.
1	20 August 2004	R53F11652A	Re-issued to introduce the changes described in report number R53F11652A
2	9 March 2010	R21958A/00	This Issue covers the following changes: <ul style="list-style-type: none"> All previously issued certification was rationalised into a single certificate, Issue 2, Issues 0 to 1 referenced above are only intended to reflect the history of the previous certification and have not been issued as documents in this format. The introduction of Variation 1.
3	23 December 2011	R25092A/00	The introduction of Variation 2.
4	22 February 2013	R28493A/00	This Issue covers the following changes: <ul style="list-style-type: none"> The comments above that relate to issue 3 were amended and the changes described in Variation 2 were clarified, these are editorial changes do not involve any technical changes or additional assessment. The introduction of Variation 3.
5	27 September 2016	R70078750A	This Issue covers the following changes: <ul style="list-style-type: none"> EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. <i>(In accordance with Article 41 of Directive 2014/34/EU, EC Type-Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</i> The introduction of Variation 4.

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service

Unit 6 Hawarden Industrial Park,
 Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900
 Fax: +44 (0) 1244 681330
 Email: ukinfo@csagroup.org
 Web: www.csagroupuk.org



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

Sira 02ATEX1147X
Issue 5

15 **SPECIFIC CONDITIONS OF USE** (denoted by X after the certificate number)

- 15.1 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.
- 15.2 The dimensions of the flameproof spigot joint are other than the relevant minimum required by table 2 (for IIB + H₂) of EN 60079-1:2007, as detailed below:

Flamepath Description	Type of joint	Minimum Width 'L' (mm)		Maximum Gap i _c (mm)
Cover to enclosure (All models)	Spigot	Total	27.7	
		Flanged part	8.8	0.05
		Cylindrical part	19.8	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 'i_c', and widths shall not be modified to be any smaller than the values of 'L', shown in the table above.

- 15.3 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.

16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II** (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 **CONDITIONS OF MANUFACTURE**

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.
- 17.3 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.
- 17.4 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.
- 17.5 Any entry devices installed by the manufacturer shall be suitable for the application and certified as equipment by a notified body.

Certificate Annexe



Certificate Number: Sira 02ATEX1147X
Equipment: Circuit Breaker Module (CBM) Pushbutton
Module (PBM)
Remote Display Module (RDM)
Applicant: Emerson Process Management Valve
Automation, Inc.

Issue 0

Drawing No:	Sheets	Rev.	Date	Description
84601-CEN	1 of 10	A	09 Aug 02	CENELEC Documents
84601-CEN	2 of 10	A	09 Aug 02	CENELEC Documents
84601-CEN	3 of 10	A	09 Aug 02	CENELEC Documents
84601-CEN	4 of 10	A	09 Aug 02	CENELEC Documents
84601-CEN	5 of 10	A	09 Aug 02	CENELEC Documents
84601-CEN	6 of 10	A	09 Aug 02	CENELEC Documents
84601-CEN	7 of 10	A	09 Aug 02	CENELEC Documents
84601-CEN	8 of 10	A	09 Aug 02	CENELEC Documents
84601-CEN	9 of 10	A	09 Aug 02	CENELEC Documents
84601-CEN	10 of 10	A	09 Aug 02	CENELEC Documents

Issue 1

Drawing No.	Sheet	Rev.	Date	Description
84601-CEN	1 of 10	B	14 Aor 04	CENELEC Documents
84601-CEN	2 of 10	B	14 Aor 04	CENELEC Documents
84601-CEN	3 of 10	B	14 Aor 04	CENELEC Documents
84601-CEN	4 of 10	B	14 Aor 04	CENELEC Documents
84601-CEN	5 of 10	B	14 Aor 04	CENELEC Documents
84601-CEN	6 of 10	B	14 Aor 04	CENELEC Documents
84601-CEN	7 of 10	B	14 Aor 04	CENELEC Documents
84601-CEN	8 of 10	B	14 Aor 04	CENELEC Documents
84601-CEN	9 of 10	B	14 Aor 04	CENELEC Documents
84601-CEN	10 of 10	B	14 Aor 04	CENELEC Documents

Issue 2

Drawing	Sheets	Rev.	Date (Sira stamp)	Description
84601-CEN	Page 8	C	08 Mar 10	Critical Documents List
84601-CEN	Page 9	C	08 Mar 10	Critical Documents List
84601-CEN	Page 11	C	08 Mar 10	Critical Documents List

Issue 3

Drawing	Sheets	Rev.	Date (Sira stamp)	Description
84601-CEN	1 of 15	C	19 Dec 2011	Critical Documents List
84601-CEN	6 of 15	C	19 Dec 2011	Critical Documents List
84601-CEN	7 of 15	C	19 Dec 2011	Critical Documents List
84601-CEN	8 of 15	C	19 Dec 2011	Critical Documents List
84601-CEN	9 of 15	C	19 Dec 2011	Critical Documents List
84601-CEN	11 of 15	C	19 Dec 2011	Critical Documents List
84601-CEN	12 of 15	C	19 Dec 2011	Critical Documents List
84601-CEN	13 of 15	C	19 Dec 2011	Critical Documents List
84601-CEN	14 of 15	C	19 Dec 2011	Critical Documents List
84601-CEN	15 of 15	C	19 Dec 2011	Critical Documents List

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service

Unit 6 Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: ukinfo@csagroup.org
Web: www.csagroupuk.org

Certificate Annexe



Certificate Number: Sira 02ATEX1147X
Equipment: Circuit Breaker Module (CBM) Pushbutton
Module (PBM)
Remote Display Module (RDM)
Applicant: Emerson Process Management Valve
Automation, Inc.

Issue 4

Note: the previously approved drawings with drawing number 84601-CEN are now obsolete. All of the drawings listed on Issues 1 to 3 inclusive are replaced by the following:

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
84601-IECEX	1 of 16	B	10 Jan 13	Critical documents list
84601-IECEX	2 of 16	A	30 Mar 12	Critical documents list
84601-IECEX	3 of 16	A	30 Mar 12	Critical documents list
84601-IECEX	4 of 16	A	30 Mar 12	Critical documents list
84601-IECEX	5 of 16	A	30 Mar 12	Critical documents list
84601-IECEX	6 of 16	B	11 Jan 13	Critical documents list
84601-IECEX	7 of 16	B	10 Jan 13	Critical documents list
84601-IECEX	8 of 16	B	10 Jan 13	Critical documents list
84601-IECEX	9 of 16	B	10 Jan 13	Critical documents list
84601-IECEX	10 of 16	A	30 Mar 12	Critical documents list
84601-IECEX	11 of 16	B	10 Jan 13	Critical documents list
84601-IECEX	12 of 16	A	30 Mar 12	Critical documents list
84601-IECEX	13 of 16	A	30 Mar 12	Critical documents list
84601-IECEX	14 of 16	B	10 Jan 13	Critical documents list
84601-IECEX	15 of 16	B	10 Jan 13	Critical documents list
84601-IECEX	16 of 16	A	10 Jan 13	Critical documents list

Issue 5

Drawing	Sheets	Rev.	Date(Sira stamp)	Title
84601-IECEX	8 of 16	C	09 Sep 16	Critical Documents list
84601-IECEX	9 of 16	C	09 Sep 16	Critical Documents list
84601-IECEX	11 of 16	C	09 Sep 16	Critical Documents list

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service

Unit 6 Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: ukinfo@csagroup.org
Web: www.csagroupuk.org