



(1) **EU-Type Examination Certificate**

- (2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 2014/34/EU**
- (3) Certificate number: **SEV 17 ATEX 0161 X**
- (4) Product: Safety temperature limiter and safety temperature monitor JUMO SafetyM STB-STW Ex
- (5) Manufacturer: JUMO GmbH & Co. KG
- (6) Address: Moritz-Juchheim-Strasse 1, 36039 Fulda, Germany
- (7) The equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) Eurofins, notified body No. 1258, in accordance with article 17 of Directive 2014/34/EU of the European parliament and of the council, dated 26 February 2014, certifies that this product has been found to comply with the essential health and safety requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in confidential report no 21CH-00125.X02
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN IEC 60079-0:2018
EN 60079-1:2014
EN 60079-7:2015
EN IEC 60079-7:2015/A1:2018
EN 60079-31:2014
EN ISO 80079-36:2016
EN ISO 80079-37:2016
EN 50495:2010

Except in respect of those requirements listed at item 18 of the schedule.

- (10) If the sign «X» is placed after the certificate number, it indicates that the product is subjected to special conditions for safe use specified in the schedule to this certificate. The sign “U” is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.
- (11) This EU type examination certificate relates only to design and construction of the specified product. Further requirements of this directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- (12) The marking of the product shall include the following:



See (20) Markings

Eurofins Electric & Electronic Product Testing AG
Notified Body ATEX

Patrick Gutensohn
 Product Certification



(13)

Appendix

(14)

EU-Type Examination Certificate no. SEV 17 ATEX 0161 X

(15) **Description of product**

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

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
 $U_m = 250$ V

Analogue connection only for the connection to a non-intrinsically safe circuit with a (Terminals 9 and 10) safety-related maximum voltage of
 $U_m = 250$ 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
 $U_m = 250$ V
 $I_{max} = 3$ 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
 $U_m = 250$ V
 $I_{max} = 3$ A

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

(16) Report number

21CH-00125.X02

(17) Specific conditions of use

- 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.

(18) Essential health and safety requirements

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
None	

(19) Drawings and Documents

See test report "Manufacturer's Documents"



(20) **Markings**

-  II (2) G [Ex eb Gb] IIC resp.  II (2) G [Ex db Gb] IIC
-  II (2) D [Ex tb Db] IIIC

-  II (2) G [Ex h Gb] IIC
-  II (2) D [Ex h Db] IIIC