



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

Certificate No.: IECEx BVS 15.0062X issue No.:0 Certificate history:

Status: **Current**

Date of Issue: **2015-07-14** Page 1 of 4

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

Electrical Apparatus: **mA-Isolating Repeater type 9164/13-20-0***
Optional accessory:

Type of Protection: **Equipment protection by intrinsic safety "i", Equipment protection by encapsulation "m", Equipment protection by increased safety "e"**

Marking:

Marking	Type
Ex e mb [ia Ga] IIC T4 Gb [Ex ia Da] IIIC	9164/13-20-06
Ex ib [ia Ga] IIC T4 Gb [Ex ia Da] IIIC	9164/13-20-08

Approved for issue on behalf of the IECEx
Certification Body:

H.-Ch. Simanski

Position:

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





IECEX Certificate of Conformity

Certificate No.: IECEx BVS 15.0062X

Date of Issue: 2015-07-14

Issue No.: 0

Page 2 of 4

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

Additional 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:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-18 : 2014 Edition: 4.0	Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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/ExTR15.0056/00](#)

Quality Assessment Report:

[DE/BVS/QAR10.0002/06](#)



IECEx Certificate of Conformity

Certificate No.: IECEx BVS 15.0062X

Date of Issue: 2015-07-14

Issue No.: 0

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

General product information:

The mA-Isolating Repeater Type 9164 is an explosion protected apparatus per IEC 60079-11 for use in Zone 1 resp. for use outside the hazardous area (dust).

With the mA-Isolating Repeater is converted an active 4 ... 20 mA signal (from a power source) to a galvanically isolated, passive 4 ... 20 mA signal (current sink). The mA-Isolating Repeater is passive, both the input side and output side. In all variants the input circuit is isolated from the output circuit.

If used in Zone 1, the Repeater type 9164/13-20-06 must be fitted in an enclosure which complies with the requirements of IEC 60079-7.

CONDITIONS OF CERTIFICATION: YES as shown below:

If used in Zone 1, the mA-Isolating Repeater type 9164/13-20-06 must be fitted in an enclosure which complies with the requirements of IEC 60079-7; this has to be certified separately. The cover of enclosure shall have a label with the following content: WARNING – NON-INTRINSICALLY SAFE CIRCUITS PROTECTED BY INTERNAL IP30 COVER.



IECEx Certificate of Conformity

Certificate No.: IECEx BVS 15.0062X

Date of Issue: 2015-07-14

Issue No.: 0

Page 4 of 4

EQUIPMENT(continued):

Parameters

1 Intrinsically safe input, type 9164/13-20-08 (Ex i – Ex i)

Voltage	U_i DC 30	V
Current	I_i 150	mA
Power	P_i 1	W
Effective internal capacitance	C_i negligible	
Effective internal inductance	L_i negligible	

2 Non-intrinsically safe input, type 9164/13-20-06 (Ex e – Ex i)

Maximum safety voltage	U_m AC 253	V
Nominal voltage	U_N 30	V
Nominal current	I_N 30	mA

3 Intrinsically safe output, type 9164/13-20-0f (f = 6 or 8)

Voltage	U_i DC 30	V
Current	I_i 150	mA
Power	P_i 1	W
Effective internal capacitance	C_i negligible	
Effective internal inductance	L_i negligible	

4 Ambient temperature range

T_a -40 °C ... +75 °C



IECEX Certificate of Conformity



Certificate No.: IECEx BVS 15.0062 X
Annex
Page 1 of 1

Type Designation

mA-Isolating Repeater Type 9164 / 1 3 - 2 0 - 0 *
a b c d e f

Ex e, internal fuse	6
Ex i, without fuse	8