



IECEx Certificate of Conformity

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 09.0046X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 3	Issue 2 (2012-04-23)
Date of Issue:	2022-11-21		Issue 1 (2011-02-17)
Applicant:	R. STAHL Schaltgeräte GmbH Am Bahnhof 30 74638 Waldenburg Germany		Issue 0 (2009-08-10)
Equipment:	Temperature Transmitter type 9182/*0-5*-**		
Optional accessory:			
Type of Protection:	Intrinsic Safety "i", Type of Protection "n", Increased Safety "e"		
Marking:	for type 9182/*0-5*-1*	for type 9182/*0-5*-6*	
	Ex ec nC [ia Ga] IIC T4 Gc [Ex ia Da] IIIC	Ex ec nC IIC T4 Gc	

Approved for issue on behalf of the IECEx
Certification Body:

Dr Michael Wittler

Position:

Deputy Head of Certification Body

Signature:
(for printed version)

Date:
(for printed version)

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2. This certificate is not transferable and remains the property of the issuing body.
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Certificate issued by:

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

 **DEKRA**
On the safe side.



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

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

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

[IEC 60079-15:2017](#) Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:5.0

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
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/ExTR09.0042/02](#)

Quality Assessment Report:

[DE/BVS/QAR10.0002/18](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Subject and Type

See Annex

Description

The Temperature Transmitter type 9182 is an associated apparatus per IEC 60079-11 as well as an apparatus under controlled environments per IEC 60079-7. The intrinsically safe circuits are galvanically separated from each other as well as from the non-I.S. signal circuits and from the power supply circuit.

The Temperature Transmitter serves to connect up to 2 thermoelement sensors (TC), resistance thermometers (RTD), potentiometers or passive voltage sensors in an intrinsically safe manner. The device linearizes the temperature signal and converts it to a standard current or voltage. In addition, it possesses switch contacts for error indication and, optionally, up to two switch contacts per channel to indicate limit infringements.

Parameters

See Annex

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1 For installation in areas, where EPL Gc equipment is required, the equipment shall be installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with IEC 60079-0.
- 2 The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Assessment of Temperature Transmitter in accordance with the current standard versions
- Modification of the marking
- Update of the documentation

Annex:

[BVS_09_0046X_Stahl_Annex_issue3.pdf](#)



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Subject and Type

Temperature Transmitter type 9182/*0-5*-**

Instead of the *** in the complete denomination numerals will be inserted which characterize modifications:

Temperature Transmitter	9182/	*	0	-	5	*	-	*	*
Number of channels:									
1									
2									
Output:									
0	No analog output								
1	Analog 0/4-20 mA								
3	Analog 0/1-5 V								
9	Analog 0/4-20 mA passive								
Power supply									
1	24 V DC, associated apparatus								
6	24 V DC, nonincendive apparatus								
Special functions									
1	without limit value contacts with line fault detection								
2	2 limit value contacts per channel with line fault detection								
3	SIL 2, without limit value contacts with line fault detection								
4	SIL 2, 2 limit value contacts per channel with line fault detection								

Parameters

1	Power input Terminal No. 7 (L+), 9 (L-) and pac-bus connector V007 / 1 (+), 2 (-)				
	Nominal voltage	U_n	DC	24 V (18-31.2V)	
	Nominal current	I_n		80	mA
	Maximum voltage	U_m	AC	253	V
2	Non-intrinsically safe signal circuits				
	Maximum voltage	U_m	AC	253	V
2.1	Output circuit and switching contact circuits				
2.1.1	Type 9182/20-51-*1 and Type 9182/20-51-*3 Output 1: Terminal 1 and 2 Output 2: Terminal 5 and 6				
	Nominal voltage	U_n	DC	15	V
	Nominal current	I_n		20	mA
2.1.2	Type 9182/10-51-*1 and Type 9182/10-51-*3 Output 1: Terminal 1 and 2				
	Nominal voltage	U_n	DC	15	V
	Nominal current	I_n		20	mA



