

# CERTIFICATE

## (1) EU-Type Examination

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

(3) EU-Type Examination Certificate Number: **KEMA 03ATEX1535 X** Issue Number: **5**

(4) Product: **2-Wire Programmable Transmitter Type 5333D.**

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

(6) Address: **Lerbakken 10, 8410 Rønede, 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., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 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 confidential test report number 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**

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 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 product. These are not covered by this certificate.

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



**II 1 G Ex ia IIC T4...T6 Ga**  
**II 1 D Ex ia IIIC Da**  
**II 1 M Ex ia I Ma**

Date of certification: 25 October 2019

DEKRA Certification B.V.



R. Schuller  
 Certification Manager

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 03ATEX1535 X**

Issue No. 5

(15) **Description**

The 2-Wire Programmable Transmitter, Type 5333D, 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 temperature class and temperature class is as follows:

T4 (Ta -40 to +85 °C),

T5 (Ta -40 to +60 °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**

Supply / output circuit (terminals 1 and 2):

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

$U_i = 30 \text{ V}$ ;  $I_i = 120 \text{ mA}$ ;  $P_i = 0,84 \text{ W}$ ;  $C_i = 1 \text{ nF}$ ;  $L_i = 10 \text{ }\mu\text{H}$ .

Sensor circuit (terminals 3, 4 and 6):

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

$U_o = 30 \text{ V}$ ;  $I_o = 8 \text{ mA}$ ;  $P_o = 60 \text{ mW}$ ;  $C_o = 66 \text{ nF}$ ;  $L_o = 35 \text{ mH}$ .

**Installation instructions**

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

(16) **Report Number**

NL/DEK/ExTR13.0034/01

(17) **Specific conditions of use**

If the transmitter is installed in an explosive atmosphere requiring the use of equipment of category 1 G, 1 M or 2 M, and if the enclosure is made of aluminum, it must be installed such, that ignition sources due to impact and friction sparks are excluded. .

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

Covered by the standards listed at item (9).

(19) **Test documentation**

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

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 03ATEX1535 X**

Issue No. **5**

(20) **Certificate history**

- Issue 1 - 203794300 Initial assessment.
- Issue 2 - 212043500 Minor constructional and marking changes.
- Issue 3 - 212575000 Assessment to new edition of the standards.
- Issue 4 - 214371900 Minor constructional and marking changes.
- Issue 5 - 223390900 Minor constructional changes, removal of models 5333B and 5333C, EN 60079-0:2012/A11:2013 added, EN 60079-26 removed