



# 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 BVS 11.0054X** issue No.: **0** Certificate history: \_\_\_\_\_

Status: **Current**

Date of Issue: **2011-08-25** Page 1 of 4

Applicant: **R. STAHL Schaltgeräte GmbH**  
Am Bahnhof 30  
74638 Waldenburg  
Germany

Electrical Apparatus: **Diagnosis Communication Module type 9415/00-310-4\***  
*Optional accessory:*

Type of Protection: **Equipment protection by intrinsic safety "i", Equipment protection by type of protection "n", Fieldbus intrinsically safe concept (FISCO)**

Marking: **Ex nA [ic] IIC T4 Gc resp.  
Ex nAc [ic] IIC T4**

*Approved for issue on behalf of the IECEx  
Certification Body:* P. Migenda

*Position:* Deputy Head of Certification Body

*Signature:*  
*(for printed version)*

*Date:*

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:

**DEKRA EXAM GmbH**  
Dinnendahlstrasse 9  
44809 Bochum  
Germany





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Manufacturer: **R. STAHL Schaltgeräte GmbH**  
Am Bahnhof 30  
74638 Waldenburg  
**Germany**

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 : 2010</b> Edition: 4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
<b>IEC 60079-27 : 2008</b> Edition: 2.0	Explosive atmospheres - Part 27: Fieldbus intrinsically safe concept (FISCO)

*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:  
[DE/BVS/ExTR11.0089/00](#)

Quality Assessment Report:

[DE/BVS/QAR10.0002/01](#)



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## Schedule

### EQUIPMENT:

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

#### General product information:

The Diagnosis Communication Module (DCM) serves for collection and transmission of the diagnosis information of up to 8 fieldbus segments to the process control system. The Diagnosis Communication Module is to be used in conjunction with the bus-Carrier type 9419 and the Fieldbus Power Supply modules type 9412 plugged onto it.

The Diagnosis Communication Module is designed according to type of protection Ex nA.. For data communication it is provided with a galvanically separated interface (FF-H1) for connection of a circuit with voltage limitation per type of protection Ex ic or an intrinsically safe circuit.

This interface is supplied from the fieldbus connected to it and performs as a FISCO Field Device with type of protection Ex ic per IEC 60079-27.

The Diagnosis Communication Module has to be mounted inside an enclosure type of protection Ex nA which is in acc. with IEC 60079-15.

#### Type designation:

Diagnosis Communication Module type 9415/00-310-4\* Instead of the asterisk in the complete denomination the letter 0 (without service port) or 2 (RS232 port) will be inserted.

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

The Diagnosis Communication Module has to be mounted inside an enclosure type of protection Ex nA which is in acc. with IEC 60079-15.



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## EQUIPMENT(continued):

### Electrical data

#### 1 Connector X1 to the bus carrier

Power supply

Rated voltage DC 24 V

Voltage range DC 18...32 V

Max. voltage Um DC 32 V

Diagnosis signals

Rated voltage DC 5 V

Max. voltage Um DC 32 V

#### 2 Connector X2 (pins 2, 3, 5) firmware download

Rated voltage DC  $\pm 15$  V

Max. voltage Um DC 32 V

#### 3 Interface FF-H1: terminals 4 (TRUNK+), 5 (TRUNK-), 6 (Shield)

The FF-H1-Feldbus connection is realized as a galvanically separated passive circuit for the connection of intrinsically safe or intrinsically safe voltage limited circuits level of protection Ex ic.

Voltage Ui DC 32 V

Internal inductance Li 10  $\mu$ H

Internal capacitance Ci negligible

The FF-H1 connection is in acc. with the requirements of IEC 60079-27 for a FISCO Field device level of protection Ex ic group IIC.

#### 4 Ambient temperature range

Ta -20 C up to +70 C