



(1) **EU-TYPE EXAMINATION CERTIFICATE**  
**(Translation)**

(2) Component Intended for Use in Potentially Explosive Atmospheres  
**Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number:

**PTB 01 ATEX 1021 U**

**Issue: 2**

(4) Component: Load and Motor Switch type 8006/4-\*\*\*-\*\*

(5) Manufacturer: R. STAHL Schaltgeräte GmbH

(6) Address: Am Bahnhof 30, 74638 Waldenburg, Germany

(7) This component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential test report PTB Ex 23-12044.



(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-7:2015+A1:2018,  
 EN 60079-11:2012**

(10) The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This partial certification may be used as a basis for certification of an equipment or protective systems.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified component in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

(12) The marking of the component shall include the following:

 **II 2 G Ex db eb IIC Gb or II 2 G Ex db eb ia IIC Gb**  
 **I M2 Ex db eb I Mb or I M2 Ex db eb ia I Mb**

Konformitätsbewertungsstelle, Sektor Explosionsschutz

Braunschweig, April 24, 2023

On behalf of PTB:

*D. Markus*

Dr.-Ing. D. Markus  
 Direktor und Professor



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EU-Type Examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

(13)

## SCHEDULE

(14) **EU-Type Examination Certificate Number PTB 01 ATEX 1021 U, Issue: 2**

(15) Description of Component

The load and motor switch type 8006/4-\*\*\*-\*\* consists of flameproof switch decks which can be combined to form a package or gang switch.  
 The connection is made to the integrated screw terminals.

Nomenclature

8006	/	*	-	*	*	*	-	*	*
1)	/	2	-	3)					

1) Type / Series

2) Design 4 – Load and Motor Switch

3) Additional variations filled in, if required not affecting certification

Technical data

Rated insulation voltage	max.	690 V AC
Rated operational voltage	max.	690 V AC
Rated current I <sub>e</sub>	max.	32 A
Rated cross section	min.	2.5 mm <sup>2</sup> / 14 AWG solid, stranded or fine-stranded with wire end ferrule
	max.	10 mm <sup>2</sup> / 8 AWG solid, stranded or fine-stranded with wire end ferrule
PE conductor size		Same or larger than line / load cross section
Tightening torque of the terminals		2 Nm
8006/4 – Ex i Version:		
Rated operation voltage	max.	690 V AC
Safety specific values		U <sub>i</sub> ≤ 40 V; I <sub>i</sub> ≤ 200 mA; Inductance L <sub>i</sub> and capacity C <sub>i</sub> negligible

**SCHEDULE TO EU-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1021 U, Issue: 2**

Service temperature

$$-60\text{ °C} \leq T_B \leq +100\text{ °C}$$

The maximum permitted service temperature of the device is 100 °C and it shall not be exceeded. See table below for measured results at 100 % rated current with min. cross section at max. ambient temperature.

Max. rated current	Max. ambient temperature					
	+40 °C	+50 °C	+55 °C	+60 °C	+70 °C	+80 °C
	Max. surface temperature					
16 A Min. cross section 2.5 mm <sup>2</sup>	55.4 °C	65.4 °C	70.4 °C	75.4 °C	85.4 °C	95.4 °C
25 A Min. cross section 4.0 mm <sup>2</sup>	68.1 °C	78.1 °C	83.1 °C	88.1 °C	98.1 °C	---
32 A Min. cross section 10 mm <sup>2</sup>	67.6 °C	77.6 °C	82.6 °C	87.6 °C	97.6 °C	---

Ambient temperature

$$-60\text{ °C} \leq T_{\text{amb}} \leq +55\text{ °C} \dots +80\text{ °C} *$$

\* Depends on rated current and cross section of conductor connection.

Maximum surface temperature

Max. rated current	Max. ambient temperature					
	+40 °C	+50 °C	+55 °C	+60 °C	+70 °C	+80 °C
	Max. surface temperature					
16 A Min. cross section 2.5 mm <sup>2</sup>	56.3 °C	66.3 °C	71.3 °C	76.3 °C	86.3 °C	96.3 °C
25 A Min. cross section 4.0 mm <sup>2</sup>	66.9 °C	76.9 °C	81.9 °C	86.9 °C	96.9 °C	---
32 A Min. cross section 10 mm <sup>2</sup>	70 °C	80 °C	85 °C	90 °C	100 °C	---

Temperature class

Max. rated current	Max. ambient temperature					
	+40 °C	+50 °C	+55 °C	+60 °C	+70 °C	+80 °C
	Temperature class					
16 A Min. cross section 2.5 mm <sup>2</sup>	T6	T6	T6	T6	T5	T4
25 A Min. cross section 4.0 mm <sup>2</sup>	T6	T6	T5	T5	T4	---
32 A Min. cross section 10 mm <sup>2</sup>	T6	T6	T5	T5	T4	---

## SCHEDULE TO EU-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1021 U, Issue: 2

### Notes for installation and operation

1. The load and motor switch Type 8006/4-\*\*\*-\*\* shall be mounted in an enclosure that meets the requirements of an approved type of protection as specified in EN IEC 60079-0, section 1 and has an ingress protection of at least IP54 according to EN IEC 60079-0 and EN IEC 60079-7.
2. When installing the load and motor switch Type 8006/4-\*\*\*-\*\* in an enclosure designed to Increased Safety "e" type of protection in compliance with EN IEC 60079-7, the clearance and creepage distances shall be maintained.
3. The connecting cables of the load and motor switch Type 8006/4-\*\*\*-\*\* 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.

(16) Test report PTB Ex 23-12044

(17) Notes for manufacture, installation and operation


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

(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

Konformitätsbewertungsstelle, Sektor Explosionsschutz  
On behalf of PTB:

Braunschweig, April 24, 2023

  
Dr.-Ing. D. Markus  
Direktor und Professor

