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 EPS 22.0084X**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2022-11-08

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

Equipment: **Media Converter Type 9786/12-11 and 9786/15-12**

Optional accessory:

Type of Protection: **Intrinsic Safety "i", increased Safety "e", encapsulation "m", optical radiation "op is"**

Marking: Ex eb mb ib [op is Ga] IIC T4 Gb and [Ex ib Db] [Ex op is Da] IIIC

Ex ec mc ic [op is Ga] IIC T4 Gc and [Ex op is Da] IIIC

Approved for issue on behalf of the IECEx Certification Body: **Ulrich Feike**

Position: **Head of Certification**

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.

Certificate issued by:

Bureau Veritas Consumer Products Services Germany GmbH
Businesspark A96
86842 Türkheim
Germany

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

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 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

IEC 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

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/EPS/ExTR22.0078/00

Quality Assessment Report:

DE/BVS/QAR10.0002/18

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The media converter types 9786/12-11 and 9786/15-12 converts signals from an RS485-interface into intrinsically safe optical signals or signals of the intrinsically safe optical interfaces into signals for the RS485 interface.

The media converters have one RS485-IS-interface (…-12-11) respective one RS485-interface (…-15-12) and two inherently safe optical interfaces (each transmitter and receiver).

Electrical data:

Supply:	24VDC (18…32VDC), I ≤ 100 mA, P ≤3,2 W - maximum voltage Um = 40VDC
Optical interface:	in kind of protection inherently safe optical radiation „op is“
RS485-IS-Interface:	Types 9786/12-11 in kind of protection intrinsically safety Ex ib IIC resp. Ex ib IIIC Maximum values: Ui = 4.2 V Uo = 4.2 V Io = 131 mA Po = 124 mW Linear output characteristic Maximum effective internal capacitance Ci = 35.7 µF The effective internal inductance is negligible small resp.
RS485-Interface	Types 9786/15-12 Unom = 5 V - maximum voltage Um = 40VDC
Fault signal output:	Types 9786/12-11 in kind of protection intrinsically safety Ex ib IIC resp. Ex ib IIIC Maximum values: Ui = 10 V Maximum effective internal capacitance Ci = 0.03 µF The effective internal inductance is negligible small resp. Types 9786/15-12 Unom = 24 V - maximum voltage Um = 40VDC

SPECIFIC CONDITIONS OF USE: YES as shown below:
The manual has to be recognized, especially in regard of the installation references and the data of the appropriate versions.

When used in potentially explosive gas atmospheres according the category given in the marking of the device, the media converters shall only be installed in an enclosure that provides a minimum protection of IP54 in accordance to IEC 60079-0 and where applicable in accordance to the IEC 60079-7.

When used in potentially explosive dust atmospheres according the category given in the marking of the device, the media converters shall only be installed in an enclosure in accordance to IEC 60079-31.