

IECEx Certificate of Conformity

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INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx LCIE 18.0016X Issue No: 0 Certificate history:

Issue No. 0 (2018-06-08)

Status: Current

Date of Issue: 2018-06-08

Applicant: ASCO SAS

53, rue de la Beauce

28110 Lucé **France**

Equipment: Pneumatic manifold - Type : *501AV****0****

Optional accessory:

Type of Protection: Ex ec

Marking:

Ex ec IIC T4 Gc

(Refer to attachment for full marking)

Approved for issue on behalf of the IECEx Julien Gauthier

Certification Body:

Position: Certification Officer

Signature:

(for printed version)

Date:

LABORATOIRE CENTRAL DES

S.A.S au capital de 15.745.984 € RCS Nanterre B 408 363 174

RCS Nanterre B 408 363 174 2018-06-08

33 avenue du <u>Général Leclerc</u>
F - 92266 FONTENAY AUX ROSES

- 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.

Certificate issued by:

Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92260 Fontenay-aux-Roses
France





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Manufacturer: ASCO SAS

53, rue de la Beauce

28110 Lucé **France**

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 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-7 : 2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

Edition:5.0

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:

FR/LCIE/ExTR18.0034/00

Quality Assessment Report:

FR/LCI/QAR07.0006/10



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Pneumatic manifold, type *501AV****0****, is based on electrical spool valves assembly with centralized electrical and pneumatical connections. The electrical connection is made by a direct connection module, called Multipol, or by a fieldbus electronic type P580AE***010*** (IECEx LCIE 18.0018X) or type G3*****0**** (IECEx LCIE 18.0019X).

The subbases are used for centralizing pneumatic and electrical connections. Spool valves outlets are directly connected to these subbases.

Specific accessories can be added, such as electrical input and Output modules, and additional pneumatic features, as a pneumatic shut-off accessory (for stopping the inlet pressure of a spool valve during maintenance phases) and a blank plate (to close all pneumatic ports of a spool valve).

(Refer to attachment for range details)

Instructions:

Installation and Maintenance Instructions, 501, Ref. 531322-001

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1 standard.
- For final installation, the pneumatic manifold must be connected in compliance with IEC 60079-14 standard requirements, providing and maintaining an enclosure with minimum ingress protection of IP 54.
- Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value at the supply terminals to the equipment.
- The equipment shall be installed according to the instruction manual provided by the manufacturer.

Annex:

IECEx LCIE 18.0016X - Issue 00 - Annex 01 - ASCO SAS.pdf



Annex 01 to Certificate IECEx LCIE 18.0016X issue 00



MARKING

ASCO™ or NUMATICS™ or ASCO-NUMATICS™

Address:..

Type: *501AV****0****
Serial number: ...
Year of construction: ...
Ex ec IIC T4 Gc
IECEx LCIE 18.0016X
-10°C \leq Tamb \leq +50°C
U = 24 V DC; P = 1 to 108 W

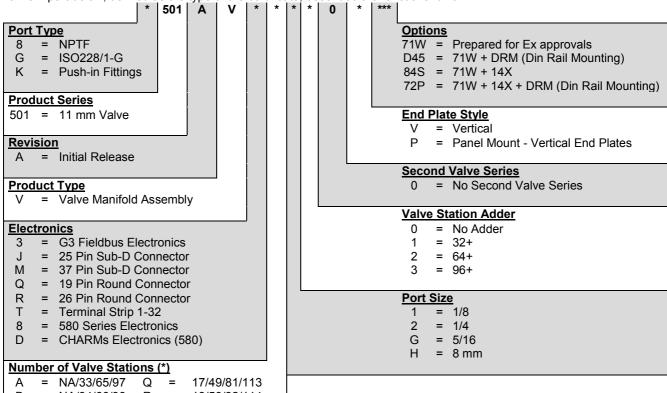
MADNING C

DO NOT SEPARATE PLUGS AND SOCKETS WHEN ENERGIZED.

