



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 03 ATEX 0123

(4) Equipment: **Angular position transmitter KINAX 2W2 type 760-2...**

(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 0560215172.

(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, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this Certificate.

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



II 2 G EEx ia IIC T6

Zertifizierungsstelle **ZELM Ex**

Braunschweig, February 20, 2003

Adolf Gruber

Sheet 1/3

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 03 ATEX 0123**

(15) Description of equipment

The angular position transmitter KINAX 2W2 type 760-2... convert the angular position of a shaft contactlessly to a proportional electrical output signal.

A variation of the shaft position effects a variation of a capacitance, which is converted to a proportional current alteration by the downstream electronics.

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 P_i	Temperature class		
	T6	T5	T4
1000 mW	40 °C	55 °C	75 °C
900 mW	44 °C	59 °C	75 °C
800 mW	49 °C	64 °C	75 °C
700 mW	54 °C	69 °C	75 °C
660 mW	56 °C	71 °C	75 °C

(Table 1)

The lowest permissible ambient temperature is -40 °C.

Electrical data

Output circuit

type of protection Intrinsic Safety EEx ia IIC
only for connection to a certified intrinsically safe circuit.

maximum values: $U_i = 30$ V
 $I_i = 160$ mA
 $P_i = 1$ W (siehe Tabelle 1)

maximum effective internal capacitance $C_i = 6,6$ nF
The maximum effective internal inductance is negligibly small.

References:

The configuration via the programming circuit is only permitted in non-hazardous locations by a short-time connection of a standard personal computer via the programming cable type PK 610 with the EC-type-examination Certificate ZELM 99 ATEX 0011 to suitable connections.

The instruction manual has to be considered, in particular with regard to an appropriate degree of protection (at least IP 20 according to EN 60529:1991)



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Schedule to EC-TYPE-EXAMINATION CERTIFICATE ZELM 03 ATEX 0123

(16) Report No.

ZELM Ex 0560215172

(17) Special conditions for safe use

not applicable

(18) Essential Health and Safety Requirements

met by standards

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Braunschweig, February 20, 2003

Adolf Gruber