



# 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 99 ATEX 0006**

- (4) Equipment: **Angular position transmitter KINAX WT 710 type 710-2**
- (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 0379918007.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 50 014: 1997**

**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:

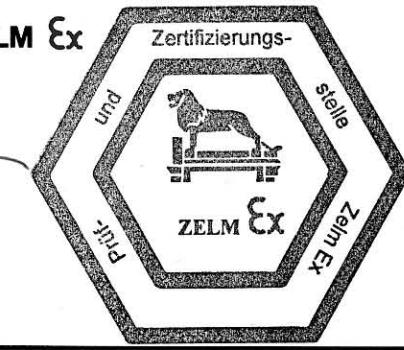


**II 2 G EEx ia IIC T6**

Zertifizierungsstelle **ZELM Ex**

Braunschweig, September 08, 1999

Dipl.-Ing. Harald Zelm



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



# Prüf- und Zertifizierungsstelle

## ZELM Ex



(13)

## SCHEDULE

(14)

### EC-TYPE-EXAMINATION CERTIFICATE ZELM 99 ATEX 0006

(15) Description of equipment

The angular position transmitter KINAX WT710 type 710-2 is a mechanical modification of the KINAX 3W2 with the certification number PTB 97 ATEX 2271. Scheme, layout, print and constructive design remain unchanged. Consequently the type of protection EEx ia IIC T6 and the electrically data correspond to the KINAX 3W2.

The ranges of the ambient temperature dependent on the temperature class are shown in the following table.

Lower ambient temperature limit	Upper ambient temperature limit	Temperature class
- 40 °C	+ 60 °C	T6
- 40 °C	+ 75 °C	T5

#### Data resp. measures for the explosion protection

Degree of protection in accordance with EN60529:1991: IP20

Output/Powering circuit.....type of protection Intrinsic Safety EEx ia IIC.  
(terminals 1, 2, 3, 4) For connection to a certified intrinsically safe circuit only.

$$\begin{aligned} \text{Maximum values: } U_i &= 30 \text{ V} \\ I_i &= 160 \text{ mA} \\ P_i &= 1 \text{ W} \end{aligned}$$

Effective internal capacitance  $C_i \leq 10 \text{ nF}$ .  
The effective internal inductance is negligibly small.

(16) Report No. ZELM Ex 0379918007

(17) Special conditions for safe use

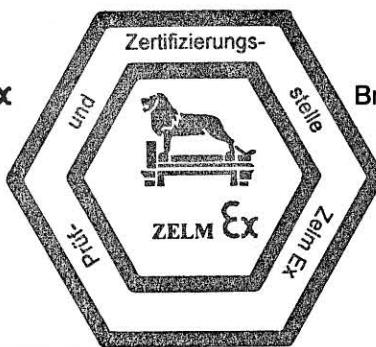
not applicable

(18) Essential Health and Safety Requirements

met by standards

Zertifizierungsstelle ZELM Ex

Dipl.-Ing. Harald Zelm



Braunschweig, September 08, 1999

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# Prüf- und Zertifizierungsstelle

## ZELM Ex



### 1. Supplement

(Supplement according to EC-Directive 94/9 Annex III letter 6)  
to EC-type-examination Certificate

### ZELM 99 ATEX 0006

Equipment: **Angular position transmitter KINAX 2W2 type 760-2...**  
Manufacturer: **Camille Bauer AG**  
Address: **Aargauerstrasse 7, CH-5610 Wohlen**

#### Description of supplement

The Angular position transmitter KINAX WT 710 type 710-2... will be extended by an alternative version.

The type designation of this new version is:

**Angular position transmitter KINAX WT 711 type 711-2**

The variations refers to the inner construction.

The maximum permissible ambient temperature of this alternative version 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
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:       $U_i = 30 \text{ V}$   
                             $I_i = 160 \text{ mA}$   
                             $P_i \leq 1 \text{ W}$  (siehe Tabelle 1)

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

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# Prüf- und Zertifizierungsstelle

## ZELM Ex



### 1. Supplement to EC-type-examination Certificate ZELM 99 ATEX 0006

#### 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.

#### Report No.

ZELM Ex 1200315329

#### Special conditions for safe use

not applicable

#### Essential Health and Safety Requirements

The Essential Health and Safety Requirements are further met by adherence to the standards referred in the EC-type-examination certificate.

Zertifizierungsstelle ZELM Ex

Adolf Gruber



Braunschweig, Oktober 29, 2004

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