

CERTIFICATE

(1) **Type Examination**

(2) **Product or Protective System intended for use in potentially explosive atmospheres - UKSI 2016:1107 (as amended) - Schedule 3A, Part 6**

(3) Type Examination Certificate Number: **DEKRA 21UKEX0171X** Issue Number: **0**

(4) Product: **HART-Transparent Repeater, Types 9106B1A, 9106B1B, 9106B2A , 9106B2B and Types 9106A1A, 9106A1B, 9106A2A , 9106A2B**

(5) Manufacturer: **PRelectronics 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., 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 Schedule 1 of the Regulations 2016, UKSI 2016:1107 (as amended).

The examination and test results are recorded in confidential report NL/DEK/ExTR11.0097/05.

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

EN IEC 60079-0 : 2018

EN 60079-7 : 2015 + A1 : 2018

EN IEC 60079-15 : 2019

except in respect of those requirements listed at item 18 of the Schedule to this certificate.

(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:



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Ex ec nC IIC T4 Gc

Date of certification: 8 June 2022

DEKRA Certification B.V.

R. Schuller
Certification Manager

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(13) **SCHEDULE**

(14) **to Type Examination Certificate DEKRA 21UKEX0171X**

Issue No. 0

(15) **Description**

HART-Transparent Repeater, Types 9106B1A, 9106B1B, 9106B2A, 9106B2B and Types 9106A1A, 9106A1B, 9106A2A, 9106A2B for rail mounting, are 24 V powered isolating barriers that serve as a repeater.

The repeater transfers the 4 - 20 mA current signal (with HART communication) of either a loop powered transmitter or an active current source to a non-intrinsically safe

4 - 20 mA output signal (with HART communication).

The Repeater is supplied via terminals at the front of the module, or via Power Rail Type 9400.

Removable display module 4501 can be used for programming of the Repeater.

The HART-Transparent Repeater, Types 9106B*A, 9106A*A are one channel version and Types 9106B*B, 9106A*B are two channel version.

Ambient temperature range -20 °C to +60 °C.

Electrical data

All Repeater Types

Supply (terminals 31, 32 and rear contacts): $U = 19,2 \dots 31,2 \text{ Vdc}$.

Status-Relay output (terminals 33, 34):

$U \leq 32 \text{ Vac}$ or 32 Vdc , $I \leq 0,5 \text{ Aac}$ or $I \leq 1 \text{ Adc}$ respectively.

If the Repeater is installed outside the hazardous area, the following data for the relay contacts apply: $U \leq 110 \text{ Vdc}$ or 125 Vac , $I \leq 0,3 \text{ Adc}$ or $I \leq 0,5 \text{ Aac}$ respectively.

Outputs (terminals 11, 12 resp. 13, 14): $I = 4 \dots 20 \text{ mA}$.

Installation instructions

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

(16) **Report Number**

NL/DEK/ExTR11.0097/05.

(17) **Specific conditions of use**

The HART Transparent Repeater shall be installed in a controlled environment with suitably reduced pollution, limited to pollution degree 2 or better.

The circuits shall be limited to overvoltage category I/II as defined in EN 60664-1.

The HART Transparent Repeater shall be installed in an enclosure in type of protection Ex n or Ex e, providing a degree of protection of at least IP54. Cable entry devices and blanking elements shall fulfil the same requirements.

Removable Display Module 4501, when connected to the Repeater, may not be damaged and shall be free of dust and moisture.

(13) **SCHEDULE**

(14) **to Type Examination Certificate DEKRA 21UKEX0171X**

Issue No. **0**

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

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, compliance with all other requirements is demonstrated in the report.

(19) **Test documentation**

As listed in Report number NL/DEK/ExTR11.0097/05.