



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 06.0025** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 3 Issue 2 (2021-06-14)
Date of Issue: **2021-10-05** Issue 1 (2012-03-12)
Applicant: **R. STAHL Schaltgeräte GmbH** Issue 0 (2006-03-30)
Am Bahnhof 30
74638 Waldenburg
Germany
Equipment: **Control and Signal Device type 8040/*****_** *** * **_* ** * **_* ** * **_* ** * **_* and 8040/**-V30-***_***
Optional accessory:
Type of Protection: **"db", "eb", "ia", "ib", "mb", "tb"**
Marking: **Ex db eb ia ib mb IIA, IIB, IIC T6, T5 Gb**
Ex tb IIIC T80 °C, T95 °C Db

Approved for issue on behalf of the IECEx
Certification Body:

Dr. -Ing. D. Markus

Position:

**Head of Department "Explosion Protection in Energy
Technology"**

Signature:
(for printed version)

Date:

05.10.21

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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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 60079-11:2011 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 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
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/PTB/ExTR06.0045/03](#)

Quality Assessment Report:

[DE/BVS/QAR10.0002/17](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Description of equipment

The Control and Signal Device, type 8040, consists of one or several plastic enclosures designed to type of protection Increased Safety "e". It can be equipped with flanges.

The enclosures can accommodate control and indicator components as well as terminals for intrinsically safe and non-intrinsically safe circuits. The area designated for intrinsically safe circuits will be marked, e.g. by means of light-blue colour.

Connection is by means of Ex-type cable glands.

All the installed and attached elements will be tested and certified under separate examination certificates.

For more information see annex.

SPECIFIC CONDITIONS OF USE: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- 1) Standard update to latest IEC standards
- 2) Combination of enclosures possible
- 3) Wall thickness adjusted

Annex:

[COCA060025-03.pdf](#)



- 5 = Moulded flange (Side C and D)
 - 6 = Metal flange (Side C and D)
 - 7 = Metal plate (Side C: with PE connection inside)
 - 8 = Metal plate (Side D: with PE connection inside)
 - 9 = Metal plate (Side C and D: with PE connection inside)
- f Additional information X = without (according to type code)
Z = with information (according to customer order)
- g Further information of built in components and actuators (not ex-relevant).

For list of components see 8040 0 000 030 0.

Information for items "d) ... g)", as defined in the general type code, is documented in the product documentation. The product documentation is available via the serial number and the barcode on the nameplate.

Series Type Code

8040	/	*	*	-	V30	-	***	-	*
a	/	b	c	-	d	-	e	-	f

- a Type series
 - b Enclosure height
 - 1 = 72 mm (low cover)
 - 2 = 97 mm (high cover)
 - c Enclosure size
 - 1 = 1-way
 - 2 = 2-way
 - 3 = 3-way
 - d Design V30 = Installation switch
 - e Assembly plan
 - 033 = 2-pole on/off switch
 - 035 = change over switch
- f Further information of built-in components and actuators (not ex-relevant).

Technical data

Dimensions of the enclosures:

Type	Length [mm]	Width [mm]	Depth [mm]
8040/11	93	80	72
8040/12	139	80	72
8040/13	185	80	72
8040/22	139	80	95
8040/23	185	80	95



Electrical data

Rated voltage*:	Max. 690 V
Rated current*:	Max. 6 A...16 A
Power input for indicator lights:	Max. 1.5 W
Rated cross section, installations:	Max. 6 mm ²
Rated cross section, terminal block / connection terminals:	Max. 4 mm ²

* depending on type of terminal and Ex components used.

Ambient temperature range

-60 °C to +74 °C

Temperature class acc. to the max. ambient temperature

Type 8040/11

Maximum installed configuration						
Current [A]	8082-8082-8082		8082-8010-8082		8008 (2-pole)	
	T6 / T80 °C	T5 / T95 °C	T6 / T80 °C	T5 / T95 °C	T6 / T80 °C	T5 / T95 °C
2	73 °C	73 °C	62 °C	71 °C	-	-
4	72 °C	72 °C	60 °C	71 °C	74 °C	74 °C
6	68 °C	71 °C	59 °C	70 °C	-	-
10	-	-	-	-	70 °C	71 °C
16					55 °C	60 °C

