

Translation

(1) **EU-Type Examination Certificate**

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 2014/34/EU**



(3) **Certificate Number** TÜV 17 ATEX 212257 X **issue:** 00

(4) for the product: Pressure transmitter type:  
Precont PU4 \*\*\*\*\*  
Precont PK4 \*\*\*\*\*

(5) of the manufacturer: ACS-CONTROL-SYSTEM GmbH

(6) Address: Lauterbachstraße 57  
84307 Eggenfelden  
Germany

Order number: 8000478933

Date of issue: 2018-06-18

(7) The design of this product and any acceptable variation thereto are specified in the schedule to this EU-Type Examination Certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH, Notified Body No. 0044, in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential ATEX Assessment Report No. 18 203 212257.

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

**EN 60079-0:2012+A11:2013**

**EN 60079-11:2012**

except in respect of those requirements listed at item 18 of the schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions for Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design, and construction of the specified product. 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 product shall include the following:



**II 1 G Ex ia IIC T6...T1 Ga resp. II 2 G Ex ib IIC T6...T1 Gb**

**II 1 D Ex ia IIIC T80°C....T195°C Da resp. II 2 D Ex ib IIIC T80°C....T195°C Db**

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The deputy head of the notified body

Hiller 

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(13) **SCHEDULE**

(14) **EU-Type Examination Certificate No. TÜV 17 ATEX 212257 X issue 00**

(15) **Description of product**

The pressure transmitter type Precont PU4 \*\*\*\*\* resp. type Precont PK4 \*\*\*\*\* consists of a transmitter type PU4 resp. type PK4 and a pressure sensor and is used for monitoring, control and continuous measurement of pressures in gases, vapours, liquids and dusts.

Type code

Precont PU4 \*\*\*\*\* resp. Precont PK4 \*\*\*\*\*

Refer to the operating instructions for detailed type codes.

Electrical data:

Supply and signal circuit  
(Plug connection  
Pins L+ and -L)

In type of protection intrinsic safety Ex ia IIC/IIB/IIIC/IIIB  
only for connection to certified intrinsically safe circuits  
maximum values:

$$U_i = 30 \text{ V}$$

$$I_i = 300 \text{ mA}$$

$$P_i = 900 \text{ mW}$$

$$\text{Effective internal capacitance } C_i = 3 \text{ nF}$$

$$\text{Effective internal inductance } L_i = 5 \text{ } \mu\text{H}$$

For the version with permanently connected cable PK4LFX\*\*\*\* the following applies:

Effective internal capacitance:  $C_i = 3 \text{ nF} + \text{capacitance of the permanently connected cable}$

Effective internal inductance:  $L_i = 5 \text{ } \mu\text{H} + \text{inductance of the permanently connected cable}$

$$C_{c,wire/wire} = 200 \text{ pF/m}$$

$$C_{c,wire/screen} = 400 \text{ pF/m}$$

$$L_c = 1 \text{ } \mu\text{H/m}$$

The supply and signal circuit are galvanically connected to each other.

Schedule to EU-Type Examination Certificate No. TÜV 17 ATEX 212257 X issue 00

Thermal data:

**For applications that require EPL Ga or Gb equipment, the following values apply:**

Marking	Ambient temperature range at electronic enclosure	Maximum surface temperature at the sensor $T_{max}$
II 1 G Ex ia IIC T6 Ga II 2 G Ex ib IIC T6 Gb	-40 °C ....+42 °C	T <sub>M</sub> (Medium temperature) + self-heating (s.table below). The special conditions must be observed.
II 1 G Ex ia IIC T5 Ga II 2 G Ex ib IIC T5 Gb	-40 °C ....+57 °C	
II 1 G Ex ia IIC T4 Ga II 2 G Ex ib IIC T4 Gb	-40 °C ....+92 °C	
II 1 G Ex ia IIC T3...T1 Ga II 2 G Ex ib IIC T3...T1 Gb	-40 °C ....+97 °C	

Electronic enclosure / Pressure sensor Type	Self-heating
Electronic enclosure PU4	38 K
Electronic enclosure PK4	24 K
Pressure sensor P*4*E	9 K
Pressure sensor P*4*K	11 K
Pressure sensor P*4*C	19 K
Pressure sensor P*4*M / P*4*H / P*4*F	8 K

**For applications that require EPL Da or Db equipment, the following values apply:**

Marking	Ambient temperature range at the electronic enclosure	Maximum surface temperature at the sensor $T_{max}$
II 1 D Ex ia IIIC T80°C Da II 2 D Ex ib IIIC T80°C Db	-40 °C ....+42 °C	T <sub>M</sub> (Medium temperature) + self-heating (s. table below). The special conditions must be observed.
II 1 D Ex ia IIIC T95°C Da II 2 D Ex ib IIIC T95°C Db	-40 °C ....+57 °C	
II 1 D Ex ia IIIC T130°C Da II 2 D Ex ib IIIC T130°C Db	-40 °C ....+92 °C	
II 1 D Ex ia IIIC T195°C Da II 2 D Ex ib IIIC T195°C Db	-40 °C ....+97 °C	

Electronic enclosure / Pressure sensor Type	Self-heating
Electronic enclosure PU4	38 K
Electronic enclosure PK4	24 K
Pressure sensor P*4*E	9 K
Pressure sensor P*4*K	11 K
Pressure sensor P*4*C	19 K
Pressure sensor P*4*M / P*4*H / P*4*F	8 K

**Schedule to EU-Type Examination Certificate No. TÜV 17 ATEX 212257 X issue 00**

- (16) Drawings and documents are listed in the ATEX Assessment Report No. 18 203 212257
- (17) Specific Conditions for Use
1. The pressure transmitter types Precont PU4\*\*\*\*\* and Precont PK4 \*\*\*\*\* may be operated in hazardous areas in which category 1 equipment is required only if atmospheric pressure exist.  
(Temperatures: See tables above, pressure from 0.8 bar to 1.1 bar).
  2. A reverse heat flow from the process exceeding the permissible ambient temperature of the transmitter is not allowed and shall be avoided by a suitable thermal insulation or a suitable temperature decoupler.
  3. The ambient temperature range depending on temperature class resp. surface temperature is to be taken from the operating instructions.
  4. For applications that require devices of EPL Da and EPL Db the pressure transmitter with connected cable (PK4LFX\*\*\*\*) has to be protected from prolific charge generating mechanisms.
- (18) Essential Health and Safety Requirements  
No additional ones

- End of Certificate -