

CERTIFICATE

(1) Type Examination

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

(3) Type Examination Certificate Number: **DEKRA 24ATEX0007X** Issue Number: **0**

(4) Product: **PROFIBUS PA temperature transmitter type 5450A..**

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

(6) Address: **Lerbakken 10, 8410 Rønne, 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 mentioned in item (16).

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

EN IEC 60079-0 : 2018 + A11 : 2024
EN 60079-11 : 2012

EN 60079-7 : 2015 + A1 : 2018 + A11 : 2024

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 ec IIC T6...T4 Gc
II 3 G Ex ic IIC T6...T4 Gc
II 3 D Ex ic IIIC T85 °C...T110 °C Dc

Date of certification: 17 January 2025

DEKRA Certification B.V.

R. Schuller
Certification Manager

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T Throughout this document, a point is used as the decimal separator.

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(13) **SCHEDULE**

(14) **to Type Examination Certificate DEKRA 24ATEX0007X**

Issue No. 0

(15) **Description**

The 5450 series of transmitters are all temperature transmitters, but with a different number of sensor inputs. They are loop-powered two wire devices converting one or two temperature sensor or other types of signals to a Profibus® signal.

The transmitters are galvanic isolated between sensor(input) and supply(output).

The dedicated extension port 'EXT' (8-pin-header hidden under a small plastic lid) may only be connected to equipment that is predefined by PR electronics A/S.

The transmitters type 5450 are suitable for mounting in an enclosure form B according to DIN 43729 or equivalent.

For the Temperature classification per ambient temperature range and Type designation see Annex 1 to test report mentioned in item (16).

Electrical data

For electrical data, see Annex 1 to test report mentioned in item (16).

Installation instructions

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

(16) **Report Number**

No. NL/DEK/ExTR24.0006/00.

(17) **Specific conditions of use**

For the ambient temperature range see Annex 1 to test report mentioned in item (16) or the installation instructions.

Ex i:

For EPL Gc, the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP20 according to IEC 60529, and that is suitable for the application and correctly installed.

For EPL Dc, the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP5X according to IEC 60079-0, and that is suitable for the application and correctly installed.

Ex ec:

For EPL Gc, the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP54 according to IEC 60079-0, and that is suitable for the application and correctly installed.

The equipment shall only be used in an area of not more than pollution degree 2, as defined in IEC 60664-1.

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

Covered by the standards listed at item (9).

(13) **SCHEDULE**

(14) **to Type Examination Certificate DEKRA 24ATEX0007X**

Issue No. **0**

(19) **Test documentation**

As listed in test report mentioned in item (16).