



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 17.0024X

Issue No: 1

Certificate history:

Status: **Current**

Issue No. 1 (2018-08-21)

Issue No. 0 (2018-02-01)

Date of Issue: **2018-08-21**

Page 1 of 4

Applicant: **ASCO, L.P.**
160 Park Avenue
Florham Park
New Jersey 07932
United States of America

Equipment: **Solenoid Valve Operator, Type JS2D**

Optional accessory:

Type of Protection: **Increased Safety, Encapsulation and Dust Protection by Enclosure**

Marking:

Ex eb mb IIC T** Gb

Ex mb tb IIIC T** Db

IP65

Ta = -25°C to +**°C

** Refer to the Annexe for the specific temperature class and T temperature for dust

* Refer to the Annexe for the specific Ambient Temperature

Approved for issue on behalf of the IECEx
Certification Body:

C Ellaby

Position:

Deputy Certification Manger

Signature:
(for printed version)

Date:

2018-08-21

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





IECEX Certificate of Conformity

Certificate No: IECEX SIR 17.0024X Issue No: 1
Date of Issue: 2018-08-21 Page 2 of 4
Manufacturer: ASCO, L.P.
160 Park Avenue
Florham Park
New Jersey 07932
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 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 60079-18 : 2014 Edition:4.0	Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2015 Edition:5.0	Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

*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/ExTR18.0017/00 GB/SIR/ExTR18.0119/00

Quality Assessment Report:

AU/TSA/QAR11.0007/04	FR/LCI/QAR07.0006/10	GB/SIR/QAR06.0056/06
GB/SIR/QAR07.0041/07	NL/DEK/QAR13.0014/05	NL/DEK/QAR14.0006/04
NO/DNV/QAR09.0007/05	NO/PRE/QAR15.0025/00	



IECEx Certificate of Conformity

Certificate No: IECEx SIR 17.0024X

Issue No: 1

Date of Issue: 2018-08-21

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Solenoid Valve Operator, Type JS2D is intended to operate an associated actuator. It comprises:

- A housing that contains an encapsulated copper coil with the shaft of the associated actuator passing through the centre of the housing and coil. Terminal pins link the coil wire with the spade connectors for an external connection. There is a threaded insert in the yoke assembly for earthing.
- The coil is fixed to an associated stainless steel dust proof (IP65 minimum) junction box, which has a ½ NPT cable entry. Adjacent to the cable entry there is an M5 screw fitted with saddle clamp and spring washer which is provided for connection of a protective earth conductor and is marked with the protective earth symbol. Into this junction box, the coil supply wiring is terminated into a terminal block which is secured to the inside of the enclosure. The coil earth lead is secured to a dedicated internal earthing point via an M4 screw. Access to the terminal block for making a supply connection is by removal of the cover. The cover is secured by means of four M3.5 screws.

Refer to the Annexe for the specific model and other relevant information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to the Annexe.



IECEX Certificate of Conformity

Certificate No: IECEX SIR 17.0024X

Issue No: 1

Date of Issue: 2018-08-21

Page 4 of 4

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

This issue, issue 1, recognises the following changes: refer to the certificate annexe to view a comprehensive history:

1. The Applicant's name was changed from "ASCO Valve, Inc." to "ASCO, L.P."
2. The introduction of the following, new 1.8 W Class H coil (coil 503606), Table 2 - DC Coils, was amended to reflect this change: JS2DHT8003G302 replaces JS2D8003G302 JS2DHT8003G303 replaces JS2D8003G303
3. The introduction of two, new 2W solenoid constructions JS2DMH8003G302 and JS2DMH8003G303. The Equipment Description section, Table 2 - DC Coils, was amended to reflect the change.
4. Additional information was included in Table 1 and Table 2.
5. The 0.7 W solenoids JS2DHT8003H306 and JS2DHT8003H307 were allowed to be marked with the following, alternative temperature class, T temperature for dust and ambient temperature range:

<u>Temperature Class/T Temperature for Dust</u>	<u>Tamb. (°C)</u>
T6/T85°C	-25~+65
6. The Sira Free Reference Report Number R70055447A for Issue 0 of the certificates listed a number of alternative manufacturing locations, these were not transposed to the certificate and therefore they are now being retrospectively recognised (Note: after the Report was issued the company name of the Aiken site was changed from ASCO Valve, Inc. to ASCO, L.P.).

