



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

Certificate No.:	IECEX SEV 21.0002X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 2	Issue 1 (2024-05-22) Issue 0 (2021-02-04)
Date of Issue:	2024-10-08		
Applicant:	Zhejiang Tormin Electrical Co., Ltd. No.2, GangTeng Road, YongXing Subdistrict, LongWan District WenZhou City, ZheJiang Province 325024 China		
Equipment:	LED Explosion-protected light, BC9102 series, BC9102S series and BC9102R series		
Optional accessory:			
Type of Protection:	db, eb mb, tb		
Marking:	Ex db eb mb IIC T4/T5/T6 Gb Ex tb IIIC T130°C/T95 °C/T80 °C Db		

Approved for issue on behalf of the IECEx
Certification Body:

Munira Gamma

Position:

Manager Product Certification

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 or use of this QR Code.



Certificate issued by:

Eurofins Electric & Electronic Product Testing AG
Luppenstrasse 3
8320 FEHRALTORF .
Switzerland



E&E



IECEx Certificate of Conformity

Certificate No.: **IECEx SEV 21.0002X**

Page 2 of 4

Date of issue: 2024-10-08

Issue No: 2

Manufacturer: **Zhejiang Tormin Electrical Co., Ltd.**
No. 2, Gangteng Road, Yongxing Subdistrict, Longwan District
Wenzhou City, Zhejiang Province 325024
China

Manufacturing
locations:

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](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

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

[IEC 60079-31:2022](#) 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 Report:

[CH/SEV/ExTR21.0002/01](#)

Quality Assessment Report:

[NL/CNEX/QAR23.0001/01](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx SEV 21.0002X**

Page 3 of 4

Date of issue: 2024-10-08

Issue No: 2

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

LED Explosion-protected light
BC9102 series, BC9102S series, BC9102R series.

Refer to Annexe for details.

SPECIFIC CONDITIONS OF USE: YES as shown below:

POTENTIAL ELECTROSTATIC CHARGING HAZARD – USE ONLY WET CLOTH TO CLEAN
THE FLAMEPROOF JOINTS ARE NOT INTENDED TO BE REPAIRED.

WARNING – ONLY USE CABLES SUITABLE FOR 95°C

WARNING – PERMITTED SUPPLY SHORT-CIRCUIT CURRENT 1500A



IECEx Certificate of Conformity

Certificate No.: **IECEx SEV 21.0002X**

Page 4 of 4

Date of issue: 2024-10-08

Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Update the standard from IEC 60079-31:2014, Edition 2.0 to IEC 60079-31:2022, Edition 3.0.

Annex:

[IECEx SEV 21.0002X app i2.pdf](#)

Annexe to: IECEx SEV 21.0002X

Issue No.: 2

page 1 of 2

Applicant Name: Zhejiang Tormin Electrical Co., Ltd.

Equipment: LED Explosion-protected light

Description of product

The BC9102 series, BC9102S series and BC9102R series Explosion-protected LED lights are mainly composed of "eb" power chamber and "db" lighting chamber. BC9102S series are intended for stents installation while BC9102R series are intended for road lamp installation. BC9102S series and BC9102R series are combination structure for BC9102 series. The light source cavity and the electrical cavity are connected with the flameproof sleeve assembly. The connecting wires are sealed with EP1282 CLEAR epoxy resin, and the sealing length is greater than 20 mm. There is an O ring between each joint surface to meet the dust explosion-protected structure. The light source cavity is mainly composed of main shell, front cover, transparent part and reflective cup. The electrical cavity is mainly composed of the main shell and the back cover. The main shell, front cover and back cover are made of aluminium alloy 6063. Inside the power chamber, LED power driver and Ex terminals are equipped.

The degree of protection of the enclosure is IP66, according to IEC 60079-0 and IEC 60529.

Model identification:

Model	Rated voltage (V)	Rated power (W)	LED power supply	Output current (mA)	Ambient temperature	
					-40 °C to +40 °C	-40 °C to +55 °C
BC9102-30	120-277, 50/60 Hz	30	GOL60-1500IL-HR	700	T6	T5
BC9102-40		40		1000	T6	T5
BC9102-50		50		1300	T6	T5
BC9102-60		60		1500	T6	T5
BC9102-70		70	GOL80-2000IL-HR	1750	T5	T4
BC9102-80		80	GOL80-2000IL-HR	2000	T5	T4

Model	Rated voltage (V)	Rated power (W)	LED power supply	Output current (mA)	Ambient temperature	
					-40 °C to +40 °C	-40 °C to +55 °C
BC9102R-L30	120-277, 50/60 Hz	30	GOL60-1500IL-HR	700	T6	T5
BC9102R-L40		40		1000	T6	T5
BC9102R-L50		50		1300	T6	T5
BC9102R-L60		60		1500	T6	T5
BC9102R-L70		70	GOL80-2000IL-HR	1750	T5	T4
BC9102R-L80		80	GOL80-2000IL-HR	2000	T5	T4
BC9102R-L100		100	GOL60-1500IL-HR x 2	1300 x 2	T6	T5
BC9102R-L120		120		1500 x 2	T6	T5
BC9102R-L150		150	GOL80-2000IL-HR x 2	2000 x 2	T5	T4
BC9102R-L150		150	GOL60-1500IL-HR x 3	1300 x 3	T6	T5

Annexe to:
IECEX SEV 21.0002X
Issue No.: 2

page 2 of 2

Model	Rated voltage (V)	Rated power (W)	LED power supply	Output current (mA)	Ambient temperature	
					-40 °C to +40 °C	-40 °C to +55 °C
BC9102S-L30	120-277, 50/60 Hz	30	GOL60-1500IL-HR	700	T6	T5
BC9102S-L40		40		1000	T6	T5
BC9102S-L50		50		1300	T6	T5
BC9102S-L60		60		1500	T6	T5
BC9102S-L70		70	GOL80-2000IL-HR	1750	T5	T4
BC9102S-L80		80	GOL80-2000IL-HR	2000	T5	T4
BC9102S-L100		100	GOL60-1500IL-HR x 2	1300 x 2	T6	T5
BC9102S-L120		120		1500 x 2	T6	T5
BC9102S-L150		150	GOL80-2000IL-HR x 2	2000 x 2	T5	T4
BC9102S-L150		150	GOL60-1500IL-HR x 3	1300 x 3	T6	T5
BC9102S-L180		180	GOL60-1500IL-HR x 3	1500 x 3	T6	T5
BC9102S-L200		200	GOL80-2000IL-HR x 3	2000 x 3	T5	T4
BC9102S-L240		240	GOL80-2000IL-HR x 3	2000 x 3	T5	T4
BC9102S-L200		200	GOL60-1500IL-HR x 4	1300 x 4	T6	T5
BC9102S-L240		240	GOL60-1500IL-HR x 4	1500 x 4	T6	T5
BC9102S-L300		300	GOL80-2000IL-HR x 4	2000 x 4	T5	T4
BC9102S-L320		320	GOL80-2000IL-HR x 4	2000 x 4	T5	T4
BC9102S-L300		300	GOL60-1500IL-HR x 5	1500 x 5	T6	T5
BC9102S-L400		400	GOL80-2000IL-HR x 5	2000 x 5	T5	T4