IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx KEM 08.0002X**

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Certificate history:

Issue 4 (2020-08-06)
Issue 3 (2017-12-01)
Issue 2 (2014-10-17)
Issue 1 (2011-02-08)
Issue 0 (2009-07-20)

Status: **Current**

Issue No: 5

Date of Issue: 2021-10-04

Applicant: **Asco Controls B.V.**
Neonstraat 3
6718 WX Ede
Netherlands

Equipment: **Solenoid Valve Operator Type EM-M...**

Optional accessory:

Type of Protection: **Ex eb mb, Ex tb**

Marking: Ex eb mb IIC T6 … T3 Gb
Ex tb IIIC T85 °C … T200 °C Db

Approved for issue on behalf of the IECEx Certification Body: **L.G. van Schie**

Position: **Certification Manager**

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.

Certificate issued by:

DEKRA Certification B.V.
Meander 1051
6825 MJ Arnhem
Netherlands

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Certificate No.: **IECEx KEM 08.0002X**

Date of issue: 2021-10-04 Issue No: 5

Manufacturer:
ASCO Controls B.V.
Neonstraat 3
6718 WX Ede
Netherlands

Manufacturing locations:

ASCO Japan Co., Ltd.
1-20 Takahata-cho, Nishinomiya,
Hyogo, 663-8202
Japan

Emerson Automation Fluid Control & Pneumatics Poland Sp. z o. o. (Emerson AFCP Poland Sp. z o.o.)
Kurczaki 132
Lodz 93-331
Poland

ASCO Numatics (INDIA) Pvt. Ltd.
57, Kundrathur Main Road
Gerughambakkam
Porur, Chennai – 602101
Tamilnadu
India

See following pages for more locations

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with 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:

NL/KEM/ExTR08.0002/03

Quality Assessment Reports:

FR/LCI/QAR07.0006/13
NL/DEK/QAR11.0004/06
NL/DEK/QAR14.0006/06
GB/SIR/QAR06.0056/10
NL/DEK/QAR13.0005/06
NO/DNV/QAR09.0007/07
GB/SIR/QAR07.0041/09
NL/DEK/QAR13.0014/07

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Solenoid Valve Operator Type EM-M... to be used for pushing or pulling valve action with mounted valve. Differences in models concern size, rated voltage and power.

Ambient temperature range -40 °C to +75 °C.
Medium temperature range -40 °C to +75 °C.

For futher details see Annex 1

SPECIFIC CONDITIONS OF USE: YES as shown below:
The solenoid shall be protected by a suitably rated fuse (1.5 x I nom, mentioned on the nameplate), capable of interrupting the prospective short circuit current.

If the solenoid is used in a dust environment, the risk of electrostatic discharge shall be avoided.

Ex eb protection is provided by an integrated junction box with, internal, Ex eb compliant filed wiring connections.
The enclosure provides protection degree IP64.
Tighten screws and cable gland with the correst torque, see torque chart in manual. Strip the outer insulation of the cable over approx. 30 mm and the insulation from the leads over 8 mm.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
- Assessed per IEC 60079-0 Ed. 7, IEC 60079-7 Ed. 5.1 and IEC 60079-18 Ed. 4.1
- Change of a manufacturing location

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Additional manufacturing locations:

ASCO Valve (Shanghai) Co. Ltd
No. 480, Xin Miao No. 3 Road
Xiao Qiao Town, Song Jiang District
Shanghai 201612
China

ASCO Valve Inc.
1561 Columbia Highway
Aiken, SC 29801
United States of America

ASCOTECH S.A. de C.V.
Circuito del Progreso
Mexicali
Baja California 21190
Mexico

ASCO Valve Inc.
50 Hanover Road, Florham Park, New Jersey 07932
United States of America

Emerson Automation Fluid Control & Pneumatics UK ltd
2 Pit Hey Place
West Pimbo
Skelmersdale
Lancashire WN8 9PG
United Kingdom

ASCO SAS
53, rue de Beauce
28110 Lucé
France

Annex:

225673500-Annex1 to ExTR08_0002_03.pdf

Description

Solenoid Valve Operator Type EM-M... to be used for pushing or pulling valve action with mounted valve. Differences in models concern size, rated voltage and power.
Equipment protection provided: Ex mb for the internal bobbin assembly and Ex eb for the outer enclosure and connection compartment. The equipment is also Ex tb for use in dust environments.

Ambient temperature range -40 °C to +75 °C.
Medium temperature range -40 °C to +75 °C.

The actual ambient temperature range is within these limits, is depending on the type and power rating and will be marked when it differs from -20 °C to +40 °C.

The apparatus enclosure provides a degree of protection of IP64 in accordance with IEC 60529 and IEC 60079-0.

Electrical data and type designation

The relation between temperature class, the maximum surface temperature "T" of the enclosure, the ambient and medium temperature and the rated power is shown in the following table:

		Type	EM-M6	EM-MXX	EM-M12 I	EM-M12 II
Temperature class	Maximum surface temperature "T" [°C]	Ambient / medium temperature [max., °C]	Nominal power [max., W]	Nominal power [max., W]	Nominal power [max., W]	Nominal power [max., W]
ac operation only						
T3	200	40	9.2	11.0	13.2	13.5
		65	7.0	8.4	8.6	7.7
dc or ac (rectified)						
T3	200	40	12.5	13.0	16.0	19.9
		65	8.7	9.4	9.2	10.2
T4	135	40	7.0	7.7	9.0	11.3
		75	3.7	3.8	4.4	6.0
T5	100	40	3.7	3.8	4.4	6.0
		55	2.3	2.6	3.0	3.9
		75	1.0	1.1	1.3	1.6
T6	85	40	2.3	2.6	3.0	3.9
		60	1.0	1.1	1.3	1.6

Max. voltage: 250 Vdc or ac.