Annex:

[IECEX SIR 17.0024X Iss 1 Annexe.pdf](#)

Annexe to: IECEx SIR 17.0024X Issue 1

Applicant: ASCO, L.P.

Apparatus: Solenoid Valve Operator, Type JS2D



Manufacturers

ASCO, L.P.

160 Park Avenue,
Florham Park, NJ 07932,
USA

ASCO, L.P.

1561 Columbia Highway,
Aiken, South Carolina 29801,
USA

ASCOTECH, S.A. de C.V.

Circuito del Progreso,
Mexicali, Baja California 21190
Mexico

ASCO NUMATICS (India) Pvt. Ltd

No: 57, Kundrathur Main Road,
Gerugambakkam, Porur, Chennai - 600 101, Tamilnadu,
India

ASCO ASIA

Block 4008, Ang Mo Kio Avenue 10,
#04-08/10/17/12, Techplace 1,
SINGAPORE 569625

Ascomation Pty Ltd

Unit 12/25 Frenchs Forest Road East,
French Forest, NSW 2086,
Australia

ASCO S.A.S.

53 Rue de Beauce BP17,
28111 LUCE Cedex,
France

ASCO CONTROLS B.V.

Neonstraat 3,
6718 WX Ede'
The Netherlands

ASCO Valve (Shanghai) Co. Ltd.

No. 480, Xin Miao No. 3 Road,
Xin Qiao Town,
Song Jiang District,
Shanghai 201612,
P.R. China

**ASCO JOUCOMATIC Ltd Trading as ASCO
Numatics**

2 Pit Hey Place,
West Pimbo,
Skelmersdale,
Lancashire WN8 9PG,
United Kingdom

Equipment

The Solenoid Valve Operator, Type JS2D is intended to operate an associated actuator. It comprises:

- A housing that contains an encapsulated copper coil with the shaft of the associated actuator passing through the centre of the housing and coil. Terminal pins link the coil wire with the spade connectors for an external connection. There is a threaded insert in the yoke assembly for earthing.
- The coil is fixed to an associated stainless steel dust proof (IP65 minimum) junction box, which has a 1/2 NPT cable entry. Adjacent to the cable entry there is an M5 screw fitted with saddle clamp and spring washer which is provided for connection of a protective earth conductor and is marked with the protective earth symbol. Into this junction box, the coil supply wiring is terminated into a terminal block which is secured to the inside of the enclosure. The coil earth lead is secured to a dedicated internal earthing point via an M4 screw. Access to the terminal block for making a supply connection is by removal of the cover. The cover is secured by means of four M3.5 screws.

Date: 21 August 2018

Page 1 of 3

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Annexe to: IECEx SIR 17.0024X Issue 1

Applicant: ASCO, L.P.

Apparatus: Solenoid Valve Operator, Type JS2D



Full Range of Models

Table 1 - AC Coils:						
Catalogue no.	Solenoid dwg. no.	Coil Type	Watts	Insulation Class	Tamb. (°C)	T class / Dust Code
JS2D8003G1	510737	MXX	10.1	F	-25~+52	T4/T135°C
JS2DHT8003G1	510737	MXX	10.1	H	-25~+60	T4/T135°C
JS2D8003H1	510737	MXX	10.1	F	-25~+52	T4/T135°C
JS2DHT8003H1	510737	MXX	10.1	H	-25~+60	T4/T135°C
JS2D8007G1	510738	MXX	10.1	F	-25~+52	T4/T135°C
JS2DHT8007G1	510738	MXX	10.1	H	-25~+60	T4/T135°C
JS2D8007H1	510738	MXX	10.1	F	-25~+52	T4/T135°C
JS2DHT8007H1	510738	MXX	10.1	H	-25~+60	T4/T135°C
JS2D8202G1	510739	MXX	10.1	F	-25~+52	T4/T135°C
JS2DHT8202G1	510739	MXX	10.1	H	-25~+60	T4/T135°C
JS2D8202G5	510739	MXX	10.1	F	-25~+52	T4/T135°C
JS2DHT8202G5	510739	MXX	10.1	H	-25~+60	T4/T135°C
JS2D8202H5	510739	MXX	10.1	F	-25~+52	T4/T135°C
JS2DHT8202H5	510739	MXX	10.1	H	-25~+60	T4/T135°C

