

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.:	IECEx BVS 20.0035X	Page 1 of 3	Certificate history:
Status:	Current	Issue No: 0	
Date of Issue:	2020-07-01		
Applicant:	R. STAHL Schaltgeräte GmbH Am Bahnhof 30 74638 Waldenburg Germany		
Equipment:	Isolating Repeater Output type 9265/16-11-	.10 (1- channel), 9265/26-11-10 (2-channel)	
Optional accessory:			
Type of Protection:	Intrinsic Safety "i", Increased Safety "e"		
Marking:	Ex ec [ia Ga] IIC T4 Gc, [Ex ia Da] IIIC, [Ex i	a Ma] I	
Approved for issue or Certification Body:	n behalf of the IECEx	Jörg Koch	
Position:		Head of Certification Body	
Signature: (for printed version)			
Date:			
2. This certificate is	d schedule may only be reproduced in full. not transferable and remains the property of the uthenticity of this certificate may be verified by v	e issuing body. visiting www.iecex.com or use of this QR Code.	
Certificate issued	by:		1170 4

DEKRA Testing and Certification GmbH Certification Body Dinnendahlstrasse 9 44809 Bochum Germany





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Manufacturer: R. STAHL Schaltgeräte GmbH

Am Bahnhof 30 74638 Waldenburg Germany

Additional manufacturing locations:

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

IEC 60079-7:2017 Edition:5.1

This Certificate does not indicate compliance with 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/ExTR20.0038/00

Quality Assessment Report:

DE/BVS/QAR10.0002/15



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Subject and Type

Isolating Repeater Output

Type 9265/16-11-10 (1- channel), type 9265/26-11-10 (2-channel)

Description

The Isolating Repeater Output is constructed in a housing, which can be mounted on 35 mm DIN rails. The protection category for the housing is IP20.

The Isolating Repeater Output can be supplied either via the lateral terminal interfaces or via the separately tested pluggable pac-Bus system type 9294/31-12, which is mounted in the 35 mm DIN rail.

The Isolating Repeater Output, which has to be installed outside the hazardous area or in an enclosure which is in accordance with IEC 60079-0, is used for transmission of 4...20 mA signals between intrinsically safe and non-intrinsically safe signal circuits. Additionally, digital communication signals (HART) can be modulated and bi-directional transmitted.

The intrinsically safe circuits type of protection Ex ia can be led into areas which require EPL Ma, EPL Ga or EPL Da equipment.

Ratings:

See Annex

SPECIFIC CONDITIONS OF USE: YES as shown below:

For the installation of the Isolating Repeater Output in areas, where Category 3 (EPL Gc) equipment is required, they have to be installed in an enclosure with a minimum degree of protection of IP54 according to IEC 60079-0.

The ambient temperature ranges specified here refer to the inner temperature at mounting location (enclosure).

Ambient temperature range depends on the operating height (above sea level)

Height	Ambient temperature range
≤ 2000 m	-40 °C ≤ T _a ≤ +70 °C
≤ 3000 m	-40 °C ≤ T _a ≤ +60 °C
≤ 4000 m	-40 °C ≤ T _a ≤ +55 °C
≤ 5000 m	-40 °C ≤ T _a ≤ +45 °C

For type 9265/16-11-10:

The setting of the DIP-switches has to be done, when the Isolating Repeater Output is not energized.

Annex:

BVS_20_0035_Stahl_Annex_Issue_0.pdf





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Ratings:

Type 9265/16-11-10 (1- channel), type 9265/26-11-10 (2-channel)

- 1 Non-intrinsically safe circuits
- 1.1 Power supply circuit

Terminal 5 - 6 and pac-BUS

Rated voltage	DC	24	V
Maximum current 5 - 6 to pac-BUS		400	mΑ
(Bus supply via terminals 5 - 6 of the device)			
Current consumption (1-channel)		45	mΑ
Current consumption (2- channel)		85	mΑ
Power consumption (1- channel)		1.1	W
Power consumption (2- channel)		2	W

1.2 Signal circuits

Terminal 1-2 (1- channel), Terminal 1-2 and 3-4 (2- channel)

Rated voltage	DC	24	V
Nominal signal		0(4) 20	mΑ

1.3 Maximum voltage U_m of the non-intrinsically safe circuits depends on the operating height (above sea level)

Height	maximum voltage U _m
≤ 2000 m	AC 253 V, DC 125 V
≤ 3000 m	AC 190 V, DC 110 V
≤ 5000 m	AC 60 V, DC 60V

2 Intrinsically safe output circuits, Ex ia IIC Ga

Terminal 10 – 11 (1- channel)

Terminal 10 – 11 and 12 – 13 (2- channel), connection values for each channel

Maximum output voltage	Uo	DC	25.2	V
Maximum output current	lo		93	mΑ
Maximum output power	Po		586	mW

Maximum external inductivity and capacity with separated connection of Co or Lo, see table

	Group IIA	Group IIB	Group IIC
Co	2.9 µF	817 nF	104 nF
Lo	10 mH	4 mH	2 mH

Maximum external inductivity and capacity if concentrated C_0 and L_0 are connected, see tables Hint: values were determined with the program ispark, version 6.2

For Group IIA

Co	587nF	627 nF	717 nF	907 nF	1.1 µF
Lo	10 mH	1 mH	500 µH	200 µH	100 µH





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For Group IIB

Co	367 nF	427 nF	507 nF	657 nF	817 nF
Lo	4 mH	1 mH	500 μH	200 µH	100 µH

For Group IIC

Co	46 nF	60 nF	77 nF	104 nF
Lo	2 mH	1 mH	500 μH	200 µH

The values of Group IIB can be used for areas with combustible dust and mining.

The intrinsically safe output circuits are safely galvanically isolated from the non-intrinsically safe circuits.

The intrinsically safe output circuits of the type 9265/26-11-10 (2-channel) are electrically isolated among themselves up to a sum of the peak values of the nominal voltages of 60 V.

3 Thermal parameters

Ambient temperature range depend on the operating height (above sea level)

Height	Ambient temperature range
≤ 2000 m	-40 °C ≤ T _a ≤ +70 °C
≤ 3000 m	-40 °C ≤ T _a ≤ +60 °C
≤ 4000 m	-40 °C ≤ T _a ≤ +55 °C
≤ 5000 m	-40 °C ≤ T _a ≤ +45 °C