POTENTIAL ELECTROSTATIC CHARGING HAZARD: REFER TO INSTRUCTIONS.

RANGE DETAILS

The main part below, defined as the type of the certificate, described the functional unit.



= В = NA/34/66/98 R 18/50/82/114 С = 3/35/67/99 S = 19/51/83/115 Т D = 4/36/68/100 20/52/84/116 = Ε = NA/37/69/101 U = 21/53/85/117 F = 6/38/70/102 22/54/86/118 23/55/87/119 G = 7/39/71/103 W = Н = 8/40/72/104 Χ 24/56/88/120 = 9/41/73/105 25/57/89/121 = 10/42/74/106 Z J = 26/58/90/122 = 11/43/75/107 2 Κ 27/59/91/123 L = 12/44/76/108 3 28/60/92/124 M = 13/45/77/109 4 = 29/61/93/125 N = 14/46/78/110 5 30/62/94/126 0 15/47/79/111 6 31/63/95/127 16/48/80/112 7 32/64/96/128

(*): Total number of coils must not exceed 128

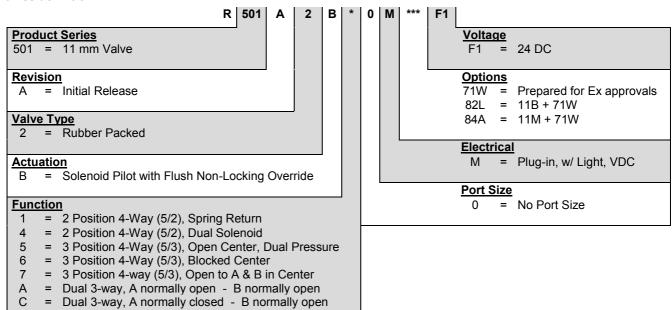


Annex 01 to Certificate IECEx LCIE 18.0016X issue 00



The two others parts below are added to explain all the variations which can be combined to build the whole pneumatic manifold (Valves + Mounting).

Valves definition:



Mounting definition:

Dual 3-way, A normally closed - B normally closed Dual 3-way, A normally open - B normally closed

Differential Air Return w/o Spring

С D

S4

M4

Q4

M8

Single Z-Board

Double Z-Board

Manifold Sub Base, 4 Stations, Side Ports,

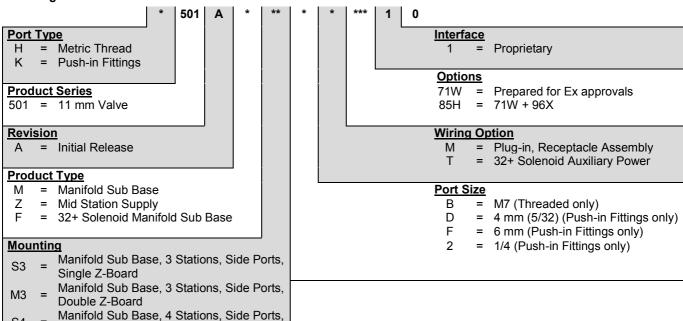
Manifold Sub Base, 4 Stations, Side Ports,

Manifold Sub Base, 4 Stations, Side Ports,

Stations, Side Ports, Double Z-Board

Single Z-Board, Panel Mount

Double Z-Board Panel Mount 32+ Solenoid Manifold Sub Base, 8





Annex 01 to Certificate IECEx LCIE 18.0016X issue 00



Accessories mounted on the pneumatic manifold :

Sandwich shut-off accessory Blank plate Blocking disc

RATINGS

Supply voltage : 24 V DC Power : 1 to 108 W

ROUTINE TESTS

According to clause 7.1 of standard IEC 60079-7, each pneumatic manifold, type *501AV****0****, shall be submitted before delivery to a dielectric strength test (carried out in accordance with clause 6.1) under 500 V DC during 60 seconds.

APPARATUS OVERVIEW

