



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 PTB 08.0007** Page 1 of 5 Certificate history:
Status: **Current** Issue No: 3 Issue 2 (2013-10-28)
Date of Issue: 2020-02-19 Issue 1 (2011-04-18)
Issue 0 (2008-02-21)
Applicant: **R. STAHL Schaltgeräte GmbH**
Am Bahnhof 30
74638 Waldenburg
Germany
Equipment: **Fieldbus Terminator, Type 9418/0.-201-10**
Optional accessory:
Type of Protection: **Intrinsic Safety (Gas + Dust), Encapsulation (Gas), Protection by Enclosures (Dust)**
Marking: Type 9418/01-201-10:
Ex mb IIC T5 Gb at Ta ≤ + 75 °C
Ex mb IIC T6 Gb at Ta ≤ + 40 °C
Ex tb IIIC T100 °C Db at Ta ≤ + 75 °C
Ex tb IIIC T65 °C Db at Ta ≤ + 40 °C
Type 9418/02-201-10:
Ex ib IIC T5 Gb at Ta ≤ + 75 °C
Ex ib IIC T6 Gb at Ta ≤ + 40 °C
Ex ib IIIC T100 °C Db at Ta ≤ + 75 °C
Ex ib IIIC T65 °C Db at Ta ≤ + 40 °C

Approved for issue on behalf of the IECEx
Certification Body:

Dr.-Ing. F. Lienesch

Position:

**Head of Department "Explosion Protection in Sensor
Technology and Instrumentation"**

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.
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Certificate issued by:

Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100
38116 Braunschweig
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

IEC 60079-18:2014 Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"
Edition:4.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

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/PTB/ExTR13.0061/01](#)

Quality Assessment Report:

[DE/BVS/QAR10.0002/15](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The fieldbus terminator type 9418/0*-201-10 serves as a low-reflectance a.c.-matching element for a two-wire fieldbus line.

Two variants are available, each intended for connection to a non-intrinsically safe circuit or to an intrinsically safe circuit respectively.

The maximum permissible ambient temperature range is $-40\text{ °C} \leq T_a \leq +75\text{ °C}$ for temperature class T5 or T100 °C and $-40\text{ °C} \leq T_a \leq +40\text{ °C}$ for T6 or T65 °C.

SPECIFIC CONDITIONS OF USE: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Adaptation of the test specification to the currently applicable standard
- Updating of the list of currently applicable technical documentation
- Adaptation of the operating instructions regarding the changes made



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Additional information:

For electrical and thermal specifications reference is made to the annex

Annex:

[Annex to IECEx PTB 08.0007_issue 03.pdf](#)



Applicant: R. STAHL Schaltgeräte GmbH
Electrical Apparatus: Fieldbus Terminator, Type 9418/0.-201-10

Description of equipment

The fieldbus terminator type 9418/0*-201-10 is used as a low-reflectance a.c.-matching element for a two-wire fieldbus line.

Two variants are available, either intended for connection to a non-intrinsically safe circuit or to an intrinsically safe circuit respectively.

The assignment of the maximum permissible ambient temperature range to the respective variant and the marking is shown in the following table.

Type 9418/01-201-10 ('Ex m')	Type 9418/02-201-10 ('Ex i')	Ambient temperature range
II 2 G Ex mb IIC T6 Gb	II 2 G Ex ib IIC T6 Gb	-40°C ≤ T _a ≤ +40°C
II 2 D Ex tb IIIC T65 °C Db	II 2 D Ex ib IIIC T65 °C Db	
II 2 G Ex mb IIC T5 Gb	II 2 G Ex ib IIC T5 Gb	-40°C ≤ T _a ≤ +75°C
II 2 D Ex tb IIIC T100 °C Db	II 2 D Ex ib IIIC T100 °C Db	

Electrical data

Type 9418/01-201-10

Fieldbus terminal
(both strands)

Maximum peak voltage U_p = 50 V
AC-bus-power, maximum: 320 mW

Type 9418/02-201-10

Fieldbus terminal
(both strands)

type of protection Intrinsic Safety Ex ib IIC or Ex ib IIIC
only for connection as a matching element to a circuit
according to the FISCO/FNICO-model

The circuit is electrically isolated from ground.

Special conditions for safe use

none

Notes for manufacture and operation

In the case of operation in potentially explosive gas or dust atmospheres, the Fieldbus Terminator, type 9418/01-201-10 must be mounted in an enclosure which meets the requirements of an appropriate, recognized type of protection in accordance with IEC 60079-0 or in an appropriately certified cable gland.