

### **IECEx Certificate** of Conformity

### INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification Scheme for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

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**IECEx DEK 11.0084X** 

issue No.:1

Certificate history: Issue No. 1 (2013-10-

Status:

Current

14) Issue No. 0 (2011-12-6)

Date of Issue:

2013-10-14

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Applicant:

PR electronics A/S

Lerbakken 10 8410 Rønde Denmark

HART-Transparent Repeater, Type 9106B1A, Type 9106B1B, Type 9106B2A, Type

9106B2B

**Electrical Apparatus:** Optional accessory:

Display, type 4501

Type of Protection:

Ex ia: nA

Marking:

[Ex ia Ga] IIC/IIB/IIA

[Ex ia Da] IIIC [Ex ia Ma] I Ex nA nC IIC T4 Gc

Approved for issue on behalf of the IECEx

Certification Body:

R. Schuller

Position:

Certification Manager

Signature:

(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.

This certificate is not transferable and remains the property of the issuing body.
 The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

**DEKRA Certification B.V.** Meander 1051. 6825 MJ Arnhem The Netherlands





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Manufacturer:

PR electronics A/S Lerbakken 10

8410 Rønde Denmark

Additional Manufacturing location

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### **STANDARDS:**

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0: 2011

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-11: 2011

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition: 6.0

IEC 60079-15 : 2010

Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition: 4

IEC 60079-26: 2006

Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga

Edition: 2

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

#### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

NL/DEK/ExTR11.0097/00

NL/DEK/ExTR11.0097/01

**Quality Assessment Report:** 

NL/DEK/QAR13.0017/00



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#### Schedule

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

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

The repeater transfers the intrinsically safe 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, Type 9106B\*A is a one channel version and Type 9106B\*B is a two channel version.

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

For electrical data, refer to Annexee.

#### CONDITIONS OF CERTIFICATION: YES as shown below:

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

The non intrinsically safe circuits shall be limited to overvoltage category I/II as defined in IEC 60664-1.

If the HART-Transparent Repeater is installed in an explosive atmosphere where equipment protection level Gc is required, the following specific conditions of use apply:

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.



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#### **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

- construction of the transformer changed
  minor hardware changes
  upgrade to the IEC60079-0: 2010