



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 CSA 20.0009X** Page 1 of 4 [Certificate history:](#)
Status: **Current** Issue No: 1 [Issue 0 \(2020-10-20\)](#)
Date of Issue: 2020-10-31
Applicant: **Harold Beck & Sons, Inc.**
11 Terry Drive
Newtown, PA 18940
United States of America
Equipment: **57-109 and 57-209 Electric Actuators for Industrial Process Control**
Optional accessory:
Type of Protection: **Ex db, Ex tb**
Marking: Ex db IIB+H₂ T4 Gb
Ex tb IIIC T105°C Db
Ta = -50°C...+85°C

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



Certificate issued by:

CSA Group
178 Rexdale Boulevard
Toronto, Ontario M9W 1R3
Canada





IECEx Certificate of Conformity

Certificate No.: **IECEx CSA 20.0009X**

Page 2 of 4

Date of issue: 2020-10-31

Issue No: 1

Manufacturer: **Harold Beck & Sons, Inc.**
11 Terry Drive
Newtown, PA 18940
United States of America

Additional
manufacturing
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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

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

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 Reports:

[CA/CSA/ExTR20.0011/00](#)

[CA/CSA/ExTR20.0011/01](#)

Quality Assessment Report:

[NL/DEK/QAR19.0013/00](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx CSA 20.0009X**

Page 3 of 4

Date of issue: 2020-10-31

Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Model 57-109 Electric Actuators for Industrial Process Control are of flameproof construction. Ratings: 12 to 30 Vdc, 3.10 A, 75 W; 120 V, 208 V, 240 V, 380 V, 400 V, 415 V, 480 V or 575 V, 50 or 60 Hz, 0.85 A max, 105 VA, Torque 120 lbf-ft (162.69 Nm) max.; Duty cycle 100 percent, Ambient temperature -50°C to +85°C; equipped with the Digital Control Module (DCM) for precise position control of valves. Output shaft rotates with maximum 10 RPM.

The Model 57-209 Electric Actuators for Industrial Process Control are of flameproof construction. Ratings: 12 to 30 Vdc, 3.10 A, 75 W; 120 V, 208 V, 240 V, 380 V, 400 V, 415 V, 480 V or 575 V, 50 or 60 Hz, 0.85 A max, 105 VA, Torque 250 lbf-ft (399 Nm) max.; Duty cycle 100 percent, Ambient temperature -50°C to +85°C; equipped with the Digital Control Module (DCM) for precise position control of valves. Output shaft rotates with maximum 10 RPM.

The flameproof enclosure of the actuator is aluminium alloy casting with 4 tapered 1" NPT entries. The enclosure is coated with Epoxy or acrylic polyester urethane paint.

The product is marked also with IP 66/68 (3m/48hr), as per the IP ratings tested only as per IEC 60529.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The wiring entries are 1 inch NPT thread type for use with metallic conduit or armoured cable. When utilizing metal conduit, the certified stopping box (conduit sealing device) shall be installed within 50 mm of the enclosure, or the cable glands shall be certified flameproof barrier gland type when used with armoured cable.
2. The NPT connection shall be made wrench tight to ensure proper thread engagement and the resistance between the enclosure and the metallic conduit or armoured cable shall be less than 0.1 ohm - see instruction Manual.
3. The field wiring conductors shall be rated at least 15°C above the maximum ambient temperature.
4. All entry closure devices (blanking elements) shall be 1 inch NPT certified as "Ex db" IIC, "Ex tb" IIIC and/or "IP68" as applicable. The blanking element shall only be removable with the aid of a tool.
5. Flameproof joints are not permitted to be repaired.
6. CAUTION – DO NOT REMOVE COVER WHILE CIRCUIT IS ALIVE
7. CAUTION – USE FASTENERS WITH YIELD STRESS \geq 135 MPa
8. The equipment shall only be cleaned with a damp cloth. "WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD"



IECEx Certificate of Conformity

Certificate No.: **IECEx CSA 20.0009X**

Page 4 of 4

Date of issue: 2020-10-31

Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1: Introduction of model 57-209, which is identical in construction to the 57-109 except for an additional output shaft to a gearbox.