# 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 IMQ 20.0005X** | Page 1 of 4 | Certificate history: |
| Status: | **Current** | Issue No: 2 | Issue 1 (2021-04-26)<br>Issue 0 (2020-11-20) |
| Date of Issue: | 2024-07-16 | | |
| Applicant: | **Zhejiang Tormin Electrical Co., Ltd.**<br>No. 2, Gangteng Road, Yongxing Subdistrict, Longwan District<br>Wenzhou City, Zhejiang Province 325024<br>**China** | | |
| Equipment: | **LED Explosion-proof lamp** | | |
| Optional accessory: | BC9304 series | | |
| Type of Protection: | **Ex db; Ex eb; Ex tb** | | |
| Marking: | Ex db eb IIC T6 Gb; Ex tb IIIC T80°C Db<br>Ex db eb IIC T5 Gb; Ex tb IIIC T95°C Db<br>Ex db eb IIC T4 Gb; Ex tb IIIC T130°C Db | | |

Approved for issue on behalf of the IECEx Certification Body: **Mr. Mauro CASARI**

Position: **IMQ ExCB Manager**

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
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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:

**Istituto Italiano del Marchio di Qualità S.p.A**
**Via Quintiliano 43**
**20138 Milano**
**Italy**

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Certificate No.: **IECEx IMQ 20.0005X** Page 2 of 4

Date of issue: 2024-07-16 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 60079-31:2022 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 Reports:

IT/IMQ/ExTR20.0005/00 IT/IMQ/ExTR20.0005/01 IT/IMQ/ExTR20.0005/02

Quality Assessment Report:

NL/CNEX/QAR23.0001/01

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**EQUIPMENT:**
Equipment and systems covered by this Certificate are as follows:

BC9304 series LED Explosion-proof lamp are of type “db” “eb” and “tb”. The enclosure material is ADC12. The material of light transmitting part is toughened glass. The LED Explosion-proof lamp has two “db” compartments and one “eb” compartment. For BC9304P: three cable entries are provided on the “eb” compartment. For BC9304S: two cable entries are provided on the “eb” compartment.

Light source is LED, their rated power are as following: 150W, 120W, 100W, 80W.

LED source is not convergent and cannot be converted into convergent by transparent part. Transparent part gives a significant attenuation of irradiance.

More details in Annex

**SPECIFIC CONDITIONS OF USE: YES as shown below:**

- Connect the external connection facility to the equipotential bonding conductor provided.
- Repair of the threaded joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not exceed the values specified in tables 3 and 4 of IEC 60079-1:2014.

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

Issue 1:

- added models BC9304P-L150 and BC9304S-L150, with rated power 150W
- added marking for new models: Ex db eb IIC T4 Gb; Ex tb IIIC T130°C Db

Issue 2:

- address change
- QAR change to NL/CNEX/QAR23.0001
- IEC 60079-31:2022 ed. 3.0 updating

**Annex:**

IECEx IMQ 20.0005X issue No. 2 Annex.pdf

## General description

BC9304 series LED Explosion-proof lamp are of type “db” “eb” and “tb”. The enclosure material is ADC12. The material of light transmitting part is toughened glass. The LED Explosion-proof lamp has two “db” compartments and one “eb” compartment. For BC9304P: three cable entries are provided on the “eb” compartment. For BC9304S :two cable entries are provided on the “eb” compartment.
Light source is LED, their rated power are as following: 150W, 120W, 100W, 80W.
LED source is not convergent and cannot be converted into convergent by transparent part. Transparent part gives a significant attenuation of irradiance.

The nameplate is riveted onto the enclosure.

Marking:

Ex db eb IIC T6 Gb; Ex tb IIIC T80°C Db

Ex db eb IIC T5 Gb; Ex tb IIIC T95°C Db

**Ex db eb IIC T4 Gb; Ex tb IIIC T130°C Db**

## Models

| Product model | Power | Rated voltage | Frequency | The environment temperature/ Temperature classes | |
|---|---|---|---|---|---|
| | | | | Ta≤40°C | Ta≤55°C |
| BC9304P-L80<br>BC9304S-L80 | 80W | 100～277V AC | 50Hz/60Hz | T6/T80°C | T6/T80°C |
| BC9304P-L100<br>BC9304S-L100 | 100W | 100～277V AC | | T6/T80°C | T6/T80°C |
| BC9304P-L120<br>BC9304S-L120 | 120W | 100～277V AC | | T6/T80°C | T5/T95°C |
| BC9304P-L150<br>BC9304S-L150 | 150W | 100～277V AC | | - | T4/T130°C |

## Specific conditions of Use:

- Connect the external connection facility to the equipotential bonding conductor provided.
- Repair of the threaded joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not exceed the values specified in tables 3 and 4 of IEC 60079-1:2014.