



(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 09 ATEX 0171 X**
- (4) Equipment: **TDR Level Sensor KFA2**
- (5) Manufacturer: **KFA SARL**
- (6) Address: **4 Chemin de la Source, FR-26260 Clerieux**
- (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. 09-IK-0358.01 incl. extension 1.
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:
- EN 60079-0:09 EN 60079-1:07 EN 60079-11:12**
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:



II 1/2G Ex ia/d IIC T6 Ga/Gb



II 1/2D Ex ia/tb IIIC T86°C IP68 Da/Db



II 2G Ex ia d IIC T6 Gb

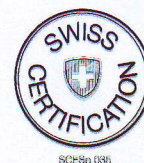


II 2D Ex ia tb IIIC T86°C IP68 Db



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Product Certification



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(13)

Appendix

(14)

EC-Type Examination Certificate(15) Description of the equipment

4-wire TDR-Sensor with single rod, wire rope or coaxial probe for continuous level measurement and point level detection in liquids, with analog and switching output. The sensor is delivered without cable glands. It is the customer's responsibility to seal the two cable entries with approved cable glands.

Rating: Supply voltage: U = 12...30 V DC (U_m 250 V AC)
 Analog output: I = 4...20 mA (U_m 250 V AC)
 Switching output: U_s = 0...U (U_m 250 V AC)

Rated ambient temperature range: -40 °C to +70 °C

The temperature class depends on ambient temperature and application temperature on the sensor.
 This relations are shown in the following tables:

CATEGORY 1/2G		
Temperature class	Application temperature	Ambient temperature
T1...T6	-20...+60 °C	-40...+70 °C
CATEGORY 2G		
T6	-40...+85 °C	-40...+70 °C
T5	-40...+100 °C	-40...+70 °C
T4	-40...+135 °C	-40...+70 °C
T1...T3	-40...+150 °C	-40...+70 °C
CATEGORY 1/2D and 2D		
max. surface temperature: +86 °C		-40...+70 °C

(16) Test Report 09-IK-0358.01 incl. extension 1

(17) Special conditions for safe use

POWER DOWN WARNING:

Marking and Safety Instruction: After de-energizing, wait 6 minutes before opening

CABLE ENTRIES AND CABLE GLANDS:

Safety Instruction: The housing has two cable entries. For installation in hazardous areas, only cable glands certified according to IEC 60079-1 or certified conduit systems are permitted.

(18) Fundamental essential health and safety requirements

Fulfilled by the standards applied



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