

# 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](http://www.iecex.com)

Certificate No.: IECEx CSA 14.0014X Issue No: 0 Certificate history:  
Issue No. 0 (2015-03-26)  
Status: Current Page 1 of 4  
Date of Issue: 2015-03-26  
Applicant: Exlar Industrial Actuators  
Curtiss-Wright  
18400 West 77th Street, Chanhassen, MN 55317  
United States of America  
Electrical Apparatus: EL120 (linear) and ER120 (rotary) actuators  
Optional accessory:  
Type of Protection: Ex d  
Marking: Ex d IIB+H2 T4 Gb  
Ta: -29C to +93C

Approved for issue on behalf of the IECEx  
Certification Body:

Dorin Stochitoiu

Position:

Technical Advisor

Signature:  
(for printed version)

Date:

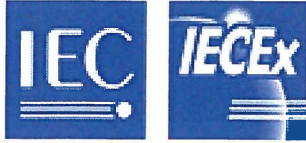


1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

CSA International  
178 Rexdale Boulevard  
Toronto, Ontario M9W 1R3  
Canada  
and  
1707 - 94th Street  
Edmonton, AB T6N 1E6  
Canada





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Manufacturer: Exlar Industrial Actuators  
Curtiss-Wright  
18400 West 77th Street, Chanhassen, MN 55317  
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 Explosive atmospheres - Part 0: General requirements  
Edition:6.0  
IEC 60079-1 : 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:6

*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:

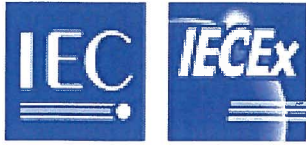
*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

Test Report:

[CA/CSA/ExTR15.0003/00](#)

Quality Assessment Report:

[CA/CSA/QAR09.0021/03](#)



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The EL120 (linear) and ER120 (rotary) series actuators are IP66, brushless, servo motor powered electro-mechanical, bi-directional actuators which comprise of four main parts as follows: End Cap Housing, containing the electrical components, Case (motor housing), Face Plate and End Plate. These four main parts are manufactured from aluminium whilst the linear and rotary shafts comprise of stainless steel or steel.

Both the EL120 and ER120 have a Manual Drive Shaft option, in this configuration, the Manual Drive Shaft Housing is fastened between the End Cap Housing and Case (motor housing) of the actuator. The Manual Drive Shaft Housing is manufactured from aluminium and the Hand Crank Shaft material is stainless steel.

### CONDITIONS OF CERTIFICATION: YES as shown below:

#### Specific Conditions of Use (ER120)

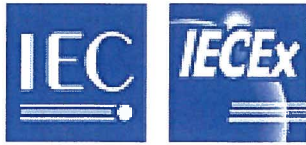
- i. At the cable entry point the surface temperature may reach up to 105°C, therefore, supply cable and entries shall be selected accordingly
- ii. The maximum voltage and current ratings marked on the equipment shall not be exceeded.
- iii. Due to the requirements of clause 5.1 of EN 60079-1:2007, it shall be pointed out that the joint dimensions of the flameproof enclosure deviate from the values in tabulated in EN 60079-1. Any maintenance of the critical dimensions of the flamepaths shall not be undertaken without seeking guidance from the manufacturer of the equipment.

#### iv. Special Fasteners Yield Strength:

(4X) Tie Rod	(4X) Tie Rod Washer	(4X) Tie Rod Nut
800 Mpa	500 MPa	700 MPa
(8X) Face Plate	(4X) Manual Drive Shaft Housing	(8X) Attach Plate
700 MPa	695 MPa	700 MPa

#### Specific Conditions of Use (EL120)

- v. At the cable entry point the surface temperature may reach up to 105°C, therefore, supply cable and entries shall be selected accordingly



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vi. The maximum voltage and current ratings marked on the equipment shall not be exceeded.

vii. Due to the requirements of clause 5.1 of EN 60079-1:2007, it shall be pointed out that the joint dimensions of the flameproof enclosure deviate from the values tabulated in EN 60079-1. The only component that is allowed to be maintained is the removal of the gland assembly for re-greasing as defined in the User Manual. As this is the only joint allowed for maintenance the joint dimensions are detailed as follows:

Joint	Design Gap Maximum	Design Length (min)
Gland Assembly/Face Plate	0.033 mm	30.0 mm

viii. Special Fasteners Yield Strength:

(4X) Tie Rod	(4X) Tie Rod Washer	(4X) Tie Rod Nut
800 Mpa	500 MPa	700 MPa
(8X) Gland Assembly	(4X) Manual Drive Shaft Housing	
695 MPa	695 MPa	

Note: The only maintenance component allowed is the removal of the gland assembly for re-greasing as defined in User Manual hence see item vii.