



# 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](http://www.iecex.com)

Certificate No.: IECEx KEM 09.0001X issue No.:2

Status: **Current**

Date of Issue: **2010-03-10** Page 1 of 4

Certificate history:  
Issue No. 2 (2010-3-10)  
Issue No. 1 (2009-12-23)  
Issue No. 0 (2009-1-16)

Applicant: **PR Electronics A/S**  
Lerbakken 10  
8410 Rønde  
Denmark

Electrical Apparatus: **Solenoid / Alarm driver, Type 9203B1A, Type 9203B1B and Type 9203B2A**  
Optional accessory: **Display module, Type 4501**

Type of Protection: **Ex i, Ex n**

Marking: **[Ex ia Ga] IIC/IIB/IIA**  
**[Ex ia Da] IIIC**  
**Ex nA nC IIC T4 Gc**

Approved for issue on behalf of the IECEx  
Certification Body:


C.G. van Es

Position:

Certification Manager

Signature:  
(for printed version)

Date:

  
2010-03-10

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**KEMA Quality B.V.**  
Utrechtseweg 310  
6812 AR Arnhem  
The Netherlands





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Manufacturer: **PR Electronics A/S**  
Lerbakken 10  
8410 Rønne  
Denmark

Manufacturing location(s):

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:

<b>IEC 60079-0 : 2007-10</b> Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
<b>IEC 60079-11 : 2006</b> Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
<b>IEC 60079-15 : 2005-03</b> Edition: 3	Electrical apparatus for explosive gas atmospheres Part 15: Construction, test and Marking of Type of Protection "n" electrical apparatus
<b>IEC 60079-26 : 2006</b> Edition: 2	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga
<b>IEC 61241-0 : 2004</b> Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
<b>IEC 61241-11 : 2005</b> Edition: 1	Electrical apparatus for use in the presence of combustible dusts - Part 11: Protection by intrinsic safety 'iD'

*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/KEM/ExTR09.0001/00  
NL/KEM/ExTR09.0001/01  
NL/KEM/ExTR09.0001/02

Quality Assessment Report:

NL/KEM/QAR07.0004/01



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

Solenoid / Alarm drivers Type 9203B1A, Type 9203B1B and Type 9203B2A, for rail mounting, are 24 V powered isolating barriers, converting digital signals from PLC's and other equipment into signals for driving valves, solenoids and light emitting diodes located in a hazardous area.

Solenoid / Alarm driver Type 9203B.. 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 Solenoid / Alarm driver.

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

### Electrical data:

Refer to "Annex to IECEx KEM 09.0001X Issue 2.pdf".

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

If the Solenoid / alarm Driver is installed in an explosive atmosphere where equipment protection level Gc is required, the following special conditions for safe use apply:

The Solenoid / Alarm driver 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 Solenoid / Alarm driver, may not be damaged and shall be free of dust and moisture.

Supply via the mounting rail is only allowed if Power Rail Type 9400 with Power Control Unit Type 9410 (IECEx Certificate of Conformity IECEx KEM 08.0025X) is used.





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

### Issue 1:

Small constructional changes of the equipment, and the electrical data is extended with the values of Co, Lo and Lo/Ro for groups IIB and IIA; changed equipment marking due to the application of latest versions of standards.

### Issue 2:

Minor constructional changes, which do not affect the explosion protection of the equipment.