



## (1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**



(3) EC-type-examination Certificate Number:

**PTB 08 ATEX 1060 U**

(4) Component: Load and motor switch, type 8544/1.-..

(5) Manufacturer: R. STAHL Schaltgeräte GmbH

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

(7) This component and any acceptable variation thereto are 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 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential assessment and test report PTB Ex 08-18038.

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

**EN 60079-0:2006**

**EN 60079-1:2007**

**EN 60079-7:2007**

(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 Component Certificate only serves as a basis for the issuing of certificates for equipment or protective systems.

(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified component in accordance to the Directive 94/9/EC. 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 de IIC

IM 2 Ex de I

Zertifizierungssektor Explosionsschutz

Braunschweig, February 26, 2009

By order:

(signed)

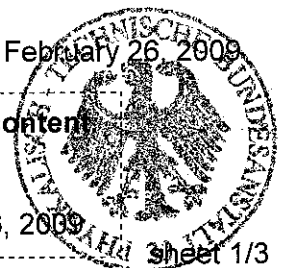
Dr.-Ing. M. Thedens  
Oberregierungsrat

3 pages, correct and complete as regards content

By order:

U. Völkel  
Dipl.-Phys.

Braunschweig, April 6, 2009



sheet 1/3

(13)

## SCHEDULE

(14)

### EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1060 U

(15) Description of component

The load and motor switch, type 8544/1.-.., is a flameproof modular electric element used for actuating or interrupting electric circuits in potentially explosive areas.

#### Technical data

Rated insulation voltage 800 V  
Rated voltage, main contacts up to 690 V  
aux. contacts up to 500 V

The switch for auxiliary contacts can also be used for connection of intrinsically safe circuits.

#### **Rated tolerance limits**

Rated voltage, up to	500 V	690 V	220 V	220 V	
Rated current up to	80 A	63 A	80 A	80 A	Main contacts
Utilisation category	AC 3	AC 3	DC 1	DC 23	
Rated current up to	6 A	6 A	6A		Auxiliary contacts

#### **Rated conductor size**

Main contacts 6 mm<sup>2</sup> to 10 mm<sup>2</sup> (AWG 10 to AWG 8), with fitting element, single-wire and finely stranded  
16 mm<sup>2</sup> to 50 mm<sup>2</sup> (AWG 6 to AWG 1/0), multi-wire and finely stranded  
2 x 50 mm<sup>2</sup> with cable lug (AWG 1/0)

Aux. contacts 1.5 mm<sup>2</sup> to 2.5 mm<sup>2</sup> (AWG 14), single-wire and finely stranded

Tapping terminal 0.5 mm<sup>2</sup> to 10 mm<sup>2</sup> (AWG 20 to AWG 8) single-wire and finely stranded

#### **Working temperature range -50 °C to +80 °C**

(16) Assessment and test report PTB Ex 08-18038

(17) Notes for manufacturing, installation and commissioning

The load and motor switch, type 8544/1.-.., has to be mounted in an enclosure that meets the requirements of an approved type of protection as specified in EN 60079-0, section 1.

When installing the load and motor switch, type 8544/1.-.., in an enclosure designed to Increased Safety "e" type of protection in compliance with EN 60079-7, the clearance and creepage distances specified in sections 4.4 and 4.5 and in table 1 must be maintained.

Braunschweig und Berlin

SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB Fehler! Verweisquelle konnte

If the load and motor switch, type 8544/1.-... , is used in intrinsically safe circuits, an additional plate ("for intrinsically safe circuits only") has to be affixed.

Since in this case the requirements of the standard are identical, the component may be used in groups I and II.

(18) Essential health and safety requirements

Met by compliance with the afore-mentioned Standards.

Zertifizierungssektor Explosionsschutz  
By order:

Braunschweig, February 26, 2009

(signed)

Dr.-Ing. M. Thedens  
Oberregierungsrat

**3 pages, correct and complete as regards content.**

By order:

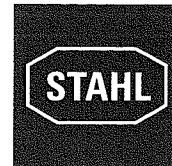


U. Völkel  
Dipl.-Phys.

Braunschweig, April 6, 2009



**EG-Konformitätserklärung**  
*EC-Declaration of Conformity*  
*Déclaration de Conformité CE*



**Wir** (*we; nous*)

R. STAHL Schaltgeräte GmbH, Am Bahnhof 30, 74638 Waldenburg, Germany

**8544/1**

**erklären in alleiniger Verantwortung, dass das Produkt**  
*hereby declare in our sole responsibility, that the product*  
*déclarons, sous notre seule responsabilité, que le produit*

**Last- und Motorschalter**  
*Load and motor switch*  
*Interrupteur de puissance pour moteur*

**mit der EG-Baumusterprüfbescheinigung:**  
*(under; EC-Type Examination Certificate:*  
*avec) Attestation d'examen CE de type:*

**PTB 08 ATEX 1060 U**

**auf das sich diese Erklärung bezieht, mit den folgenden Normen oder normativen Dokumenten übereinstimmt**

*which is the subject of this declaration, is in conformity with the following standards or normative documents*

*auquel cette déclaration se rapporte, est conforme aux normes ou aux documents normatifs suivants*

**Bestimmungen der Richtlinie**  
*terms of the directive*  
*prescriptions de la directive*

**Nummer sowie Ausgabedatum der Norm**  
*Number and date of issue of the standard*  
*Numéro ainsi que date d'émission de la norme*

**94/9/EG: ATEX-Richtlinie**  
*94/9/EC: ATEX Directive*  
*94/9/CE: Directive ATEX*

EN 60079-0:2006  
 EN 60079-1:2007  
 EN 60079-7:2007

**2004/108/EG: EMV-Richtlinie**  
*2004/108/EC: EMC Directive*  
*2004/108/CE: Directive CEM*

EN 60947-1

**Qualitätssicherung Produktion:**  
*Production Quality Assessment:*  
*Assurance Qualité Production:*

PTB 96 ATEX Q006-6

**Kenn-Nr. der benannten Stelle / Notified Body number / N° de l'organisme de certification:** 0102

Waldenburg, 12. Mai 2009

i.V.

**B. Limbacher**  
**Leiter Entwicklung**  
*Head of Development*  
*Directeur Développement*

i.V.

**Dr. S. Jung**  
**Leiter Qualitätsmanagement**  
*Director Quality Management Dept.*  
*Directeur Dept. Assurance de Qualité*

**Ort und Datum**  
*Place and date*  
*Lieu et date*