



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

Certificate No.: **IECEx EPS 18.0107X**

Page 1 of 4

Certificate history:

Status: **Current**

Issue No: 2

Issue 1 (2020-11-24)

Issue 0 (2018-11-09)

Date of Issue: 2025-06-06

Applicant: **Schischek GmbH**  
Mühlsteig 45, Gewerbegebiet Süd 5  
90579 Langenzenn  
**Germany**

Equipment: **Actuator type RedMax-\*\*\***

Optional accessory:

Type of Protection: **Flameproof enclosures "d", protection by enclosure "t", intrinsic safety "i"**

Marking: **Ex db [ic Gc] IIC T6, T5, T4 Gc**  
**Ex tc [ic Dc] IIIC T80 °C, T95 °C, T130 °C Dc**

Approved for issue on behalf of the IECEx  
Certification Body:

Position:

Signature:  
(for printed version)

Date:  
(for printed version)



**Ulrich Felke**

**Head of Certification**

**2025-06-06**

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](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**Bureau Veritas Consumer Products Services Germany GmbH**  
**Businesspark A96**  
**86842 Türkheim**  
**Germany**





# IECEx Certificate of Conformity

Certificate No.: **IECEx EPS 18.0107X**

Page 2 of 4

Date of issue: 2025-06-06

Issue No: 2

Manufacturer: **Schischek GmbH**  
Mühlsteig 45, Gewerbegebiet Süd 5  
90579 Langenzenn  
**Germany**

Manufacturing locations: **Schischek GmbH**  
Mühlsteig 45, Gewerbegebiet Süd 5  
90579 Langenzenn  
**Germany**

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** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:7.0

**IEC 60079-11:2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

**IEC 60079-31:2022** Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:3.0

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:

**DE/EPS/ExTR18.0112/02**

Quality Assessment Report:

**DE/BVS/QAR07.0009/18**



# IECEX Certificate of Conformity

Certificate No.: **IECEX EPS 18.0107X**

Page 3 of 4

Date of issue: 2025-06-06

Issue No: 2

## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The actuator type RedMax consists of a flameproof enclosure containing a brushless DC motor with actuator shaft, control electronics and an optional potentiometer with shaft. The two shafts represent flameproof joints. All electronics is encapsulated in casting compound in order to reduce surface temperatures and separation distances and to exclude explosive atmospheres. The flameproof enclosure consists of a top and a bottom part that are sealed with cemented joints. It is mounted in a protective housing with additional mechanical components such as a gearing mechanism and a spring (option). The mechanical parts do not form part of this type approval however the resistance to impact test was performed on this protective enclosure. Five components, a two-color status LED, a push-button and a rotary switch (both for actuator parametrisation), and RS232 connector (for factory-programming) and an EEXi contact (for connection of a temperature trigger = option "BF") protrude from the encapsulation and flameproof enclosure into the explosive atmosphere. They are intrinsically safe components. Electrical connection is done by means of a permanently-connected cable with flying leads.

For coated housings with a layer thickness of more than 0.2 mm, Ex-marking IIB can be used.

Electrical Data:

See appendix.

## **SPECIFIC CONDITIONS OF USE: YES as shown below:**

For repair of the flameproof joints due regard must be given to the structural specifications provided by the manufacturer. Repair on the basis of the values in tables 2 and 3 of IEC 60079-1 is not accepted.

The actuator shall be only used together with certified enclosure provided by Schischek.

Only for coated enclosure - Warning of electrostatic discharge, see operating instructions.





# IECEx Certificate of Conformity

Certificate No.: **IECEx EPS 18.0107X**

Page 4 of 4

Date of issue: 2025-06-06

Issue No: 2

## **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

Standards update

New special condition of use (Electrostatic charges on external non-metallic materials)

Update the standards

## **Annex:**

[Schi\\_18TH0505\\_Attachment to IECEx certificate IECEx EPS 18.0107\\_2.pdf](#)



**Applicant:** Schischek GmbH  
Mühlsteig 45, Gewerbegebiet Süd 5  
90579 Langenzenn  
Germany

**Electrical equipment:** Actuator type RedMax-\*\*\*

**Description:**

The actuator type RedMax-\*\*\* consists of a flameproof enclosure with actuator shafts that accommodate electromechanical components. The internal portion is temperature controlled. The flameproof enclosure is mounted in a protective housing together with additional mechanical components. The gears and mechanical actuators mounted in the protective housing do not form part of this type approval.

Connection is by means of a connecting lead (open-ended line).

Electrical data:

Power supply: terminals 1-5 (X1, XA)

|                               |       |            |
|-------------------------------|-------|------------|
| Nominal voltage $U_0/U$ ..... | up to | 24 – 240 V |
| Rated voltage .....           | max.  | 240 V      |
| Rated current .....           | max.  | 2.5 A      |

Option –S terminals 1-6 (XB)

|                               |       |           |
|-------------------------------|-------|-----------|
| Nominal voltage $U_0/U$ ..... | up to | 24- 230 V |
| Rated voltage .....           | max.  | 240 V     |
| Rated current .....           | max.  | 5.0 A     |

Option –Y terminals 1-6 (X2, XB)

|                               |       |       |
|-------------------------------|-------|-------|
| Nominal voltage $U_0/U$ ..... | up to | 24 V  |
| Rated voltage .....           | max.  | 24 V  |
| Rated current .....           | max.  | 30 mA |

Rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus. Within these limiting values complying with the appropriate standards, the manufacturer specifies the final limiting values dependent on power supply specifications, operating mode, utilization category, etc. Any additional technical features are specified in the test documents and the operating manual.

|                     |    |                     |
|---------------------|----|---------------------|
| Ambient temperature | T6 | -40 °C up to +40 °C |
|                     | T5 | -40 °C up to +50 °C |
|                     | T4 | -40 °C up to +60 °C |

**Intrinsic safe circuits**

Option –BF, terminals 1,2 (EEXi output, JP101)

U<sub>o</sub> .....  
I<sub>o</sub> .....  
P<sub>o</sub> .....5.88 V  
24.75 mA  
0.037 W

Linear circuit

Li negligible

Ci negligible

Maximum of external lumped capacitance and inductance:

|    | Ex ic |         |         |
|----|-------|---------|---------|
|    | IIC   | IIB     | IIA     |
| Lo | 50 mH | 50 mH   | 50 mH   |
| Co | 43 µF | 1000 µF | 1000 µF |

RS232, terminals 1-6 (EEXi output, SV101)

U<sub>o</sub> .....  
I<sub>o</sub> .....  
P<sub>o</sub> .....5.88 V  
119 mA  
0.7 W

Linear circuit

Li negligible

Ci negligible

Maximum of external lumped capacitance and inductance:

|    | Ex ic |         |         |
|----|-------|---------|---------|
|    | IIC   | IIB     | IIA     |
| Lo | 2 mH  | 2 mH    | 2 mH    |
| Co | 43 µF | 1000 µF | 1000 µF |