



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.:	<b>IECEX IBE 16.0038</b>	Page 1 of 4	<u>Certificate history:</u>
Status:	<b>Current</b>	Issue No: 5	Issue 4 (2020-12-09)
Date of Issue:	2023-01-06		Issue 3 (2020-02-24)
Applicant:	<b>R. STAHL Schaltgeräte GmbH</b> Am Bahnhof 30 74638 Waldenburg Germany		Issue 2 (2018-05-22)
Equipment:	<b>LED Emergency Light Fitting type 6009/1. and 6009/4.</b>		Issue 1 (2017-08-31)
Optional accessory:			Issue 0 (2016-11-03)
Type of Protection:	<b>Increased safety "e" in combination with flameproof enclosure "d", encapsulation "m" and intrinsic safety "i" or dust ignition protection by enclosure "t", inherently safe optical radiation "op is"</b>		
Marking:	Ex db eb mb op is IIB+H2 T4 Gb	(type 6009/1..1)	
	Ex db eb mb op is IIC T4 Gb	(type 6009/1..2)	
	Ex db eb ib mb op is IIC T4 Gb	(type 6009/4.)	
	Ex db eb ib op is IIC T4 Gb	(type 6009/4. with 6046/3.)	
	Ex tb op is IIIC T100°C Db	(all types)	
	-30 °C ≤ T <sub>a</sub> ≤ +60 °C	(max.; depends on type)	

Approved for issue on behalf of the IECEx  
Certification Body:

**Kai Willamowski**

Position:

**Head of department Certification Body**

Signature:  
(for printed version)

Date:  
(for printed version)

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 [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**IBExU Institut für Sicherheitstechnik GmbH**  
Fuchsmühlenweg 7  
09599 Freiberg  
Germany





# IECEX Certificate of Conformity

Certificate No.: **IECEX IBE 16.0038**

Page 2 of 4

Date of issue: 2023-01-06

Issue No: 5

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

Manufacturing locations: **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.  
Tamilnadu - 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 equipment 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](#) Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

[IEC 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

[IEC 60079-18:2017](#) Explosive atmospheres - Part 18: Protection by encapsulation "m"  
Edition:4.1

[IEC 60079-28:2015](#) Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation  
Edition:2

[IEC 60079-31:2022-01](#) Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:3.0

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:5.1

This Certificate **does not** indicate compliance with 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 Reports:

[DE/IBE/ExTR16.0012/00](#)  
[DE/IBE/ExTR16.0012/03](#)

[DE/IBE/ExTR16.0012/01](#)  
[DE/IBE/ExTR16.0012/04](#)

[DE/IBE/ExTR16.0012/02](#)  
[DE/IBE/ExTR16.0012/05](#)

Quality Assessment Report:

[DE/BVS/QAR10.0002/18](#)



# IECEX Certificate of Conformity

Certificate No.: **IECEX IBE 16.0038**

Page 3 of 4

Date of issue: 2023-01-06

Issue No: 5

## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The LED Emergency Light Fitting of type 6009/1. and 6009/4. is a LED luminaire with emergency light function that is suitable for use in areas with potentially explosive gas and dust atmospheres that require EPL Gb, Gc, Db or Dc. 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 is mounted in a separate enclosure that is attached to the side of the luminaire. The luminaire is intended for indoor and outdoor use.

In luminaire type 6009/1. separately certified LED assemblies with high-power LEDs are applied. The LEDs are protected in type of protection flameproof enclosure "db".

In luminaire type 6009/4. integral LED modules with mid-power LEDs are applied. The individual LEDs are protected in type of protection intrinsic safety "ib", which is provided in combination with a separately certified Ex-i module (current limiter).

The Ex-i module can be implemented as separate component (type 6047) or as integrated part of the LED control gear (type 6046/3).

In addition to white LEDs, mid-power LEDs with different colors (red, amber, green and blue) can be applied in luminaire type 6009/4.

## Technical data:

Nominal input voltage:	110 V...240 V AC; 110 V...250 V DC for type 6009/1. 100 V...240 V AC; 110 V...250 V DC for type 6009/4.
Rated input power:	15 W (type 6009/11.) 28 W (type 6009/12. and type 6009/412.) 52 W (type 6009/14. and type 6009/414.)
Battery:	NiCd 6 V / 7 Ah NiCd 6 V / 4 Ah
Through-wiring:	up to 3 x 16 A
Optional DALI interface acc. to IEC 62386-207	≤ 22.5 V DC; typ. ≤ 2 mA (250 mA short-time)
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)

Detailed information regarding technical data and luminaire variants is shown in the Annex.

