

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: Status:	IECEx LCI 08.0032X  Current		Issue No: 3 Page 1 of 4	Certificate history: Issue No. 3 (2013-10-22) Issue No. 2 (2013-07-23)
Date of Issue:	2013-10-22			Issue No. 1 (2011-07-26) Issue No. 0 (2008-07-07)
Applicant:	R. Stahl Schaltgeräte GmbH Am Bahnhof 30, 74638 Waldenburg Germany			
Electrical Apparatus:  Optional accessory:	Optical beacon			
Type of Protection:	db eb, tb			
Marking:	Ex d e IIC T* Gb Ex tb IIIC T* Db			
	For complete marking, see Attachment			
Approved for issue on behalf of the IECEx Certification Body:		Michel EQUI		
Position:		Certification Officer		
Signature: (for printed version)				
Date:				

- 1. This certificate and schedule may only be reproduced in full.
- $2. \ \mbox{This certificate}$  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:

Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92260 Fontenay-aux-Roses
nce[<br />]Documents relative to LCIE certification activit



France[<br/>br />]Documents relative to LCIE certification activites (Certificates, QARs, ExTRs) can be registered under the references "LCI" or "LCIE".



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Manufacturer: R. Stahl Schaltgeräte GmbH

Am Bahnhof 30, 74638 Waldenburg

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 : 2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-1: 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:6

IEC 60079-31 : 2008 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

Edition:1

IEC 60079-7: 2006-07 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition:4

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:

FR/LCI/ExTR08.0037/00 FR/LCI/ExTR08.0037/01 FR/LCI/ExTR08.0037/02

Quality Assessment Report:

DE/BVS/QAR10.0002/03



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Schedule

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

### Type 6161/2-..-.::

Strobe signal light with polycarbonate lens. All working positions. The apparatus including the following components: lamp, printed circuit and junction block.

#### Type 6161/3-..-..:

The type 6161/3 is identical to the type 6161/2 except that it includes the light unit with LED's.

### Type 6161/8-.7-... and type 6161/8-.8-...:

The types 6161/8-.7-... and 6161/8-.8-... are identical to the type 6161/2 except that they can be connected respectively to a WLAN device or a Bluetooth device.

### **ROUTINE VERIFICATIONS AND TESTS**

The "d" compartment of the equipment is exempted of individual test.

In "e" compartment, each apparatus shall be submitted to a dielectric strenght test according to the paragraph 7.1 of IEC 60079-7 standard.

### CONDITIONS OF CERTIFICATION: YES as shown below:

When the optional guard is not installed, the apparatus shall be submitted to low mechanical impact only.



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

Issue 01: Change of QAR number

### <u>lssue 02 :</u>

Normative update according to standards IEC 60079-0 Ed.6.0; IEC 60079-31 Ed.1

Additional voltage

Additional potting material

Additional version of model 6161/2 (polycarbonate lens structure with a wire guard)

Modification of minimum ambient temperature

### <u>lssue 03 :</u>

Wire guard becomes an option (addition of the suffix X of the certificate number to add this special condition for a safe use)

### Annex:

LCI 08.0032X - Issue 03 - Attachment 01 -STAHL.pdf



### IECEx LCI 08.0032 X issue 03 Attachment n°01



### Complete marking:

STAHL
Address:...
Type:6161/...
Serial number:...
Year of construction:...

Classic marking : Ex d e IIC T\* Gb Ex tb IIIC T\* Db IP66

Or alternative marking Ex db eb IIC T\* Ex tb IIIC T\* IP66 -40°C ≤ Tamb ≤ \* °C IECEx LCI 08.0032 X

WARNING - DO NOT OPEN WHEN ENERGIZED

WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD - See instructions.

### Temperature class:

		Temperature Class		
Туре	Tamb	Gas	Dust	
6161/2	+40°C	T6	T85°C	
	+50°C	T5	T100°C	
6161/3	+40°C	T6	T65°C	
	+50°C	T6	T75°C	
61/61/87 & 6161/88	+60°C	T6	T80°C	

### **Electrical ratings:**

Rated voltage for type 6161/2
12V to 48V +/- 10% DC
24V +/- 10% DC
24V to 42V +/-10% AC (50/60 Hz)
60V to 80V +/-10% DC or 42 to 48 VAC
110V to 127V +/-10% AC (50/60 Hz)
230V+/- 10% AC (50/60 Hz)

Rated voltage for type 6161/3 230V (50/60 Hz)

Rated voltage for type 6161/7 & /8 24 VDC

<sup>\*</sup> See table



### IECEx LCI 08.0032 X issue 03 Attachment n°01



### List of models:

6161/*-**-	<u>/*</u>	<u>-**</u>	<u>-***</u>
Type series	Version	Electrical rating	Additional information without reference to explosion-protection
	2 – Electronic flash lamp 3 – LED 8 – wireless, USB	1 – 230 VAC 3 – 110–127 VAC 4 – 60-80 VDC or 4-48 VAC 5 – 24 VDC 6 – 12-48 VDC and 24-42 VAC	
		Flashing energy 0 –continuous light LED 1 – 5J 7 – WLAN 8 - Bluetooth	
		Lens color  Lens material 2 - polycarbonate	