



Prüf- und Zertifizierungsstelle

ZELM Ex



(1) **EC-TYPE-EXAMINATION CERTIFICATE**
(Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**

(3) EC-TYPE-EXAMINATION CERTIFICATE Number:

ZELM 01 ATEX 0067

(4) Equipment: **Head-mounted transmitter SINEAX VK 626 type 626-7B...**

(5) Manufacturer: **Camille Bauer AG**

(6) Address: **Aargauerstrasse 7, CH-5610 Wohlen**

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

(8) The Prüf- und Zertifizierungsstelle ZELM Ex, notified body No. 0820 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report ZELM Ex 0100115092.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50 014: 1997+A1+A2

EN 50 020: 1994

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-type-examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:



II 2 (1) G EEx ia IIC T6

Zertifizierungsstelle ZELM Ex

Braunschweig, September 26, 2001


Dipl.-Ing. Harald Zelm



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EC-type-examination Certificates without signature and stamp are not valid. The certificates may only be circulated without alteration. Extracts or alterations are subject to approval by the Prüf- und Zertifizierungsstelle ZELM Ex. In the case of dispute, the German text shall prevail.



SCHEDULE

(13)

(14) **EC-TYPE-EXAMINATION CERTIFICATE ZELM 01 ATEX 0067**

(15) Description of equipment

The head-mounted transmitter SINEAX VK 626 type 626-7B... is a two-wire transmitter for the temperature measurement. The input signal of a temperature sensor, as PT100 or thermocouple, is converted into a standard current signal at the exit. Input and Output are safely electrically isolated from each other but HART capable.

The head-mounted transmitter is determined to be mounted in a metallic case or a plastic case with a surface resistance $< 10^9 \Omega$ which at least achieves the degree of protection IP20 in accordance with EN 60529:1991.

The maximum permissible ambient temperature conducts depending on the maximum load P_i of the intrinsically safe output circuit and the temperature class according to the following table:

Maximum load	Temperature class		
	T6	T5	T4
P_i			
1000 mW	43 °C	58 °C	70 °C
900 mW	47 °C	62 °C	80 °C
800 mW	52 °C	67 °C	80 °C
700 mW	52 °C	67 °C	80 °C
660 mW	52 °C	67 °C	80 °C

(Table 1)

The minimum permissible ambient temperature is -40 °C.

Electrical data

Output circuit
(terminals + and -)

type of protection Intrinsic Safety EEx ia IIC resp. EEx ia IIB
for connection to an intrinsically safe circuit with the following
maximum values:

$$\begin{aligned} U_i &= 30 && \text{V} \\ I_i &= 160 && \text{mA} \\ P_i &\leq 1 && \text{W (see table 1)} \end{aligned}$$

effective internal capacitance and effective internal inductance
are negligibly small.



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Schedule to EC-TYPE-EXAMINATION CERTIFICATE ZELM 01 ATEX 0067

Input circuit
(terminals 1, 2, 3, 4)

type of protection Intrinsic Safety EEx ia IIC resp. EEx ia IIB

maximum values:

$$U_o = 6 \text{ V}$$

$$I_o = 5 \text{ mA}$$

$$P_o = 11 \text{ mW}$$

(trapezoidal output characteristic)

IIC bzw. IIB

effective external inductance

5 mH

5 mH

effective external capacitance

1864 nF

8964 nF

References:

The input circuit is safely electrically isolated from the output circuit up a peak value of the nominal voltage of 60 volts.

The instruction manual has to be observed.

(16) Report No.

ZELM Ex 0100115092

(17) Special conditions for safe use

not applicable

(18) Essential Health and Safety Requirements

met by standards

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