



(1) **EU-Type Examination Certificate**

- (2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 2014/34/EU**
- (3) Certificate number: **SEV 21 ATEX 0500 X**
- (4) Product: LED Explosion-protected light  
Type BC9102 series, BC9102S series, BC9102R series
- (5) Manufacturer: ZHEJIANG TORMIN ELECTRICAL CO., LTD
- (6) Address: No.35 Qingjiang Road, Technology Park, High-tech District, Wenzhou City, Zhejiang, China
- (7) The equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) Eurofins, notified body No. 1258, in accordance with article 17 of Directive 2014/34/EU of the European parliament and of the council, dated 26 February 2014, certifies that this product has been found to comply with the essential health and safety requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.  
The examination and test results are recorded in confidential report no 20CH-01726.X01
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:

**EN IEC 60079-0:2018**  
**EN 60079-1:2014**  
**EN 60079-18:2015**  
**EN 60079-31:2014**  
**EN 60079-7:2015**

- Except in respect of those requirements listed at item 18 of the schedule.
- (10) If the sign «X» is placed after the certificate number, it indicates that the product is subjected to special conditions for safe use specified in the schedule to this certificate. The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.
- (11) This EU type examination certificate relates only to design and construction of the specified product. Further requirements of this directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- (12) The marking of the product shall include the following:

 **II 2G Ex db eb mb IIC T4/T5/T6 Gb**  
**II 2D Ex tb IIIC T130°C/T95 °C/T80 °C Db**

**Eurofins Electric & Electronic Product Testing AG**  
**Notified Body ATEX**

Martin Plüss  
Product Certification



(13)

## Appendix

(14)

**EU-Type Examination Certificate no. SEV 21 ATEX 0500 X**

(15) **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 20mm. 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 aluminum 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.

Ratings:	120-277V AC, 50/60Hz, 30-400W
Classification of installation and use:	stationary
Ingress protection:	IP66
Rated ambient temperature range (°C):	-40 °C to +40/55 °C
Rated ambient temperature range (°C) for Ex Components	N/A

Model	Rated voltage (V)	Rated power (W)	LED power supply	Output current (mA)	Ambient temperature	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
BC9102R-L30		30		700	T6	T5

BC9102R-L40	120-277, 50/60 Hz	40	GOL60-1500IL-HR	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-HRx2	1300x2	T6	T5
BC9102R-L120		120		1500x2	T6	T5
BC9102R-L150		150	GOL80-2000IL-HRx2	2000x2	T5	T4
BC9102R-L150		150	GOL60-1500IL-HRx3	1300x3	T6	T5
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-HRx2	1300x2	T6	T5
BC9102S-L120		120		1500x2	T6	T5

BC9102S-L150	120-277, 50/60 Hz	150	GOL80-2000IL-HRx2	2000x2	T5	T4
BC9102S-L150		150	GOL60-1500IL-HRx3	1300x3	T6	T5
BC9102S-L180		180	GOL60-1500IL-HRx3	1500x3	T6	T5
BC9102S-L200		200	GOL80-2000IL-HRx3	2000x3	T5	T4
BC9102S-L240		240	GOL80-2000IL-HRx3	2000x3	T5	T4
BC9102S-L200		200	GOL60-1500IL-HRx4	1300x4	T6	T5
BC9102S-L240		240	GOL60-1500IL-HRx4	1500x4	T6	T5
BC9102S-L300		300	GOL80-2000IL-HRx4	2000x4	T5	T4
BC9102S-L320		320	GOL80-2000IL-HRx4	2000x4	T5	T4
BC9102S-L300		300	GOL60-1500IL-HRx5	1500x5	T6	T5
BC9102S-L400		400	GOL80-2000IL-HRx5	2000x5	T5	T4

(16) **Specific conditions of use**

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

(17) **Essential health and safety requirements**

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
None	

(18) **Drawings and Documents**

See test report “Manufacturer’s Documents”