

### **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 06.0010U** Page 1 of 4

Issue 2 (2015-01-09) Issue No: 3 Status: Current Issue 1 (2013-03-15) Issue 0 (2006-02-23)

2024-02-09 Date of Issue:

R. STAHL Schaltgeräte GmbH Applicant:

Am Bahnhof 30 74638 Waldenburg

Germany

Control Switch / Load Disconnect Switch type 8008/2-\*\*\*\* and 8008/4-\*\*-\*\* Ex Component:

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 "d", Increased Safety "e"

Ex db eb IIC Gb Marking:

Approved for issue on behalf of the IECEx

Certification Body:

Position: **Head of ot Working Group Flame Transmission Processes** 

Dr. Ing. D. Markus

Signature:

(for printed version)

(for printed version)

- This certificate and schedule may only be reproduced in full.

  This certificate is not transferable and remains the property of the issuing body.

  The Status and authenticity of this certificate may be verified by visiting <a href="https://www.iecex.com">www.iecex.com</a> or use of this QR Code.



Certificate history:

Certificate issued by:

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





## IECEx Certificate of Conformity

Certificate No.: IECEx PTB 06.0010U Page 2 of 4

Date of issue: 2024-02-09 Issue No: 3

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 component 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 Ex

Edition:7.0

Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

IEC 60079-7:2017

Edition:5.1

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

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 component listed has successfully met the examination and test requirements as recorded in:

Test Report:

DE/PTB/ExTR06.0013/02

**Quality Assessment Report:** 

DE/BVS/QAR10.0002/19



Date of issue:

## IECEx Certificate of Conformity

Issue No: 3

Certificate No.:	IECEx PTB 06.0010U	Page 3 of 4		

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

2024-02-09

### **Description of equipment**

The flameproof control switch or load disconnect switch series 8008/2-\*\*\*-\*\* and 8008/4-\*\*-\*\* serves for switching of electrical and electronic components used to control, switch, regulate and monitor electrical machines and systems. The device is intended for installation in the enclosures or control panels with type of protection Increased Safety "e" for use in hazardous areas.

Further information see Annex.

### **SCHEDULE OF LIMITATIONS:**

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



# IECEx Certificate of Conformity

Certificate No.: IECEx PTB 06.0010U Page 4 of 4

Date of issue: 2024-02-09 Issue No: 3

### **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

1) New type 8008/4 added

2) Update of standards

3) Revision of Ex-Marking

Annex:

COCA060010-03.pdf



### Attachment to Certificate IECEx PTB 06.0010 U, Issue 3



Applicant: R. STAHL Schaltgeräte GmbH

Am Bahnhof 30 74638 Waldenburg

Germany

Equipment: Control Switch / Load Disconnect Switch type 8008/2-\*\*\*-\*\* and

8008/4-\*\*-\*\*\*

### **Description:**

The flameproof control switch or load disconnect switch series 8008/2-\*\*\*-\* and 8008/4-\*\*\*\*\*-\*\* serves for switching of electrical and electronic components used to control, switch,
regulate and monitor electrical machines and systems. The device is intended for installation
in the enclosures or control panels with type of protection Increased Safety "e" for use in
hazardous areas.

### **Nomenclature**

#### 8008/2

800	/	2	ı	*	***_**
a)	_	b)	ı	O	d)

- a) Type series
- b) 2 Version
- c) Version (construction):

0 - Control switch (1 layer) 1 or 2 pole 1 - Control switch (2 layer) 3 or 4 pole 6 - Load disconnect switch (2 or 3 layer) 3 or 4 pole

d) Options without relevance to explosion protection,

e.g. contact arrangement or gold plated contacts or silicone containing

### 8008/4

800	1	4	-	*	*	-	***_**
a)	/	b)	-	С	d	-	e)

- a) Type series
- b) 4 Version
- c) Mounting:
  - 1 Mounting rail installation
- d) Design:
  - 0 Control switch 1 or 2 pole
  - 1 Control switch 3 or 4 pole



## Attachment to Certificate IECEx PTB 06.0010 U, Issue 3



### 6 - Load disconnect switch 3 or 4 pole

e) Options without relevance to explosion protection; e.g. contact arrangement or gold plated contacts or silicone containing

### Service temperature

-60 °C ≤ T<sub>S</sub> ≤ +80 °C

### **Ambient temperature**

 $-60 \, ^{\circ}\text{C} \le T_{amb} \le +60 \, ^{\circ}\text{C} \, ^{*})$ 

\*) these ranges may be reduced by the manufacturer

### **Technical data**

### **Specification**

Rated voltage: up to 690 VAC / 230 VDC

Rated current: up to 16 A

Rated impulse voltage: 6 kV

### **Terminal capacity**

8008/2

Stranded: 1,5 ... 2,5 mm<sup>2</sup> (16 ... 14 AWG) Solid: 1,5 ... 4 mm<sup>2</sup> (16 ... 12 AWG)

8008/4

Stranded/ stranded with ferrules: max. 2 x 1,5 ... 2,5 mm<sup>2</sup> (16 ... 14 AWG)

max. 1 x 4 mm<sup>2</sup> (12 AWG)

Solid: max. 2 x 1,5 ... 2,5 mm<sup>2</sup> (16 ... 14 AWG)

max. 1 x 4 mm<sup>2</sup> (12 AWG)

### **Terminal torque**

1.8 Nm



### Attachment to Certificate IECEx PTB 06.0010 U, Issue 3



### **Dimensions**

#### 8008/2

Version	Length [mm]	Width [mm]	Height [mm] (without pin)	Volume of switch chamber
8008/2-0	45	45	48	max. 8 cm³
8008/2-1	45	45	61	max. 12 cm³
8008/2-6	45	45	74	max. 14 cm³

Note: Maximum internal free volume of chamber is defined only with installed shaft

(Pos. 2 in DWG 8008 0 45 00 0)

#### 8008/4

Version	Length [mm]	Width [mm]	Height [mm] (without pin)	Volume of switch chamber
8008/4-*0	45	45	47	max. 8 cm³
8008/4-*1	45	45	60	max. 12 cm³
8008/4-*6	45	45	74	max. 14 cm³

Note: Maximum internal free volume of chamber is defined only with installed shaft

(Pos. 2 in DWG 8008 0 000 055 0)

### Notes for manufacturing and operation:

- 1. The control switch or load disconnect switch series 8008/2-\*\*\*-\*\* and 8008/4-\*\*-\*\*\* shall be installed in an enclosure that meets the requirements of an approved type of protection in accordance with IEC 60079-0, section 1.
- 2. When installing the control switch or load disconnect switch series 8008/2-\*\*\*-\*\* and 8008/4-\*\*-\*\* in an enclosure designed to type of protection Increased Safety "e" as specified in IEC 60079-7, the clearance and creepage distances shown in section 4.3, section 4.4, and table 2 shall be duly considered.
- 3. The connecting cables of the control switch or load disconnect switch series 8008/2\*\*\*\*-\*\* and 8008/4-\*\*-\*\*\* 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.