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EU-TYPE EXAMINATION CERTIFICATE[2] **Equipment intended for use in potentially explosive atmospheres - Directive 2014/34/EU**[3] Certificate Number: **EPT 16 ATEX 2483 X** issue 0[4] Equipment: **LED Explosion-Proof Light**Series: **BC9700-L□-□ Series**[5] Manufacturer: **ZHEJIANG TORMIN ELECTRICAL CO., LTD.**[6] Address: **No.35 Qingjiang Road, High-tech District, Wenzhou, Zhejiang, China**

[7] This equipment and its accepted variations are specified in the annex to this Certificate.

[8] Eurofins Product Testing Italy S.r.l., Notified Body n. 0477 in accordance with Article 21 of the Directive 2014/34/EU of the European Parliament and of the Council of 26th February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II of the Directive.

The examination and test results are recorded in the confidential Report N° EPT.16.REL.01/54571


[9] Compliance with the essential health and safety is assured through the verification of them and by compliance with the standard:

EN60079-0:2012+A11:2013; EN60079-1:2014; EN 60079-31:2014


[10] If the sign "X" is placed after the Certificate number, it indicates that the equipment is subject to the special conditions for safe use specified in the annex to this Certificate.

[11] This EU -TYPE EXAMINATION CERTIFICATE relates only to the design, the exam and the tests of the specified equipment.

Further requirements of the Directive 2014/34/EU apply to the manufacture and supply of this equipment. These requirements are not object of this Certificate.

[12] The equipment shall include the sign  and the following string:**II 2GD****Ex db IIC "T 5...T3" Gb****Tamb: -40°C ~ +40°C /+55°C****Ex tb IIIC "T95°C... T195°C" Db**

Place and date of issue:

Torino, 2016-07-26Dionisio Bucchieri
Directive ResponsiblePaolo Trisoglio
Managing Director**SGQ N° 133A**
PRD N° 119BMembro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition AgreementsThis Certificate has 6 pages and it is ~~reproducible~~ only in its entirety. Conditions of validity are reported below.

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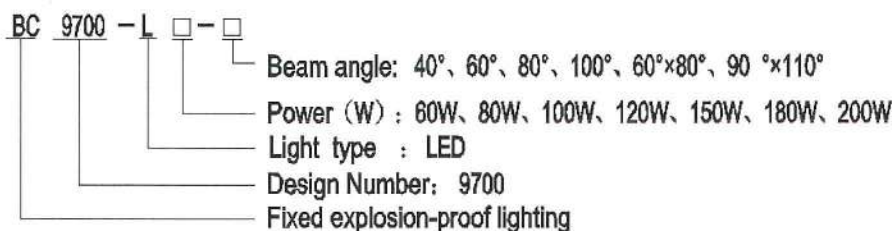
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[15] Equipment description

BC9700-L□-□ Series LED explosion-proof light (hereinafter as explosion-proof light) is flameproof structure; it consists of two flameproof chamber, one for the illuminant (illuminant chamber) and the other one for power (electrical chamber); O-rings are adopted in the flameproof joints to fulfill the dust-proof structural requirements. The two chambers are connected with wire, which is encapsulated by epoxy resin with length of no less than 20mm. The illuminant LEDs are installed in the illuminant chamber while power supply and terminals are installed in electrical chamber. The flameproof enclosure consists of main enclosure, front cover, electrical box enclosure, rear cover and transparent part. The main enclosure, front cover, electrical box enclosure, rear cover are made of aluminum alloy ADC12 (the content of magnesium, titanium and zirconium are no more than 7.5%) with minimum thickness of 3mm; the light-transmitting parts are made of toughened high borosilicate glass with minimum thickness of 10mm. Two entry holes are provided in the enclosure of the connection compartment, where suitable certified cable glands or blanking elements should be installed. The certified cable gland and blanking element should have protection level no less than Ex db IIC Gb / Ex tb IIIC Db.

Degrees of protection provided by enclosures, according to EN 60529 is IP66.

Catalogue Number Logic


No.	TYPE	POWER	INPUT VOLTAGE	BEAM ANGLE	AMBIENT TEMPERATURE/ TEMPERATURE GROUP	
					Ta≤40°C	Ta≤55°C
1	BC9700-L60-□	60W	90-305VAC 50Hz/60Hz	40°, 60°, 80°, 100°, 60°X80°, 90°X110°	T5	T4
2	BC9700-L80-□	80W			T5	T4
3	BC9700-L100-□	100W			T4	T4
4	BC9700-L120-□	120W			T4	T4
5	BC9700-L150-□	150W			T4	T4
6	BC9700-L180-□	180W			T3	T3
7	BC9700-L200-□	200W			T3	T3



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Electrical characteristics

Input voltage: 90~305V AC,

Rated voltage: 110V AC, 120V AC, 127V AC, 220V AC, 230V AC, 240V AC, 277V AC,

Rated frequency: 50/60Hz,

Rated power: 60W, 80W, 100W, 120W, 150W, 180W, 200W.

