



# 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.:  issue No.:

Status:

Date of Issue: **2010-03-03** Page 1 of 3

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

Electrical Apparatus: **Universal Converter, Type 9116B.**  
Optional accessory:

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

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

Approved for issue on behalf of the IECEx  
Certification Body:

C.G. van Es

Position:

Certification Manager

Signature:  
(for printed version)

Date:

2010-03-03

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





# IECEX Certificate of Conformity

Certificate No.: IECEx KEM 10.0022X

Date of Issue: 2010-03-03

Issue No.: 0

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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/ExTR10.0020/00](#)

Quality Assessment Report:

[NL/KEM/QAR07.0004/01](#)



# IECEX Certificate of Conformity

Certificate No.: IECEx KEM 10.0022X

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## Schedule

### EQUIPMENT:

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

#### General product information:

Universal Converters, Type 9116B1 and Type 9116B2, for rail mounting are 24 V powered isolating barriers, interfacing temperature sensors and loop supplied transmitters located in an explosive atmosphere.

The output to safe area is a 0/4 ... 20 mA signal together with a normally open relay contact.

The Universal Converter 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 Converter.

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

#### Electrical data:

Refer to "Annex 1 to Certificate of Conformity IECEx KEM 10.0022X, Issue 00.pdf".

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

If the Universal Converter is installed in an explosive atmosphere where equipment protection level Gc is required, the following special conditions for safe use apply:

The Universal Converter 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 fulfill the same requirements.

Removable Display Module 4501, when connected to the Universal Converter, 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 (CoC IECEx KEM 08.0025X) is applied.