



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 IBE 16.0047 Issue No: 3 Certificate history:
Status: **Current** Issue No. 3 (2019-07-04)
Date of Issue: **2019-07-04** Issue No. 2 (2018-02-22)
Page 1 of 5 Issue No. 1 (2017-07-17)
Issue No. 0 (2016-12-20)
Applicant: **R. STAHL Schaltgeräte GmbH**
Am Bahnhof 30
74638 Waldenburg
Germany
Equipment: **LED Emergency Light Fitting**
Optional accessory: 6409/1. and 6409/4.
Type of Protection: **Increased safety "e" in combination with flameproof enclosure "d" and encapsulation "m" or dust ignition protection by enclosure "t" in combination with inherently safe optical radiation "op is"**
Marking:
Ex db ec IIC T4 Gc
Ex db ec mb IIC T4 Gc
Ex tc IIIC T100°C Dc
Ex tb op is IIIC T100°C Db
-30 °C ≤ Ta ≤ +60 °C (max.; depends on type)

*Approved for issue on behalf of the IECEx
Certification Body:*

Dipl.-Ing. Alexander Henker

Position:

Head of Certification Body

*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:

IBExU Institut für Sicherheitstechnik GmbH
Certification Body
Fuchsmühlenweg 7
09599 Freiberg
Germany





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

Additional Manufacturing location(s):

R. STAHL Schaltgeräte GmbH
Nordstraße 10
99427 Weimar
Germany

R. STAHL (P) LTD.
Plot No. -5, Malrosapuram Road,
Sengundram Ind. Area
Singaperumal Koil,
Kanecheepuram Dist.,
Talmilnadu - 603204
India

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 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 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-18 : 2014 Edition:4.0	Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"
IEC 60079-28 : 2015 Edition:2	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2015 Edition:5.0	Explosive atmospheres – Part 7: Equipment protection by 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/IBE/ExTR16.0013/00](#)
[DE/IBE/ExTR16.0013/03](#)

[DE/IBE/ExTR16.0013/01](#)

[DE/IBE/ExTR16.0013/02](#)

Quality Assessment Report:

[DE/BVS/QAR10.0002/14](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The LED Emergency Light Fitting of type 6409/1. and 6409/4. is a LED luminaire with emergency light function that is suitable for use in areas with potentially explosive gas and dust atmospheres of zone 2, 21 and 22. The luminaire consists of a polyester enclosure, an assembly plate / reflector with LED modules, LED control gear and terminals, and a light-transmitting cover made of polycarbonate. Additionally, the luminaire is equipped with a replaceable battery pack for emergency light function. The battery pack (7 Ah or 4 Ah) is mounted in a separate enclosure that is attached to the side of the luminaire. Alternatively, the smaller battery pack (4 Ah) with adapted shape can also be integrated directly into the luminaire enclosure. The luminaire is intended for indoor and outdoor use.

Technical data:

Nominal input voltage:	110 V...240 V AC
	110 V...250 V DC
Rated input power:	15 W (type 6409/11.)
	28 W (type 6409/12. and 6409/412.)
	52 W (type 6409/14. and 6409/414.)
Battery:	NiCd 6 V / 7 Ah
	NiCd 6 V / 4 Ah
Optional DALI interface:	≤22.5 V DC; typ. ≤ 2 mA (250 mA short-time)
(acc. to IEC 62386-207)	
Through-wiring:	up to 3 x 16 A
Ambient temperature:	-30 °C...+60 °C (without through-wiring)
	-30 °C...+55 °C (through-wiring 3 x 10 A)
	-30 °C...+50 °C (through-wiring 3 x 16 A)

Variants:

Luminaire type	6409/11.	6409/12. and 6409/412.	6409/14. and 6409/414.
Number of LEDs	12 LEDs	24 LEDs (6409/12.)	48 LEDs (6409/14.)
		96 or 120 LEDs (6409/412.)	192 or 240 LEDs (6409/414.)
Rated input power	15 W	28 W	52 W
Luminaire size*	Size 2	Size 2	Size 4

(*) Size 2 with battery enclosure: 857 mm × 184 mm × 125 mm (length × width × height)

with internal battery: 700 mm × 184 mm × 125 mm (length × width × height)

Size 4 with battery enclosure: 1467 mm × 184 mm × 125 mm (length × width × height)

with internal battery: 1310 mm × 184 mm × 125 mm (length × width × height)



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Safety instructions:

The plastic housing has to be protected against intense electrostatic charging processes. Cleaning is permitted only with a damp cloth.

For battery replacement see manufacturer's instructions in the operation manual.

SPECIFIC CONDITIONS OF USE: NO



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

Addition of new battery cell types

Addition of a new version of the luminaire without external battery enclosure. The battery pack (4 Ah) with adapted shape is integrated directly into the luminaire enclosure.

The LED modules of luminaire type 6409/4. can also be equipped with a new type of mid-power LEDs. The total number of LEDs increases to 120, or resp., 240 per luminaire (depends on type).

Conformity with current standard (IEC 60079-0, Ed. 7)