## 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**



# IECEX Certificate of Conformity

Certificate No.: **IECEX IBE 16.0038**

Page 4 of 4

Date of issue: 2023-01-06

Issue No: 5

## **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

The luminaire type 6009/4. can also be equipped with a new LED control gear type 6046/3..-1 with integrated Ex-i module and intrinsically safe output for signal LEDs.

The luminaire type 6009/4. can also be equipped with intrinsically safe signal LEDs (indicating the charging state of the battery pack), which are directly connected to the intrinsically safe signal output of the new LED control gear type 6046/3..-1. In this case, the type of protection "m" (encapsulation) is not applied and the marking is changed accordingly.

The luminaire type 6009 can also be equipped with a new integral thread adapter for connection of a separately certified protective vent.

Conformity with current standard IEC 60079-31, Ed. 3

## **Annex:**

[Annex\\_to\\_IBE16.0038\\_5.pdf](#)



# IECEX Certificate of Conformity - Annex



Certificate No: IECEx IBE 16.0038

Issue No: 5

Date of Issue: 2023-01-06

Page 1 of 2

## Additional technical information

### Variants

#### **Type 6009/1. (with high-power LEDs)**

Luminaire type	6009/11.1	6009/12.1	6009/14.1	6009/11.2	6009/12.2	6009/14.2
Number of LED assemblies	1 (12 LEDs)	2 (24 LEDs)	4 (48 LEDs)	1 (12 LEDs)	2 (24 LEDs)	4 (48 LEDs)
Rated input power	15 W	28 W	52 W	15 W	28 W	52 W
Luminaire size <sup>(4)</sup>	Size 2	Size 2	Size 4	Size 2	Size 2	Size 4
LED control gear	6046/1					
Nominal input voltage	110 V...240 V AC; 110 V...250 V DC					
Ambient temperature $T_a$	-30 °C...+60 °C <sup>(1)</sup> -30 °C...+55 °C <sup>(2)</sup> -30 °C...+50 °C <sup>(3)</sup>					
LED assembly	6062/19. – 090 – 000 – ... 6062/29. – 090 – 000 – ...			6062/29. – 090 – 000 – ...		
Group	IIB+H <sub>2</sub> and IIIC			IIC and IIIC		

(1) without through-wiring

(2) with through-wiring 3 x 10 A

(3) with through-wiring 3 x 16 A

(4) Size 2: 857 mm × 184 mm × 125 mm (width × depth × height)

Size 4: 1467 mm × 184 mm × 125 mm (width × depth × height)



# IECEX Certificate of Conformity - Annex



Certificate No: IECEx IBE 16.0038

Issue No: 5

Date of Issue: 2023-01-06

Page 2 of 2

## **Type 6009/4. (with mid-power LEDs)**

Luminaire type	6009/412.	6009/414.
LED module configuration <sup>(5)</sup> - White LEDs -	24 x 4 LEDs or 24 x 5 LEDs (one LED module)	48 x 4 LEDs or 48 x 5 LEDs (two LED modules)
LED module configuration <sup>(5)</sup> - Color LEDs -	20 x 5 LEDs "PC amber", "blue", "green" <sup>(6)</sup> (one LED module)	40 x 5 LEDs "red", "PC amber", "blue", "green" <sup>(6)</sup> (two LED modules)
Rated input power	28 W	52 W
Luminaire size <sup>(4)</sup>	Size 2	Size 4
LED control gear	6046/1, 6046/2 or 6046/3..-1	
Nominal input voltage	100 V...240 V AC; 110 V...250 V DC	
Ambient temperature $T_a$	-30 °C...+60 °C <sup>(1), (7)</sup> -30 °C...+55 °C <sup>(2), (7)</sup> -30 °C...+50 °C <sup>(3)</sup>	
Group	IIC and IIIC	IIC and IIIC

- (1) without through-wiring
- (2) with through-wiring 3 x 10 A
- (3) with through-wiring 3 x 16 A
- (4) Size 2: 857 mm x 184 mm x 125 mm (width x depth x height)  
Size 4: 1467 mm x 184 mm x 125 mm (width x depth x height)
- (5) [Number of LED blocks connected in series] x [Number of parallel LEDs per block]
- (6) A combination of green mid-power LEDs with white mid-power LEDs is possible.
- (7) not for variant with green mid-power LEDs