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2.1.3 Type 9182/10-51-*2 and Type 9182/10-51-*4
Output 1: Terminal 1 and 2

Nominal voltage	U_n	DC	15	V
Nominal current	I_n		20	mA

Switch contact 1: Terminal 3 and 4
Switch contact 2: Terminal 5 and 6

Nominal voltage	U_n	AC/DC	30	V
Nominal current	I_n		100	mA

2.1.4 Type 9182/10-50-*2 and Type 9182/10-50-*4
Switch contact 1: Terminal 3 and 4
Switch contact 2: Terminal 5 and 6

Nominal voltage	U_n	AC/DC	30	V
Nominal current	I_n		100	mA

2.1.5 Type 9182/20-50-*2 and Type 9182/20-50-*4
Switch contact 1: Terminal 1 and 2
Switch contact 2: Terminal 2 (together with switch contact 1), 3
Switch contact 3: Terminal 5 and 6
Switch contact 4: Terminal 6 (together with switch contact 3), 4

Nominal voltage	U_n	AC/DC	30	V
Nominal current	I_n		100	mA

2.1.6 Type 9182/10-53-*1
Output 1: Terminal 1 and 2

Nominal voltage	U_n	DC	5	V
Nominal current	I_n		10	mA

2.1.7 Type 9182/10-53-*2
Output 1: Terminal 1 and 2

Nominal voltage	U_n	DC	5	V
Nominal current	I_n		10	mA

Switch contact 1: Terminal 3 and 4
Switch contact 2: Terminal 5 and 6

Nominal voltage	U_n	AC/DC	30	V
Nominal current	I_n		100	mA

2.1.8 Type 9182/20-53-*1
Output 1: Terminal 1 and 2
Output 2: Terminal 5 and 6

Nominal voltage	U_n	DC	5	V
Nominal current	I_n		10	mA



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2.1.9 Type 9182/10-59-*1 and Type 9182/10-59-*3
Output 1: Terminal 1 and 2

Nominal voltage	U_n	DC	22	V
Nominal current	I_n		20	mA

2.1.10 Type 9182/20-59-*1 and Type 9182/20-59-*3
Output 1: Terminal 1 and 2
Output 2: Terminal 5 and 6

Nominal voltage	U_n	DC	19	V
Nominal current	I_n		20	mA

2.1.11 Type 9182/10-59-*2 and Type 9182/10-59-*4
Output 1: Terminal 1 and 2

Nominal voltage	U_n	DC	22	V
Nominal current	I_n		20	mA

Switch contact 1: Terminal 3 and 4
Switch contact 2: Terminal 5 and 6

Nominal voltage	U_n	AC/DC	30	V
Nominal current	I_n		100	mA

2.2 Error indicator circuits
Circuit 1: Terminal No. 8, 9 (-); circuit 2: pac-Bus connector V007/ 3, 4
Circuit 1 is connected to the power input via the return conductor.
Circuit 2 is galvanically isolated from circuit 1.

Nominal voltage	U_n	AC/DC	30	V
Nominal current	I_n		100	mA

2.3 Configuration interface (RS232)
plug connector V401 behind the front cover

Nominal voltage	U_n		± 15	V
Nominal current	I_n		10	mA

2.4 Input circuits
Terminal No. 10 to 15, any interconnection

Maximum voltage	U_n		6.5	V
Maximum current	I_n		19.7	mA

3 Intrinsically safe output circuits
Terminal No. 10 to 15, any interconnection

Maximum output voltage	U_o		6.5	V
Maximum output current	I_o		19.7	mA
Linear output characteristics				
Maximum output power	P_o		32	mW



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Maximum external capacitance C_o or maximum external inductance L_o :

	IIB	IIC
L_o	330 mH	90 mH
C_o	570 μ F	25 μ F

4 Ambient temperature range

$-20\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$