



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 13.0139X** issue No.: **0** Certificate history:

Status: **Current**

Date of Issue: **2014-08-15** Page 1 of 4

Applicant: **Exlar Corporation**
18400 West 77th Street
Chanhassen
MN 55317
United States of America

Electrical Apparatus: **EL 100 Linear Actuator**
Optional accessory:

Type of Protection: **Flameproof**

Marking: **Ex d IIB+H₂ T3 Gb IP66**
Ta = -29°C to +93°C

Approved for issue on behalf of the IECEx Certification Body: **C Ellaby**

Position: **Deputy Certification Manager**

Signature:
(for printed version)

Date:



2014-08-15

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
Rake Lane
Eccleston
Chester
CH4 9JN
United Kingdom

sira
CERTIFICATION



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Manufacturer: **Exlar Corporation**
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:
[GB/SIR/ExTR14.0191/00](#)

Quality Assessment Report:

[CA/CSA/QAR09.0021/02](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The EL100 Linear Actuator consists of an enclosure assembly, incorporating a resolver, stator, terminal blocks, thermal switch and rear brake. The enclosure assembly incorporates a roller screw mechanism within the armature of a brushless servo motor. The EL100 Linear is connected to a servo drive controller which commutates the motor and controls the torque, speed and position of the actuator. This rotary motion is translated into linear motion by an internal planetary roller screw mechanism. The actuator and a controller combine to provide a complete motion control system. The electrical to mechanical power conversion and position feedback devices are contained in the actuator.

24-120 V dc – 25 A Max, 2420 W Max
115-460 V ac, 50 / 60 Hz, 25 A Max, 2420 W Max

All bolt fasteners are zinc plated carbon steel to ISO 4017, grade 10.9

Refer to EQUIPMENT (continued) for additional description and Conditions of Manufacture.

CONDITIONS OF CERTIFICATION: YES as shown below:

Conditions of certification

The user/installer shall comply with the following:

1. At the cable entry point the surface temperature may reach up to 125°C, therefore, supply cable and entries shall be selected accordingly.
2. The maximum voltage and current ratings marked on the equipment shall not be exceeded.
3. In accordance with clause 5.1 of IEC 60079-1:2007, any maintenance of the critical dimensions of the flamepaths shall not be undertaken without seeking guidance from the manufacture of the equipment.



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EQUIPMENT(continued):

Model Code information

EL100-06-x-a-x-x-x-2-b-8-c-x-T3-x

a - denotes Connections, where:

- T = Terminal Strip with 3/4" NPT housing access, Two Rows
- S = Terminal Strips with 3/4" NPT housing access, Single Row

b - denotes Voltage Rating, where:

- A = 24 V dc
- B = 48 V dc
- C = 120 V dc
- 1 = 115 V rms
- 3 = 230 V rms
- 5 = 400 V rms
- 6 = 460 V rms
- X = Special Voltage Rating - Not to Exceed 460 V rms

c - denotes Optional Mechanical and Speed Designations, where:

- RB = Rear Brake
- 1-99 = Speed (RPMx100)
- PF = Preloaded Follower
- AR = External Anti Rotate Assembly
- XT = Special Travel Options
- XL = Special Lubricant

x - denotes Options Not Affecting Safety

Conditions of manufacture

The Manufacturer shall comply with the following:

1. The maximum voltage and current ratings marked on the equipment shall not contradict the 2420 W maximum power rating allowed for this equipment, in addition, the products that incorporate Allen Bradley 1492-LMJ3 terminal shall be limited to 20 A and marked accordingly.
2. Any greases applied to the flamepaths shall not harden, contain evaporating solvents and do not cause corrosion to the joint surfaces can be utilised.