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 17.0050X

Issue No: 0

Certificate history:
Issue No. 0 (2017-07-03)

Status: **Current**

Date of Issue: **2017-07-03**

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

Equipment: **Electronic Relay Module type 9174/10-14-00**
Optional accessory:

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

Marking:

Ex eb mb [ib Gb] IIC T4 Gb
[Ex ib Db] IIIC

Approved for issue on behalf of the IECEx Certification Body: Jörg Koch

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.

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
On the safe side.

IECEx Certificate of Conformity

Certificate No: IECEx BVS 17.0050X Issue No: 0

Date of Issue: **2017-07-03** 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 : 2015 Edition:5.0	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/ExTR17.0052/00

Quality Assessment Report:

DE/BVS/QAR10.0002/10

IECEx Certificate of Conformity

Certificate No: IECEx BVS 17.0050X Issue No: 0

Date of Issue: **2017-07-03**

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Type Designation

Electronic Relay Module type 9174/10-14-00

Description

The relay module type 9174/10-14-00 is an associated apparatus per IEC 60079-11 for use in hazardous areas classified Zone 1.
The non-intrinsically safe circuits are connected via terminals with type of protection Increased Safety. The non-intrinsically safe parts of the circuit are encapsulated with a compound providing type of protection Ex mb.
The intrinsically safe input circuits are designed in type of protection Ex ib and are galvanically separated from each other, as from the non I.S. signal circuits.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1 If used in Zone 1, the Electronic Relay Module type 9174/10-14-00 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. The specified ambient temperature range has to be observed at the installation point of the Electronic Relay Module.

2 When screwed into an enclosure in type of protection increased safety:
The installation of the Electronic Relay Module type 9174/10-14-00 shall be carried out in such a way that clearances between bare conducting parts of intrinsically safe circuits and parts of the metallic enclosure or bare conducting parts of non-intrinsically safe circuits are in accordance with IEC 60079-11:2011, clause 6.2.1.
The installation of the Electronic Relay Module type 9174/10-14-00 shall be carried out in such a way that the separation distances between the connection facilities of the Electronic Relay Module's type 9174/10-14-00 intrinsically safe circuits and the connection facilities of non-intrinsically safe circuits are in accordance with the requirements of IEC 60079-11:2011, clause 6.2.1.

3 Each Electronic Relay Module type 9174/10-14-00 has to be fitted with an external fuse rated 3.15 A. The breaking capacity shall be at least 1500 A @ 250 VAC.

IECEx Certificate of Conformity

Certificate No: IECEx BVS 17.0050X Issue No: 0

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EQUIPMENT (continued):

Parameters

1. Intrinsically safe input circuits (terminals 3 - 4)
The intrinsically safe input is galvanically isolated from the intrinsically safe output and has no connection to ground.

Voltage	U_i	DC	28	V
Current	I_i		150	mA
Power	P_i		780	mW
Internal capacitance	C_i		1.2	nF
Internal inductance	L_i			negligible

2. Non-intrinsically safe output circuits (terminals 5 - 6)

Maximum voltage	U_m	AC	253	V
Nominal voltage	U_n	DC	31.2	V
Nominal current	I_n		2	A
External fuse			3.15	A

3. Ambient temperature range T_a -20 °C up to +65 °C