

# CERTIFICATE

## (1) Type Examination

(2) **Product intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) Type Examination Certificate Number: **KEMA 10ATEX0003 X** Issue Number: **3**

(4) Product: **2-wire Programmable Transmitter Type 5333A**

(5) Manufacturer: **PR Electronics A/S**

(6) Address: **Lerbakken 10, 8410 Rønde, Denmark**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., 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 Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential test report no. NL/DEK/ExTR13.0034/01.

(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**

**EN 60079-15 : 2010**

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 of Use specified in the schedule to this certificate.

(11) This Type Examination Certificate relates only to the design and construction of the specified product and not to the manufacturing process and its monitoring.

(12) The marking of the product shall include the following:



**II 3 G Ex nA [ic] IIC T4 ... T6 Gc**  
**II 3 G Ex ic IIC T4...T6 Gc**  
**II 3 D Ex ic IIIC Dc**

Date of certification: 25 October 2019.

DEKRA Certification B.V.

A handwritten signature in blue ink, appearing to read 'R. Schuller'.

R. Schuller  
Certification Manager

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(13) **SCHEDULE**

(14) **to Type Examination Certificate KEMA 10ATEX0003 X**

Issue No. 3

(15) **Description**

The 2-Wire Programmable Transmitter, Type 5333A, suitable for mounting in an enclosure form B according to DIN 43729, is used to convert the temperature measurement signal of a resistive temperature sensor into a 4 ... 20 mA current signal with digital communication.

The relation between ambient temperature range and temperature class is as follows:

T4 (Ta -40 to +85 °C),

T6 (Ta -40 to +60 °C).

For explosive dust atmospheres, the surface temperature of the outer enclosure is 20 K above the ambient temperature.

**Electrical data**

Either,

supply / output circuit (terminals 1 and 2): in type of protection Ex nA:  $U_{max} = 35 V$ .

Sensor circuit (terminals 3, 4 and 6):

in type of protection intrinsic safety Ex ic IIC and Ex ic IIIC, with the following maximum values:

$U_o = 5 V$ ;  $I_o = 4 mA$ ;  $P_o = 20 mW$ ;  $C_o = 1000 \mu F$ ;  $L_o = 900 mH$ ,

or,

supply / output circuit (terminals 1 and 2):

in type of protection intrinsic safety Ex ic IIC and Ex ic IIIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:

$U_i = 35 V$ ;  $I_i = 110 mA$ ;  $C_i = 1 nF$ ;  $L_i = 10 \mu H$ .

sensor circuit (terminals 3, 4 and 6):

in type of protection intrinsic safety Ex ic IIC or Ex ic IIIC, with the following maximum values:

$U_o = 5 V$ ;  $I_o = 4 mA$ ;  $P_o = 20 mW$ ;  $C_o = 1000 \mu F$ ;  $L_o = 900 mH$ .

**Installation instructions**

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Test Report**

No. NL/DEK/ExTR13.0034/01.

(17) **Specific conditions of use**

For type of protection Ex nA, the transmitter shall be mounted in a metal enclosure providing a degree of protection of at least IP54 according to EN 60529.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Test Report No. NL/DEK/ExTR13.0034/01.

(13) **SCHEDULE**

(14) **to Type Examination Certificate KEMA 10ATEX0003 X**

Issue No. **3**

(20) **Certificate history**

- Issue 1 - 213096400 Initial assessment.
- Issue 2 - 214371900 Minor constructional and marking changes.
- Issue 3 - 223090900 Minor constructional changes, EN 60079-0:2012/A11:2013 added.