



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.

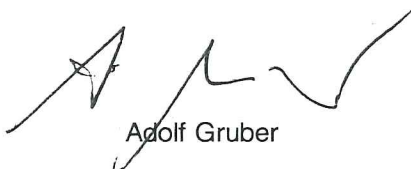
(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. 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

  
Adolf Gruber



Braunschweig, February 20, 2003

Sheet 1/3

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(13)

## SCHEDULE

(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  
 $P_i \leq 1$  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



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## 1. Supplement

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

### ZELM 03 ATEX 0123

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 2W2 type 760-2... will be extended by an alternative version.  
The type designation of this new version is:

**Angular position transmitter KINAX WT717 type 717-2**

This new version is build-in in an aluminum housing.

All technical Data remain unchanged and are valid also for this alternative version.

#### References:

The instruction manual has to be observed.

The required housing protection level (at least IP 20 according to EN 60529: 1991) of the Angular position transmitter KINAX WT717 type 717-2 is fulfilled because of the construction.

#### Report No.

ZELM Ex 1210315259

#### 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



Braunschweig, September 13, 2004

Adolf Gruber

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## 2. Ergänzung

(Ergänzung gemäß EG-Richtlinie 94/9 Anhang III Ziffer 6)

zur EG-Baumusterprüfbescheinigung

**ZELM 03 ATEX 0123**

Gerät: Drehwinkel - Messumformer KINAX 2W2 Typ 760-2...  
Hersteller: Camille Bauer AG  
Anschrift: Aargauerstrasse 7, CH-5610 Wohlen

### Beschreibung der Ergänzung

Der Drehwinkel-Messumformer KINAX 2W2 Typ 760-2 darf künftig auch unter Berücksichtigung der im zugehörigen Prüfbericht aufgeführten Unterlagen gefertigt werden. Die Änderungen betreffen den inneren Aufbau. Alle technischen Daten bleiben unverändert und gelten auch für diese 2. Ergänzung.

### Hinweise:

Die Betriebsanleitung ist zu beachten.

Der erforderliche Gehäuseschutzgrad (mindestens IP 20 gemäß EN 60529:1991) wird von dem Drehwinkel-Messumformer KINAX WT717 Typ 717-2 bauartbedingt sichergestellt.

### Prüfbericht Nr.

ZELM Ex 1120511420

### Besondere Bedingungen

nicht zutreffend

### Grundlegende Sicherheits- und Gesundheitsanforderungen

Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden weiterhin erfüllt durch Übereinstimmung mit den in der EG-Baumusterprüfbescheinigung aufgeführten Normen.

Zertifizierungsstelle ZELM Ex

  
Dipl.-Ing. Harald Zelm



Braunschweig, 14.09.2005

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EG-Baumusterprüfbescheinigungen ohne Unterschrift und ohne Stempel haben keine Gültigkeit.  
Diese EG-Baumusterprüfbescheinigung darf nur unverändert weiterverbreitet werden.  
Auszüge oder Änderungen bedürfen der Genehmigung der Prüf- und Zertifizierungsstelle ZELM Ex

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### 3. Supplement

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

**ZELM ex**

to EC-type-examination Certificate

## ZELM 03 ATEX 0123

Equipment: **Angular position transmitter KINAX 2W2 type 760-2... and KINAX WT717 types 717-2..., 717-5...**

Manufacturer: **Camille Bauer AG**

Address: **Aargauerstrasse 7, CH-5610 Wohlen**

#### Description of supplement

The 3. Supplement concerns the verification of the angular position transmitter KINAX 2W2 type 760-2... and KINAX WT717 type 717-2... with the requirements of the current standards.

The marking of the equipment is in the future:



**II 2 G Ex ia IIC T6**

#### References:

The angular position transmitters are only intended for acquisition of the angular position of the shaft. The usage as a rotational speed sensor is not permitted.

The electrical data and all other data as well as the further references according to the EC-type-examination Certificate including the supplements 1 and 2 are not changed and will be still valid further on. The angular position transmitter KINAX 2W2 type 760-2... and KINAX WT717 types 717-2..., 717-5... may be manufactured in future also in accordance with this 3. Supplement.

#### Report No.

ZELM Ex 1480915764

#### Essential Health and Safety Requirements

Within the scope of this 3. Supplement the compliance with the requirements of the actual standards has been checked..

The essential health and safety requirements are still fulfilled by compliance with the following Standards:

EN 60079-0:2006

EN 60079-11:2007

Braunschweig, April 14, 2010

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Dipl.-Ing. Harald Zelm



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## 4. Supplement

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

**ZELM ex**

### to EC-type-examination Certificate

## ZELM 03 ATEX 0123

Equipment: **Angular position transmitter KINAX 2W2 type 760-2... and  
KINAX WT717 type 717-2..., 717-5...**

Manufacturer: **Camille Bauer AG**

Address: **Aargauerstrasse 7, CH-5610 Wohlen**

#### Description of supplement

The 4. Supplement concerns the verification of the angular position transmitter KINAX 2W2 type 760-2... and KINAX WT717 type 717-2..., 717-5... with the requirements of the current standards, as well as the consideration of the new type KINAX WT717 type 717-6....

The marking of the angular position transmitter will be in the future:

 **II 2 G Ex ia IIC T6 Gb**

The new type of angular position transmitter is:

**Angular position transmitter KINAX WT 717 Type 717-6...**

#### References:

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)

The angular position transmitters are only intended for acquisition of the angular position of the shaft. The usage as a rotational speed sensor is not permitted.

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.

**4. Supplement  
to EC-type examination Certificate ZELM 03 ATEX 0123**

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The required Ingress protection degree of the enclosure (at least IP 20 according EN 60529:1991) will be adhered by construction of the Angular position transmitter KINAX WT 717 Type 717-2..., 717-5..., 717-6....

The ambient temperature range, as well as the electrical and technical data for the angular position transmitters remain unchanged and are also valid for the angular position transmitter KINAX WT717 type 717-6.

The angular position transmitter KINAX 2W2 type 760-2... and KINAX WT717 type 717-2..., 717-5... and 717-6... may be manufactured in future also in accordance with this 4<sup>th</sup> Supplement.

Report No.

ZELM Ex 1691219990

Essential Health and Safety Requirements

The essential Health and Safety Requirements are fulfilled by compliance with the following Standards:

**EN 60079-0:2012**

**EN 60079-11:2012**

Braunschweig, 2013-09-25

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