



# 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](http://www.iecex.com)

Certificate No.: IECEx PTB 06.0016U issue No.:0 Certificate history: .....

Status: Current

Date of Issue: 2006-03-09 Page 1 of 3

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

Electrical Apparatus: **Indicator light, type 8010/-...-**  
Optional accessory:

Type of Protection: **Flameproof enclosure "d", Increased Safety "e", Intrinsic safety "i"**

Marking: **Ex de IIC resp. Ex de I**  
**or**  
**Ex d ia/ib IIC resp. Ex d ia/ib I**

Approved for issue on behalf of the IECEx  
Certification Body:

Dr. Ing. Uwe Klausmeyer

Position:

Head of Section "Flameproof Enclosures"

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](http://www.iecex.com).

Certificate issued by:

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





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Page 2 of 3

Manufacturer:

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

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:

<b>IEC 60079-0 : 2004</b> Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2001</b> Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
<b>IEC 60079-11 : 1999</b> Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'
<b>IEC 60079-7 : 2001</b> 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/ExTR06.0020/00](#)

Quality Assessment Report:

[DE/PTB/QAR06.0001/00](#)



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Page 3 of 3

## Schedule

### EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Description of equipment  
The indicator light, type 8010/...-, consists of a flameproof enclosure housing with electronic system, which may be fitted with one or two LED's differing in the radiation colour.

The indicator light may be rail mounted.

Connection is to the integrated screw-type or cage clamp terminal.

### Nomenclature

Indicator light	Type	8010/a-bc-d
a	Version: 2 = standard with screw-type terminal, 3 = Intrinsically safe with screw-type terminal, 4 = standard with cage clamp terminal, 5 = Intrinsically safe with cage clamp terminal	
b, c, d	numerals or letters without influence to explosion-protection	

### Technical data

Rated insulation voltage	up to	500 V	
Rated operating voltage			
Type 8010/2 and 8010/4	up to	10.8 ... 24 V DC/AC	10.8 ... 270 V DC/AC
Type 8010/3 and 8010/5	up to	10.8 ... 30 V DC/AC	
For circuits of type of protection Ex ia/ib IIC or Ex ia/ib I			
Maximum values:	$U_i = 30$ V		
	$I_i = 150$ mA		
	$P_i = 1$ W		
	The internal inductance $L_i$ and capacitance $C_i$ are negligibly low		
	Temperature class	Ta [°C]	
T4	60		
T6	40		

The indicator light shall be mounted in the enclosures in such a way that the clearance and creepage distances specified in IEC 60079-11 for the clearance between intrinsically safe and non-intrinsically safe circuits are complied with.

If system installation and layout does not provided for the clearance requirements for connectors as specified in IEC 60079-11, wiring that meets the quality criteria Increased Safety "e" shall be used, or the wiring shall be mechanically fail-safe as required in IEC 60079-11.

Should the above clearance requirements not be met, local wiring work may be performed only if an explosion risk can positively be excluded along all the lines.

When connecting more than on intrinsically safe circuit, the rules and regulations for interconnection shall duly be observed.

Rated connection max. 2.5 mm<sup>2</sup>

The indicator light is designed for a temperature resistance of up to 95 °C. It may be used for temperature class T6.

### Notes for installation and operation

The indicator light shall be installed in an enclosure that meets the requirements of an approved type of protection in accordance with IEC 60079-0, section 1. When installing the indicator light 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 4.4, section 4.5, and table 1 shall be duly considered.

When installing the indicator light 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 4.4, section 4.5, and table 1 shall be duly considered.

**CONDITIONS OF CERTIFICATION: NO**

