



(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 13 ATEX 0197**

(4) Product: RTD and thermocouple temperature probes
Type B 901xxx.x.x, B 902xxx.x.x

(5) Manufacturer: Jumo Mess- und Regeltechnik AG

(6) Address: Laubisrütistrasse 70, 8712 Stäfa, SWITZERLAND

(7) The equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) Electrosuisse SEV, 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 13-Ex-0080.01 + .01 E1

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN 60079-0:12 + A11:13

EN 60079-11:12

EN 60079-26:15

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.

(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 Appendix page 3: (20) Markings

Electrosuisse
Notified Body ATEX

Martin Plüss
Product Certification



(13)

Appendix

(14)

EU-Type Examination Certificate

(15) **Description of product**

RTD and thermocouple temperature probes from JUMO are used as intrinsically safe equipment for temperature measurement in liquid and gaseous media, as well as for dusts. The thermometers consist of a protection fitting with various process connection options, a terminal head or a connecting cable, and an interchangeable measuring insert (depending on the type). All fittings in contact with the process media undergo a leakage test. The Pt100 temperature sensors mounted in the fittings are to EN 60751, in tolerance classes A or B, in a 2-, 3-, or 4-wire circuit. It is also possible to use these sensors with a higher reference value (Pt500; Pt1000; Pt2000; Pt5000 as well as NTC & PTC). Versions with two or three measurement circuits can be provided.

A separate ATEX certified head transmitter is or can be installed in the connection head and/or a separate ATEX certified display can be fitted. They must be connected to a certified intrinsically safe circuit.

The thermometers fulfil the requirements for Explosion Group II in Categories 1 G and 1 D as well as 2 G and 2 D. They are thus suitable for use in areas with an explosion hazard: Zone 1 or Zone 2 with gas (Gas) and Zone 21 or 22 with dust (Dust). Depending on the circumstances, it may be permissible for the probe stem to protrude into the Zone 0 or 20 area (only for "Ex ia" versions or "Ex ib" versions with separation elements).

Ratings and notes (information) are as shown in the test report.

(16) **Report number** 13-Ex-0080.01 + .01 E1

(17) **Specific conditions of use**
None

(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**



Versions "Ex ia" resp. "Ex ib" with separation elements

 II 1/2 G Ex ia IIC T1 ... T6 Ga/Gb resp.
 Ex ib IIC T1 ... T6 Ga/Gb

or

 II 1/2 D Ex ia IIIC T60°C ... T80°C Da/Db IP6X resp.
 Ex ib IIIC T60°C ... T80°C Da/Db IP6X

Resp.
Versions "Ex ia" resp. "Ex ib"

 II 2 G Ex ia IIC T1 ... T6 Gb resp.
 Ex ib IIC T1 ... T6 Gb

or

 II 2 D Ex ia IIIC T60°C ... T80°C Db IP6X resp.
 Ex ib IIIC T60°C ... T80°C Db IP6X