

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

ZELM ex

- (2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**
- (3) EC-TYPE-EXAMINATION CERTIFICATE Number:

ZELM 10 ATEX 0427 X

- (4) Equipment: **Transmitter for angular position KINAX 3W2 Type 708-2... and KINAX WT 707 Types WT 707-2..., WT 707-7..., WT 707-8... and KINAX SR 709 Type SR 709-2...**
- (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 certifies as notified body No. 0820 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, 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 1470915763.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2006 **EN 60079-11:2007**
- (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 Ex ia IIC T6

Braunschweig, April 1, 2010

ZELM ex

**Zertifizierungs-
stelle**

Zertifizierungsstelle ZELM EX
Dipl.-Ing. Harald Zelm

**ZELM
ex**

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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. The English version is based on the German text. In the case of dispute, the German text shall prevail.

ZELM ex
Prüf- und Zertifizierungsstelle
Siekgraben 56 · D-38124 Braunschweig

(13)

SCHEDULE

ZELM ex

(14) **EC-TYPE-EXAMINATION CERTIFICATE ZELM 10 ATEX 0427 X**

(15) Description of equipment

The angular position transmitters KINAX 3W2 of type 708-2..., KINAX WT707 of type 707-2..., 707-7..., 707-8...and KINAX SR 709 of type SR 709-2... convert the angular position of a shaft into a current signal. The unit is contact free. The angular deflection is transferred to a rotor. This causes a change of the capacitance and is converted into a current signal proportional to the angle.

The following table shows the ambient temperature in relationship to the temperature class.

Minimum ambient temperature	maximum ambient temperature	temperature class
-40 °C	60 °C	T6
-40 °C	75 °C	T5

Electrical data

Measuring output
(terminals 1,2,3)

type of protection Intrinsic Safety Ex ia IIC
only for connection to certified intrinsically safe circuit
maximum values:
 $U_i = 30 \text{ V}$
 $I_i = 160 \text{ mA}$
 $P_i = 1 \text{ W}$

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

(16) Report No.

ZELM Ex 1470915763

(17) Special conditions for safe use

1. The instruction manual has to be observed, especially regarding the mounting of the angular position transmitter KINAX 3W2 of type 708-2... into a housing that provide the Protection Class of at least IP 20 according EN 60529.
The angular position transmitters KINAX WT707 of type 707-2..., 707-7..., 707-8...and KINAX SR 709 of type SR 709-2... provides the Protection Class of at least IP 20 according EN 60529 hence an additional housing is not required for these versions. According to the installation environment of the transmitters for instance outdoors a higher degree of protection might be necessary.
2. The permitted ambient temperature range according to this EC-type-examination certificate has to be considered.
3. 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.

(18) Essential Health and Safety Requirements

met by standards

Braunschweig, April 1, 2010

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