Warning label

- WARNING: DO NOT OPEN WHEN ENERGIZED
- WARNING: POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS
- WARNING: AFTER DE-ENERGIZING, DELAY 15 MINUTES BEFORE OPENING

Routine tests

The following routine pressure tests must be performed by the manufacturer for minimum 10s:

Illuminant chamber: 1.05MPa;

Electrical chamber:

Type	Routine overpressure test
BC9700-L□-40°	1.35MPa
BC9700-L□-60°	1.05MPa
BC9700-L□-80°	1.16MPa
BC9700-L□-100°	1.11MPa
BC9700-L□-60°×80°	1.11MPa
BC9700-L□-90°×110°	0.96MPa

[16] **Assessment Report n° EPT.16.REL.01/54571**

This EC-Type Examination Certificate is released after the positive result of the conformity assessment of the Council Directive 2014/34/EU and to harmonized technical standards listed in this certificate performed by the Notified Body Eurofins Product Testing Italy S.r.l., and reported in the Assessment Report above cited.

[17] **Special condition for a safe use**

The flameproof joints of the equipment mustn't be repaired. Use fasteners with yield stress ≥ 450 MPa.

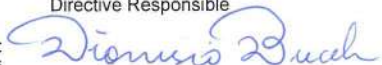
[18] **Essential Health and Safety Requirements**

Assured by compliance with harmonized standards.


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[19] Descriptive documents

The equipment objects of this Certificate is described by the following documents.

Scheduled documents are indicated with the symbol "✓". They cannot be modified without the explicit authorization of the Notified Body.

Document	Name	Rev.	Date	Scheduled
Self-made component list	BC9700-MX-01	2.0	2016-01-17	✓
Self-made component list	BC9700-MX-02	2.0	2016-01-17	✓
Assembly diagram	BC9700-00.1~7	2.0	2016-01-17	✓
Self-made component list	BC9700-MX-00.1~7	2.0	2016-01-17	✓
Assembly diagram	BC9700-00.8~14	2.0	2016-01-17	✓
Self-made component list	BC9700-MX-00.8~14	2.0	2016-01-17	✓
Preparation table 1	BC9700-PT-1~14	1.0	2016-01-17	✓
Main enclosure	BC9700-01	2.0	2016-01-17	✓
Support installation	BC9700-02	2.0	2016-01-17	✓
Positioning plate	BC9700-03	1.0	2012-06-18	✓
Nameplate	BC9700-04	2.0	2016-01-17	✓
Rear cover	BC9700-05	2.0	2016-01-17	✓
Front cover(40°.60°.80°.100°)	BC9700-07-1	1.0	2016-01-17	✓
Front cover(90°X 110°)	BC9700-07-2	1.0	2016-01-17	✓
Front cover(60°X 80°)	BC9700-07-3	1.0	2016-01-17	✓
Electrical box enclosure	BC9700-10	2.0	2016-01-17	✓
Warning plate	BC9700-11	1.0	2016-01-17	✓
Stopping plug	BC5401-25	2.0	2015-06-15	✓
transparent parts (100°)	BC9305-01-04	1.0	2015-12-20	✓
transparent parts (80°)	BC9305-01-03	1.0	2015-12-20	✓
transparent parts (60°)	BC9305-01-02	1.0	2015-12-20	✓
transparent parts (40°)	BC9305-01-07	1.0	2015-12-20	✓
transparent parts(90°X110°)	BC9305-01-05	1.0	2015-12-20	✓
transparent parts(60°X80°)	BC9305-01-06	1.0	2015-12-20	✓
Clamping ring of lens	BC9305-07-01	1.0	2015-12-20	✓
Rubber mat	BC9305-02	1.0	2015-12-20	✓
Hexagon socket stop screw	BC9100-21	1.0	2012-06-20	✓


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T-plug	BC5401-32	2.0	2015-12-20	✓
Pressure Plate	BW6610-13	1.0	2012-06-20	✓
Sealing ring	BC9300-06	1.0	2012-06-15	✓
Clamping nut	BC9305-17	1.0	2015-12-20	✓
Flameproof pipe assembly	BC9305-06	1.0	2015-12-20	✓
Flameproof pipe	BC9305-06-01	1.0	2015-12-20	✓
Sealing ring A	BC9305-06-02	1.0	2015-12-20	✓
Sealing ring B	BC9305-06-03	1.0	2015-12-20	✓
BC9700 series LED explosion-proof light Instruction Manual	TM20160117001	2.0	2016-01-17	✓
BC9700 series LED explosion-proof light Product Description	TM20160117002	2.0	2016-01-17	✓
Explosion-proof lamp cement of transparent component and encapsulation of wire technological Document	TM/GY-0213	1.0	2015-12-20	✓
Encapsulation, adhesive material properties table	JS20150702014	-	2015.10.21	✓
EPDM 4045 material description	JS20121021002	-	2012-10-21	✓
Material report of high temperature grease 6001-1	JS20150702007	-	2015-07-02	✓
Tensile strength of aluminium alloy ADC12 (- 40°C)	JS20130115004	-	2015-07-02	✓
Specification of hydrostatic pressure test	JS20120321003	-	2012-10-21	✓
Silicon rubber Ethylene 150 material description	JS20150702003	-	2015-07-02	✓
The operation regulation of power frequency withstand voltage test	JS20150702005	1.0	2015-07-02	✓
Material analysis report of aluminium alloy ADC12	JS2012021005	-	2015-07-02	✓


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[20] Terms and conditions

The product liability rests with the Manufacturer, his representative or, in the absence of a representative, with the importer, in accordance with the General Product Safety Directive 2001/95/EC.

The following conditions may render this certificate invalid:

- changes in the design or construction of the product;
- changes or amendments to the Directive;
- changes or amendments in the standards which form the basis for documenting compliance with the essential requirements of the 2014/34/EU Directive.

[21] History


This certificate is at its first issue.



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End of Certificate

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