



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

- (2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 94/9/EC**
- (3) Examination certificate number: **SEV 11 ATEX 0187**
- (4) Equipment: Level sensor
- (5) Manufacturer: Heinrich Kübler AG
- (6) Address: Steuer- und Regeltechnik, Ruessenstrasse 4, CH-6341 Baar
- (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 9 of the Council Directive of the European Communities of 23 March 1994 (94/9/EC), certifies that this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of equipment or protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The results of the examination are recorded in confidential report no 12-IK-0012.01
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:
- | | | |
|-----------------------|-----------------------|-----------------------|
| EN 13463-1:09 | EN 13463-5:11 | EN 60079-0:09 |
| EN 60079-1:07 | EN 60079-11:07 | EN 60079-26:07 |
| EN 60079-31:09 | | |
- (10) If the sign «X» is placed after the certificate number, it indicates that the equipment or protective system is subjected to special conditions for safe use specified in the schedule to this certificate.
- (11) This examination certificate relates only to design and construction of the specified equipment in accordance with the directive 94/9/EC. Further requirements of this directive apply to the manufacturing process and the placing on the market of the equipment.
- (12) The marking of the equipment shall include the following:

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**Electrosuisse
Notified Body ATEX**

Martin Plüss
Product Certification



Fehraltorf, 2012-03-12

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(13)

Appendix

(14)

EC-Type Examination Certificate

(15) Description of the equipment

The KSR filling level sensor Type as per the type key is for continuous electrical measuring of the filling level of vessels containing flammable liquids.

With the "intrinsically safe" type of ignition protection, the device is used as a passive multi-pole device (three-wire potentiometer circuit) in an intrinsically safe circuit.

Versions of the ignition protection type "flameproof enclosure" and/or with a separately certified measuring transducer installed in the connection housing are also manufactured.

The KSR filling level sensor Type as per the type key can also be supplemented with additional temperature sensors or temperature switches, and with a pressure transmitter.

Type designation

See the type key in the supplement to the EC type test certificate.

Ratings

Version with type of ignition protection "intrinsically safe":

Input circuit as as a passive multi-pole device

With type of ignition protection "intrinsically safe"

Ex ia IIC

Only for connection to a certified intrinsically safe circuit.

Maximum values:

$$U_i \leq 30 \text{ V}$$

$$I_i \leq 150 \text{ mA}$$

The effective internal inductances and capacitances are negligibly low.

Input circuits with built-in separately certified measuring transducer

With type of ignition protection "intrinsically safe"

Ex ia IIC and Ex ib IIC

Only for connection to a certified intrinsically safe circuit.

Maximum values in acc. with the nominal data of the separately certified measuring transducer.

Input circuits
Temperature sensor

with type of ignition protection "intrinsically safe"

Ex ia IIC

Only for connecting to one or more certified intrinsically safe circuit(s).

Maximum value for each circuit:

$$I_i \leq 100 \text{ mA}$$

The effective internal inductances and capacitances are negligibly low.

Input circuits
Temperature sensor

With type of ignition protection "intrinsically safe"

Ex ia IIC

Only for connecting to one or more certified intrinsically safe circuit(s).

Maximum value for each circuit:

$$U_i \leq 28 \text{ V}$$

$$I_i \leq 100 \text{ mA}$$

Total power of all circuits:

$$P_i \leq 700 \text{ mW}$$

The effective internal inductances and capacitances are negligibly low.

When one or more measuring transducer(s) is installed, attention must be paid to the electrical characteristics stated in the associated separate certificate(s).

Input circuit
Pressure transmitter

With type of ignition protection "intrinsically safe"

Ex ia IIC

Only for connection to a certified intrinsically safe circuit.

Attention must be paid to the electrical characteristics in the associated separate certificate.

Version with type of ignition protection "flameproof enclosure":

Input circuit as as a passive
multi-pole device

Only for connecting to a circuit with reliable limitation of the electrical characteristics to the following values:

$$\text{Rated voltage} \quad U_N = 30 \text{ VDC/AC}$$

$$\text{Rated current} \quad I_N = 150 \text{ mA}$$

Input circuits Temperature
sensor and temperature switch

Only for connecting to one or more circuit(s) with reliable limitation of the electrical characteristics to the following values:

$$\text{Rated voltage} \quad U_N = 100 \text{ VDC/AC}$$

$$\text{Rated current} \quad I_N = 300 \text{ mA}$$

$$\text{switching capacity} \quad P_{SN} = 1 \text{ W}$$

$$\text{Total power, sensors} \quad P_{FN} = 700 \text{ mW}$$

