

# CERTIFICATE

## (1) Type Examination

### (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC

(3) Type Examination Certificate Number: KEMA 10ATEX0006 X Issue Number: 3

(4) Equipment: 2-Wire Transmitter with HART Protocol  
Type 6335A, Type 6336A and Type 6337A

(5) Manufacturer: PR electronics A/S

(6) Address: Lerbakken 10, 8410 Rønne, Denmark

(7) This equipment 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 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 confidential test report no. 214349600/4.

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

EN 60079-0 : 2009  
EN 60079-11 : 2007

EN 60079-15 : 2010  
EN 61241-11 : 2006

(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 Type Examination Certificate relates only to the design, examination and tests of the specified equipment and not to the manufacturing process and supply of this equipment.

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



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

This certificate is issued on 20 December 2011 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

DEKRA Certification B.V.

C.G. van Es  
Certification Manager

(13) **SCHEDULE**

(14) **to Type Examination Certificate KEMA 10ATEX0006 X**

Issue No. 3

(15) **Description**

The 2-Wire Transmitters Type 6335A with HART 5 protocol, Type 6336A with HART 6 protocol and Type 6537A with HART 7 protocol, are used to convert temperature measurement signals from a temperature sensor or a mV signal into a 4 ... 20 mA current signal with digital communication (HART).

Type 633\*A2A is a one channel version and Type 633\*A2B has two independent channels.

Ambient temperature range: -40 °C to +60 °C for temperature class T6,  
-40 °C to +85 °C for temperature class T4.

For use in an explosive dust atmosphere, the transmitter shall be mounted in an enclosure providing a degree of protection of at least IP 6X in accordance with EN 60529. The surface temperature of the enclosure is equal to the ambient temperature +20 K, for a dust layer with a maximum thickness of 5 mm.

**Electrical data**

Supply and output circuits (terminals 11 ... 14, respectively 21 ... 24):  
in type of protection non sparking Ex nA, with  $U \leq 35$  Vdc;  $I = 4 \dots 20$  mA; or

Supply and output circuits (terminals 11 ... 14, respectively 21 ... 24):  
in type of protection intrinsic safety Ex ic IIC or Ex ic IIIC, with the following maximum values (per circuit):  
 $U_i = 35$  V;  $C_i = 2$  nF;  $L_i = 10$   $\mu$ H.

Sensor circuits, thermocouple, RTD, resistance or mV (terminals 41 ... 44, respectively 51 ... 54):  
in type of protection intrinsic safety Ex ic IIC or Ex ic IIIC, with the following maximum values (per circuit):  
 $U_o = 9,6$  V;  $I_o = 28$  mA;  $P_o = 67$  mW;  $C_o = 28$   $\mu$ F;  $L_o = 45$  mH.

(16) **Test Report**

No. 214349600/4.

(17) **Special conditions for safe use**

1. For use in explosive gas atmosphere, the transmitter shall be mounted in an enclosure providing a degree of protection of at least IP 54 in accordance with EN 60529.
2. For an ambient temperature  $\geq 60$  °C, heat resistant cables shall be used with a rating of at least 20 K above the ambient temperature.

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

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 214349600/4.