



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

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEX PTB 17.0037U**

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Certificate history:

Status: **Current**

Issue No: 2

[Issue 1 \(2020-09-01\)](#)

[Issue 0 \(2017-11-15\)](#)

Date of Issue: 2021-07-06

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

Ex Component: Contact element type 8082/3-**-*_-*

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Flameproof Enclosure "db" and Increased Safety "eb"**

Marking: Ex db eb IIC Gb

Ex db eb I Mb

Approved for issue on behalf of the IECEx
Certification Body:

Dr.-Ing. Detlev Markus

Position:

Head of Department "Explosion Protection in Energy Technology"

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



Certificate issued by:

Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100
38116 Braunschweig
Germany





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Date of issue: 2021-07-06

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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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

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/PTB/ExTR17.0043/02](#)

Quality Assessment Report:

[DE/BVS/QAR10.0002/16](#)



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Ex Component(s) covered by this certificate is described below:

Description

The contact element type 8082/3-**-*-** is a flameproof encapsulated switching element. It can be used to connect or disconnect load, control and signal circuits in hazardous zones 1 or 2. It is intended to be mounted within an enclosure of protection type "eb" (increased safety). The enclosure usually will be equipped with an insert cover also from protection type "eb".

The device consists of the enclosure, the base, the cover, the actuating and the contacting parts. The base and cover are welded to the enclosure by means of ultrasonic welding. This construction forms the flameproof enclosure.

For further technical information, notes for installation and operation and schedule of limitations see Annex.

SCHEDULE OF LIMITATIONS:

The use of this component requires a further assessment by an ExCB.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- 1) New test according to IEC 60079-0:2017, IEC 60079-1:2014 and IEC 60079-7:2017.
- 2) Alternative Material Stainless Steel 1.4305 for bolt.

Annex:

[COCA170037U-02.pdf](#)



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

Equipment: Contact Element type 8082/3-**-**-*

Description:

The contact element type 8082/3-**-**-* is a flameproof encapsulated switching element. It can be used to connect or disconnect load, control and signal circuits in hazardous zones 1 or 2. It is intended to be mounted within an enclosure of protection type "eb" (increased safety). The enclosure usually will be equipped with an insert cover also from protection type "eb".

The device consists of the enclosure, the base, the cover, the actuating and the contacting parts. The base and cover are welded to the enclosure by means of ultrasonic welding. This construction forms the flameproof enclosure.

Nomenclature:

8082	/	3	-	*	*	-	*	-	*	-	*
a	b	c		d	e		f		g		h

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>a Type series</p> <p>b Version
/- Contact element
A - Assembly internal
C - Customer assembly</p> <p>c Design
3 – Enclosure welded, 2nd generation</p> <p>d Mounting method
1 – Rail mounting
2 – Front mounting</p> | <p>e Terminals
1 –Terminal screw</p> <p>f Contact type
1 – NC (break contact)
2 – NO (make contact)
3 – NO/NC (combination of 2 separate contact elements NC and NO on one DIN rail)</p> <p>g Contact material
0 – Silver-nickel-contact (standard)
1 – Silver-nickel-contact, gold plated</p> <p>h Auxiliary
1 – Disconnect terminal (lockable attachment, rail mounting only)</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Service temperature range:

-60 °C ≤ T_s ≤ +100 °C



Electrical Data:

Rated operational voltage U_e :	550 V
Conventional free air thermal current I_{th} :	10 A
Conventional enclosed thermal current I_{the} :	6 A
Rated operational current I_e :	see below
Conductor cross-section:	0.32 ... 2.5 mm ² (solid wire, fine-stranded)
Torque of the terminals:	1.2 Nm

Note: Flexible wires are suitable only with wire end ferrules!

Utilization categories (switching categories):

AC-12	250 V, 10 A	400 V, 7.5 A	550 V, 5 A
AC-15	150 V, 10 A	250 V, 6 A	400 V, 4 A
DC-13	110 V, 1A	N/A	N/A
DC-13 ¹⁾	60 V, 6 A	110 V, 2.5 A	250 V, 1.25 A
¹⁾ Two contact elements in series			

Other, then the above-mentioned rated values are permissible, in the case of compliance with the switching capacity, depending on operating mode and category permitted.

Notes for manufacturing and operation:

1. The contact element type 8082/3-**-*-** shall be mounted in an enclosure that meets the requirements of an approved type of protection as specified in IEC 60079-0, section 1 and has an ingress protection of at least IP54 according to IEC 60079-0 and IEC 60079-7.
2. When installing the contact element type 8082/3-**-*-** in an enclosure designed to Increased Safety "e" type of protection in compliance with IEC 60079-7, the clearance and creepage distances shall be maintained.
3. The connecting cables of the contact element type 8082/3-**-*-** shall be fixed and routed so that it will be adequately protected against mechanical damage.

This information must accompany each device in an adequate form.

Schedule of Limitations:

The use of this component requires a further assessment by an ExCB.