

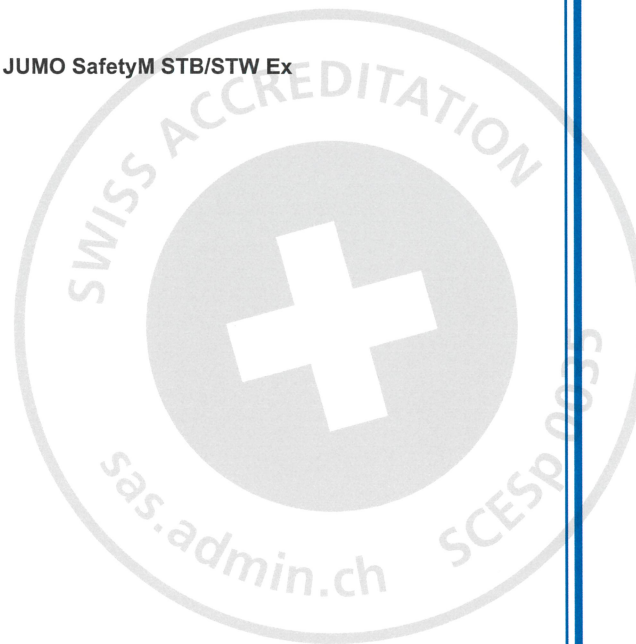


# IECEX Certificate of Conformity

## 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 SEV 22.0016X** Page 1 of 4 [Certificate history:](#)  
Status: **Current** Issue No: 0  
Date of Issue: 2022-11-15  
Applicant: **JUMO GmbH & Co. KG**  
Moritz-Juchheim-Strasse 1  
36039 Fulda  
Germany  
Equipment: **Safety temperature limiter and safety temperature monitor JUMO SafetyM STB/STW Ex**  
Optional accessory: ---  
Type of Protection: **"d", "e", "h", "t"**  
Marking: [Ex eb Gb] IIC resp. [Ex db Gb] IIC  
[Ex tb Db] IIIC  
[Ex h Gb] IIC  
[Ex h Db] IIIC



Approved for issue on behalf of the IECEx  
Certification Body:

**Patrick Gutensohn**

Position:

**Manager Product Certification**

Signature:  
(for printed version)

Date:  
(for printed version) 2022-11-15

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2. This certificate is not transferable and remains the property of the issuing body.
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Certificate issued by:

**Eurofins Electric & Electronic Product Testing AG**  
Luppenstrasse 3  
8320 FEHRALTORF .  
Switzerland



E&E



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Page 2 of 4

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Manufacturing  
locations: **JUMO GmbH & Co. KG**  
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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

**IEC 60079-7:2017** Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:5.1

**ISO 80079-36:2016** Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic methods and requirements  
Edition:1.0

**ISO 80079-37:2016** Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres - Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"  
Edition:1.0

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:

[CH/SEV/ExTR22.0017/00](#)

Quality Assessment Report:

[DE/TUN/QAR13.0005/08](#)



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Certificate No.: **IECEX SEV 22.0016X**

Page 3 of 4

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## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

### General product information:

The JUMO safetyM STB/STW Ex mentioned above are either a safety temperature limiter or a safety temperature monitor considered as associated safety temperature facilities intended for installation on mounting rails outside the hazardous areas.

Each output of the two output circuits of the device is provided to be connected to a resistor-type thermometer (PT100 or PT1000) or to a thermocouple or to measure a standardized signal current (4...20 mA). The output circuits are intended to be operated in areas with an explosive gas or dust atmosphere. And must be installed and protected in a suitable type of protection for the used categories.

### Parameters:

**For types STB/STW Ex 701155 / \* - \*\* - \*\*\*\* - \*\*\*\* - 23 / \*\*\* , \*\*\***

Supply circuit only for the connection to a non-intrinsically safe circuit with a (Terminals N and L1) safety-related maximum voltage of

$U_N = 110$  up to  $240$  V AC  $+10\%$  /  $-15\%$ , 48 up to 63 Hz

$U_m = 250$  V

**For types STB/STW Ex 701155 / \* - \*\* - \*\*\*\* - \*\*\*\* - 25 / \*\*\* , \*\*\***

Supply circuit only for the connection to a non-intrinsically safe circuit with a (Terminals L- and L+) safety-related maximum voltage of

$U_N = 20$  up to  $30$  V DC or AC, 48 up to 63 Hz

$U_m = 250$  V

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

- Switching operations may be performed on the electrical circuits (Ex eb) only when the JUMO safetyM STB/STW Ex, including all supply lines, is de-energized.
- Only the STB (safety temperature limiter) variant of the JUMO safetyM STB/STW Ex is admissible for use as a safety device for minimum overpressure monitoring with static pressurized enclosure.
- The safety-relevant settings of the JUMO safetyM STB/STW Ex must be protected against unauthorized changes (e.g. with sealed or password-protected inputs).
- For use of the JUMO safetyM STB/STW Ex in the STW (safety temperature monitor) variant, it must be ensured that after a switch-off by the temperature limiter an automatic restart of the monitored equipment is prevented by a higher-level control system.
- If the JUMO safetyM STB/STW Ex is used in the single-channel device variant to monitor non-electrical ignition sources and a warning is issued on demand, the user must take immediate measures to achieve a safe status.
- If it is installed in a separate electrical cabinet, the following warning must be attached to the outside of this electrical cabinet: WARNING: "Caution - This enclosure contains equipment that is part of an ignition protection system according to ISO 80079-37.



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Page 4 of 4

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## Equipment (continued):

### For all types

Binary connection only for the connection to a non-intrinsically safe circuit with a (Terminals 4 and 5) safety-related maximum voltage of  $U_m = 250\text{ V}$

Analogue connection only for the connection to a non-intrinsically safe circuit with a (Terminals 9 and 10) safety-related maximum voltage of  $U_m = 250\text{ V}$

Relay connection only for the connection to a non-intrinsically safe circuit with a (Terminals 11, 12, 13) safety-related maximum voltage and current of  $U_m = 250\text{ V}$   
 $I_{max} = 3\text{ A}$

Relay connection only for the connection to a non-intrinsically safe circuit with a (Terminals 14, 15, 16) safety-related maximum voltage and current of  $U_m = 250\text{ V}$   
 $I_{max} = 3\text{ A}$

USB connection only for the connection to a non-intrinsically safe circuit with a (USB-socket) safety-related maximum voltage of  $U_m = 250\text{ V}$

Output circuit in type of protection for increased safety [Ex eb] IIC resp. IIIC with the (Terminals 1, 2, 3 and 6, 7, 8) following maximum values per circuit:  
 $U_o = 6\text{ V}$   
 $I_o = 41.2\text{ mA}$   
 $P_o = 61.8\text{ mW}$   
Characteristic line: linear

Classification of installation and use ..... : Stationary

Ingress protection ..... : IP20

Rated ambient temperature range (°C) ..... : 0 °C ... +55 °C

Rated service temperature range (°C) for Ex Components .... : ---

