IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx PTB 06.0056U issue No.:1

Certificate history:
Issue No. 1 (2012-1-27)
Issue No. 0 (2007-3-9)

Status: **Current**

Date of Issue: **2012-01-27** Page 1 of 4

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

Electrical Apparatus: **Fuse, type 8560/..**
Optional accessory:

Type of Protection: **Increased safety "e", Encapsulation "m"**

Marking: Ex em II resp. Ex em I

Approved for issue on behalf of the IECEx Certification Body: Dr. U. Johannsmeyer

Position: Head of Department "Intrinsic Safety and Safety of Systems"

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 the Official IECEx Website.

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 (Württ.)
Germany

Additional Manufacturing location (s):

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 electrical apparatus 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 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-18 : 1992 Edition: 1	Electrical apparatus for explosive gas atmospheres - Part 18: Encapsulation 'm'
IEC 60079-7 : 2001 Edition: 3	Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'

*This Certificate **does not** indicate compliance with electrical 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/ExTR06.0088/00

Quality Assessment Report:

DE/BVS/QAR10.0002/02

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

Description of equipment
The fuse, type 8560/.., is used for the protection of electrical circuits in potentially explosive atmospheres. It has to be installed into an enclosure with type of protection Increased Safety “e”, where at least degree of protection IP54 is maintained. The fuse may be used with or without cover.

Nomenclature

Fuse	Type	8560/ab
a, b	51 = G-Fuse (5x20) 250 V 61 = G-Fuse (5x30) 500 V 71 = TR-5 Fuse 250 V	

Technical data

Rated voltage	up to	500 V
Rated current	up to	6.3 A
Rated cross section		2 x 2.5 mm^2
Fuse characteristic		F (fast), M (medium), T (slow)

Breaking capacity (I_A)

	F		**M**		**T**	
250 V	I ≤ 3.15 A	I_A = 35 A	I ≤ 1.25 A	I_A = 80 A	I ≤ 3.15 A	I_A = 35 A
	I = 4.0 A	I_A = 40 A	---	---	I = 4.0 A	I_A = 40 A
	I = 5.0 A	I_A = 50 A	---	---	I = 5.0 A	I_A = 50 A
	I = 6.3 A	I_A = 63 A	---	---	I = 6.3 A	I_A = 63 A
500 V	---	---	I ≤ 1.25 A	I_A = 50 A	---	---

Ambient temperature

Ambient temperature	Rated current	Can be used in temperature class
T_a ≤ 56 °C	≤ 4.0 A	T6
T_a ≤ 70 °C	≤ 4.0 A	T5
T_a ≤ 46 °C	≤ 5.0 A	T5
T_a ≤ 70 °C	≤ 6.3 A	T4
The fuses maximum permissible temperature is 120 °C. This is due to the characteristics of materials used.		

Special Requirements
1. The fuse may only be installed into certified enclosures (min. IP54).
2. The fuse may be used in a temperature range of -50 °C to +70 °C. The exact assignment is to be seen from the operating instructions.
3. The breaking capacity of the fuse-link has to be the same as or larger than the maximum expectable short circuit current at the module position (usually 1500 A). Should the breaking capacity of the fuse deviate from 1500 A, the real breaking capacity of the fuse is to be seen from the operating instructions. The equipment, in which this fuse is used, is to be marked with the real breaking capacity of the fuse used.
4. The fuse type 8560/51 and type 8560/71 (250 V) may be lined up directly without cover.
5. For the fuse type 8560/61 (500 V) without cover, a minimum distance of 3 mm between the fuses is maintained. Should larger clearances and creepage distances be required, suitable separator plates have to be attached between the fuses.
6. If fuses are installed or built on electroconductive enclosures or walls, the following minimum distance to the fuse must be maintained:
   3 mm for type 8560/51 and type 8560/71
   5 mm for type 8560/61

CONDITIONS OF CERTIFICATION: NO

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

New QAR