Type 8040/12

Maximum installed configuration										
Current [A]	8082-8082-8082		8082-8010-8082		8008 (2-pole)		8405/6		8082-8082-8082-8082	
	T6 / T80 °C	T5 / T95 °C	T6 / T80 °C	T5 / T95 °C	T6 / T80 °C	T5 / T95 °C	T6 / T80 °C	T5 / T95 °C	T6 / T80 °C	T5 / T95 °C
2	74 °C	74 °C	61 °C	70 °C	-	-	-	-	73 °C	73 °C
4	71 °C	71 °C	58 °C	70 °C	74 °C	74 °C	74 °C	74 °C	71 °C	71 °C
6	64 °C	68 °C	56 °C	66 °C	-	-	-	-	65 °C	69 °C
10	-	-	-	-	70 °C	71 °C	73 °C	73 °C	-	-
15	-	-	-	-	-	-	64 °C	68 °C	-	-
16					59 °C	62 °C				



Type 8040/13

Maximum installed configuration						
Current [A]	8082-8082-8082 8082-8082-8082 8082-8082-8082		8082-8010-8082 8082-8010-8082 8082-8010-8082		8082-8082-8082-8082 80828082-8082-8082	
	T6 / T80 °C	T5 / T95 °C	T6 / T80 °C	T5 / T95 °C	T6 / T80 °C	T5 / T95 °C
2	74 °C	74 °C	60 °C	69 °C	74 °C	74 °C
4	70 °C	70 °C	57 °C	67 °C	71 °C	71 °C
6	61 °C	65 °C	54 °C	63 °C	64 °C	66 °C

Maximum installed configuration				
Current [A]	8082-8010-8082 8008 (2-pole)		8405/6 8008 (2-pole)	
	T6 / T80 °C	T5 / T95 °C	T6 / T80 °C	T5 / T95 °C
2 / 4	62 °C	72 °C	-	-
4 / 10	54 °C	62 °C	-	-
6 / 16	44 °C	45 °C		
4 / 4	-	-	74 °C	74 °C
10 / 10	-	-	68 °C	70 °C
15 / 15	-	-	52 °C	57 °C

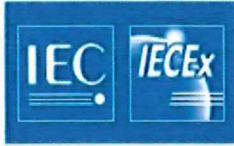
Type 8040/23

Maximum installed configuration		
Current [A]	8405/6 8008 (3-pole+Aux)	
	T6 / T80 °C	T5 / T95 °C
4 / 4	74 °C	74 °C
10 / 10	65 °C	67 °C
15 / 16	41 °C	48 °C

Note: Rated current of auxiliary contact is ≤ 1 A.

For further information see test protocol 11568.

Ingress protection according to IEC 60079-0, IEC 60079-7 and IEC 60079-31:
without flanges IP66
with flanges IP65
for enclosure combination IP64 with silicon gasket D0130-01 or D0308-00



The rated values are maximum values, the actual electrical values depend on the electrical equipment incorporated. Within the scope of these maximum permissible values and with due regard to the standards, the manufacturer specifies the final rated values dependent on the system conditions, mode of operation, utilization category, etc. The characteristic values of the intrinsically safe circuits are to be given by the manufacturer on his own responsibility.

The maximum permissible ambient temperature range of the terminal enclosure can be limited by the maximum permissible service temperature ranges of the separately certified components.

The composition of the type of protection marking will be based on the types of protection of components actually used.

The arrangement of the Ex-marking will be based on the level of protection of components used.

Notes for manufacturing and operation:

Components attached or installed have to be of a technical standard that complies with the specifications on the cover sheet. They must be suited for the operating conditions and have a separate examination certificate. The special conditions specified for the components must be complied with and may have to be included in the type test. This also applies to components already specified in the technical description.

In order to ensure the ingress protection IP, the cover of the empty enclosure, the flange enclosure, the sealing frame and other Ex-components must be properly installed and with the appropriate torque.

The fastening force of the connecting piece between two enclosures must be properly fastened with the correct torque and must not be influenced by other forces (e.g. wall mounting).

Equipment of the type of protection intrinsic safety "i" is to be installed in such a way that the distances, creepage distances and clearances between intrinsically safe circuits and non-intrinsically safe circuits comply with the requirements of IEC 60079-11.

When more than one intrinsically safe circuit is used, the rules for interconnection are to be observed.

When components are installed into the empty enclosure, clearance and creepage distances specified in the standard IEC 60079-7 and IEC 60079-11 shall duly be complied with.

The enclosure with a coating of polyester powder must not be used in areas affected by charge-producing processes, mechanical friction and separation processes, electron emission (e.g. in the vicinity of electrostatic coating equipment), and pneumatically conveyed dust.