Table 2 - DC Coils:						
Catalogue no.	Solenoid dwg. no.	Coil Type	Watts	Insulation Class	Tamb. (°C)	T class / Dust Code
JS2D8003G1	510737	MXX	11.6	F	-25~+40	T4/T135°C
JS2DHT8003G1	510737	MXX	11.6	H	-25~+40	T4/T135°C
JS2D8003H1	510737	MXX	11.6	F	-25~+46	T4/T135°C
JS2DHT8003H1	510737	MXX	11.6	H	-25~+46	T4/T135°C
JS2D8007G1	510738	MXX	11.6	F	-25~+40	T4/T135°C
JS2DHT8007G1	510738	MXX	11.6	H	-25~+40	T4/T135°C
JS2D8007H1	510738	MXX	11.6	F	-25~+46	T4/T135°C
JS2DHT8007H1	510738	MXX	11.6	H	-25~+46	T4/T135°C
JS2D8202G1	510739	MXX	11.6	F	-25~+40	T4/T135°C
JS2DHT8202G1	510739	MXX	11.6	H	-25~+40	T4/T135°C
JS2D8202G5	510739	MXX	11.6	F	-25~+40	T4/T135°C
JS2DHT8202G5	510739	MXX	11.6	H	-25~+40	T4/T135°C
JS2D8202H5	510739	MXX	11.6	F	-25~+46	T4/T135°C
JS2DHT8202H5	510739	MXX	11.6	H	-25~+46	T4/T135°C
JS2D8003G300	510757	MXX	1.4	F	-25~+60	T6/T85°C
JS2D8003G301	510757	MXX	1.4	F	-25~+60	T6/T85°C
JS2DMF8003G300	510757	MXX	1.7	F	-25~+60	T6/T85°C
JS2DMF8003G301	510757	MXX	1.7	F	-25~+60	T6/T85°C
JS2DHT8003G302	510757	MXX	1.8	H	-25~+74 -25~+65	T5/T100°C T6/T85°C
JS2DHT8003G303	510757	MXX	1.8	H	-25~+74 -25~+65	T5/T100°C T6/T85°C
JS2DMH8003G302	510757	MXX	2.0	H	-25~+ 74 -25~+65	T5/T100°C T6/T85°C
JS2DMH8003G303	510757	MXX	2.0	H	-25~+ 74 -25~+65	T5/T100°C T6/T85°C
JS2D8003H304	510758	MXX	0.55	F	-25~+65	T6/T85°C

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Page 2 of 3

Annexe to: IECEx SIR 17.0024X Issue 1

Applicant: ASCO, L.P.

Apparatus: Solenoid Valve Operator, Type JS2D



Catalogue no.	Solenoid dwg. no.	Coil Type	Watts	Insulation Class	Tamb. (°C)	T class / Dust Code
JS2DHT8003H306	510758	MXX	0.70	H	-25~+80 -25~+65	T5/T100°C T6/T85°C
JS2DMF8003H304	510758	MXX	0.75	F	-25~+65	T6/T85°C
JS2D8003H305	510759	MXX	0.55	F	-25~+65	T6/T85°C
JS2DHT8003H307	510759	MXX	0.70	H	-25~+80 -25~+65	T5/T100°C T6/T85°C
JS2DMF8003H305	510759	MXX	0.75	F	-25~+65	T6/T85°C

Specific Conditions of Use

1. Due to construction, the equipment is considered to be a potential electrostatic charging hazard. For prevention, clean only with a damp cloth.
2. The user shall ensure cable entry devices/conduit are suitably certified and are suitable for the ambient temperature range marked and maintain a minimum degree of protection of IP65.

Conditions of Manufacture

1. The following routine tests are to be performed on each product manufactured:
 - The encapsulated parts of the apparatus shall be subjected to a visual inspection. No visible damage of the compound shall be evident, such as cracks, exposure of the encapsulated parts, flaking, impermissible shrinkage, discoloration, swelling decomposition or softening, as required by IEC 60079-18 Clause 9.1.
 - An electric strength test of 2U+1000V or 500 Vrms, as applicable, shall be applied between circuit and casing of solenoids for at least 1 second as required by IEC 60079-18 Clause 9.2 and IEC 60079-7 Clause 7.1. Alternatively 1.2 times this test voltage may be applied for at least 100ms. No breakdown shall occur.

Full Certificate change history

Issue 1

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