

Braunschweig und Berlin



# **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:



### PTB 06 ATEX 2011

(4) Equipment:

(1)

Capacitive pressure transmitter series 41XEi resp. 46XEi

(5) Manufacturer:

Keller AG für Druckmesstechnik

(6) Address:

St. Gallerstrasse 119, 8404 Winterthur, Switzerland

- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 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 PTB Ex 06-26068.

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

EN 50014:1997 +A1 +A2

EN 50020:2002

EN 50284:1999

- (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 in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

🔄 II 1/2 G EEx ia IIC T4

Zertifizierungsstelle Explosionsschutz

By order:

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Braunschweig, June 19, 2006

Dr.-Ing. U. Johannsme Direktor und Professo

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## SCHEDULE

## (14) EC-TYPE-EXAMINATION CERTIFICATE PTB 06 ATEX 2011

## (15) Description of equipment

The capacitive pressure transmitter series 41XEi resp. 46XEi serves for the measurement of pressures in hazardous areas which require Category-1-equipment or Category-2-equipment. The capacitive pressure transmitter series 41XEi serves for pressure measurements within hazardous areas which requires Category-1-equipment and is to be mounted across the boundary wall to the hazardous area with Category-1-requirements.

The capacitive pressure transmitter can be used as pressure transmitter with cable tail (series 41XEi) or as level probe (series 46XEi) for the hydrostatic pressure measurement. The maximum permissible ambient temperature range amounts to: -20°C to +80°C.

#### Electrical data

Supply circuit

in type of protection Intrinsic Safety EEx ia IIC; only for connection to certified intrinsically safe circuits.

Maximum values:

 $U_i = 30 \text{ V}$ 

 $I_i = 100 \text{ mA}$ 

P<sub>i</sub> = 640 mW linear characteristic

C<sub>i</sub> negligible small

Li negligible small

Signal and interface circuits combined

in type of protection Intrinsic Safety EEx ia IIC;

Maximum values:

 $U_0 = 30 \text{ V}$ 

 $I_0 = 88.5 \text{ mA}$ 

 $P_o = 583 \text{ mW}$ 

 $R_i = 33,4 \text{ Ohm}$ 

linear characteristic

 $C_i = 350 \text{ nF}$ 

Li negligible small

(16) Test report PTB Ex 06-26068

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# Braunschweig und Berlin SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 06 ATEX 2011

- (17) Special conditions for safe use none
- (18) Essential health and safety requirements met by compliance with the standards mentioned above

Zertifizierungsstelle Explosionsschutz

By order

Dr.-Ing. U. Johannsme Direktor und Professor Braunschweig, June 19, 2006



Braunschweig und Berlin

## 1 SUPPLEMENT

according to Directive 94/9/EC Annex III.6

## to EC-TYPE-EXAMINATION CERTIFICATE PTB 06 ATEX 2011

(Translation)

Equipment:

Capacitive pressure transmitter series 41XEi resp. 46XEi

Marking:

II 1/2 G EEx ia IIC T4

Manufacturer: Keller AG

Address:

St. Gallerstrasse 119

8404 Winterthur, Switzerland

### Description of supplements and modifications

The capacitive pressure transmitter series 41XEi resp. 46XEi will be produced in the future with the modifications according to the documents specified in the Assessment and Test Report mentioned below. The modifications refer to the internal structure and the modified layout.

The permissible ambient temperature range is: -20°C to +80°C.

The basis for the standard for the capacitive pressure transmitter series 41XEi resp. 46XEi changes as follows:

EN 60079-0:2006

EN 60079-11:2007

EN 60079-26:2007

The marking according the above mentioned standards shall include the following details:

⟨Ex⟩ II 1/2 G Ex ia IIC T4

The electrical data change as follows, all other fixings are valid without changes.

## Electrical data

Supply circuit

in type of protection Intrinsic Safety Ex ia IIC; only for connection with separately certified intrinsically safe circuits with the maximum values:

U. = 30 V  $I_i = 100 \text{ mA}$ 

 $P_i = 640 \text{ mW}$ 

linear characteristic

C<sub>i</sub> negligibly small

Li negligibly small

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## 1 SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 06 ATEX 2011

Signal and interface circuits together

in type of protection Intrinsic Safety Ex ia IIC; maximum values:

 $U_o = 14,7 \text{ V}$   $\Sigma I_o = 464 \text{ mA}$   $\Sigma P_o = 1,71 \text{ W}$ linear characteristic  $C_i$  negligibly small  $L_i$  negligibly small

Assessment and test report:

PTB Ex 09-29157

Zertifizierungssektor Explosionsschutz

By order:

Braunschweig, September 29, 2009

Dr.-Ing. U. Johannsme Direktor und Professor