



Translation

# Type Examination Certificate

(1)

(2)

**- Directive 94/9/EC -  
Equipment and protective systems intended for use  
in potentially explosive atmospheres**

(3)

**BVS 10 ATEX E 105 X**

(4)

**Equipment: Fieldbus isolating repeater type 9185/12-4\*-10**

(5)

**Manufacturer: R. STAHL Schaltgeräte GmbH**

(6)

**Anschrift: 74638 Waldenburg, Germany**

(7)

The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.

(8)

The certification body of DEKRA EXAM GmbH certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of Category 3 equipment intended for use in potentially explosive atmospheres, given in Annex II to the Directive.  
The examination and test results are recorded in confidential test and assessment report BVS PP 10.2196 EG.

(9)

The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2009 General requirements  
EN 60079-15:2005 Type of protection 'n'

(10)

If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the appendix to this certificate.

(11)

This Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.  
Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12)

The marking of the equipment shall include the following:

**II 3G Ex nAc IIC T4**

**DEKRA EXAM GmbH**

Bochum, dated 21 July 2010

Signed:

Simanski

Certification body

Signed:

Dr. Eickhoff

Special services unit

(13) Appendix to

(14) **Type Examination Certificate**

**BVS 10 ATEX E 105 X**

(15) 15.1 Subject and type

Fieldbus isolating repeater type 9185/12-4\*-10

Instead of the \* in the complete denomination the numeral 5 (repeater) or 6 (bridge) will be inserted.

15.2 Description

The fieldbus isolating repeater, which has to be mounted inside an enclosure which is in accordance with EN 60079-15 if installed in an area which requires Category 3 equipment, is used for converting bus signals.

15.3 Parameters

15.3.1	Power supply circuit (terminals 7 (L+) - 9 (L-) and pac-bus connector V007/1 – V007/2)			
	Nominal voltage	DC	24	V
	Nominal current		80	mA
15.3.2	Interfaces system side			
15.3.2.1	RS232 interface (connection: sub-d plug X1) Pin 2 (RXD), 3 (TXD), 5 (GND), 7 (RTS), 8 (CTS)			
	Nominal voltage		± 15	V
	Input resistance $R_{Receiver}$		≥ 3	kΩ
15.3.2.2	RS485/RS422 interface (connection: sub-d socket X2) RS485 or RS422 TXD: Pin 3 (B+), Pin 5 (U-), Pin 6 (U+), Pin 8 (A-) RS422 RXD: Pin 4 (B+), Pin 9, (A-)			
	Nominal voltage	DC	5	V
	Input resistance $R_{Receiver}$		≥ 12	kΩ
15.3.3	Interfaces field side			
15.3.3.1	Type 9185/12-46-10 (RS422) (connection: sub-d socket X3) TXD: Pin 3 (B+), Pin 8 (A-), RXD: Pin 4 (B+), Pin 9, (A-)			
	Nominal voltage	DC	5	V
	Input resistance $R_{Receiver}$		≥ 12	kΩ
15.3.3.2	Type 9185/12-45-10 (RS422/RS485) (connection: sub-d socket X3) RS485 or RS422 TXD: Pin 3 (B+), Pin 8 (A-) RS422 RXD: Pin 4 (B+), Pin 9, (A-)			
	Nominal voltage	DC	5	V
	Input resistance $R_{Receiver}$		≥ 12	kΩ
15.3.4	Ambient temperature range	Ta	-20 °C up to +70 °C	

(16) Test report

Nr. BVS PP 10.2196 EG, dated 21.07.2010

(17) Special conditions for safe use

For installation of the fieldbus isolating repeater in areas, where category 3 equipment is required, this module has to be mounted inside an enclosure which is in accordance with EN 60079-15.

---

We confirm the correctness of the translation from the German original.  
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 21.07.2010  
BVS-Schu/Her A 20100106

DEKRA EXAM GmbH



\_\_\_\_\_  
Certification body



\_\_\_\_\_  
Special services unit

**EG-Konformitätserklärung**  
*EC-Declaration of Conformity*  
*Déclaration de Conformité CE*



Wir; we; nous

R. STAHL Schaltgeräte GmbH, Am Bahnhof 30, 74638 Waldenburg, Germany

**9185/12-4d-10**

d = 5, 6

**erklären in alleiniger Verantwortung, dass das Produkt**  
*hereby declare in our sole responsibility, that the product*  
*déclarons, sous notre seule responsabilité, que le produit*

**Feldbus-Trennübertrager**  
*Fieldbus isolating repeater*  
*Convertisseur fieldbus*

**mit der** **Baumusterprüfbescheinigung:**  
*under* *Type Examination Certificate:*  
*avec* *Attestation d'examen de type:*

**BVS 10 ATEX E 105 X**  
**(DEKRA EXAM GmbH**  
**Dinnendahlstraße 9, 44809 Bochum)**

**auf das sich diese Erklärung bezieht, mit den folgenden Normen oder normativen Dokumenten übereinstimmt**  
*which is the subject of this declaration, is in conformity with the following standards or normative documents*  
*auquel cette déclaration se rapporte, est conforme aux normes ou aux documents normatifs suivants*

**Bestimmungen der Richtlinie**  
*Terms of the directive*  
*Prescription de la directive*

**Nummer sowie Ausgabedatum der Norm**  
*Number and date of issue of the standard*  
*Numéro ainsi que date d'émission de la norme*

**94/9/EG: ATEX-Richtlinie**  
*94/9/EC: ATEX Directive*  
*94/9/CE: Directive ATEX*

EN 60079-0: 2009  
EN 60079-15: 2005

**2004/108/EG: EMV-Richtlinie**  
*2004/108/EC: EMC Directive*  
*2004/108/CE: Directive CEM*

EN 61326-1: 2006


**Allgemeine Normen ohne Bezug auf eine Richtlinie**  
*General standards without reference to a directive*  
*Normes générales sans référence à une directive*

EN 50178: 1997  
EN 61010-1: 2001

Waldenburg, 10.08.2010

**Ort und Datum**  
*Place and date*  
*Lieu et date*

  
**J.-P. Rückgauer**  
**Leiter Entwicklung und Technik**  
*Director Design and Technology*  
*Directeur Développement et Technique*

  
**Dr. S. Jung**  
**Leiter Qualitätsmanagement**  
*Director Quality Management Dept.*  
*Directeur Dép. Assurance de Qualité*