



[1] EU-TYPE EXAMINATION CERTIFICATE

[2] Equipment or Protective System intended for use in potentially explosive atmospheres - Directive 2014/34/EU – Annex III – MODULE B: EU-TYPE EXAMINATION

[3] EU-type Examination Certificate number: **IMQ 25 ATEX 004 X**

[4] PRODUCT: **Explosion-proof lighting switch**

TYPE/SERIES: **BZM */***

[5] MANUFACTURER: **Zhejiang Tormin Electrical Co., Ltd.**

[6] ADDRESS: **No. 2, Gangteng Road, Yongxing Subdistrict, Longwan District, Wenzhou City, Zhejiang Province 325024, China**

[7] This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documents therein referred to.

[8] IMQ, notified body N° 0051, 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 equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in Report No.: **AT24-0112436-01**

[9] Compliance with Essential Health and Safety Requirements, except in respect of those listed at item 18 of the annex, has been assured by compliance with:

EN IEC 60079-0:2018; EN 60079-1:2014; EN 60079-31:2014

Other reference standards: EN IEC 60079-31:2024

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:

 **II 2G Ex db IIC T6 Gb**
II 2D Ex tb IIIC T80°C Db

THIS CERTIFICATE CANCELS AND REPLACES THE PREVIOUS ONE. IT INCLUDES 1 ANNEX.

FIRST 2025/02/24

ISSUE

CURRENT ISSUE 2025/02/24

PREVIOUS
ISSUE

EXPIRING DATE 2035/02/23

B.U. PRODUCT
CERTIFICATION SECTOR - MANAGER

This Certificate may only be reproduced in its entirety and without any change. It is subject to the general rules for assessing conformity to community directives for which IMQ operates as notified body n°. 0051 and to the special requirements for Directive 2014/34/EU (ATEX) "Equipment and protective systems for potentially explosive atmospheres" annex III - MODULE B – EU Type-examination.



PRD N° 005 B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC
Mutual Recognition Agreements

[13] Annex

[14] EU-type Examination Certificate number: **IMQ 25 ATEX 004 X**

[15] Description of product:

BZM series explosion-proof lighting switch has one flameproof compartment with the same size of housing but in different metallic enclosure (aluminium alloy ADC12 or ZL104).

There are nine models according to electrical parameters and three types of cable entries: G 3/4", NPT 3/4", M25×1.5. Cable entries with G thread are certificated with clamping nut and sealing ring as cable gland integrally with the equipment; cable entries with NPT 3/4" and M25×1.5 shall be installed with separated certified cable glands. Details on entries devices are given in Special conditions of use.

[15.1] Models/Series Identification:

Product model	Specifications
BZM 10/A	Rated current 10A, Monopolar
BZM 10/B	Rated current 10A, Bipolar
BZM 10/C	Rated current 10A, Dual control
BZM 16/A	Rated current 16A, Monopolar
BZM 16/B	Rated current 16A, Bipolar
BZM 16/C	Rated current 16A, Dual control
BZM 20/A	Rated current 20A, Monopolar
BZM 20/B	Rated current 20A, Bipolar
BZM 20/C	Rated current 20A, Dual control

[15.2] **Ratings:** depending on models as per [15.1]

Rated voltage: 220V AC, 230V AC, 250V AC, 50Hz

Rated current: 10A, 16A, 20A

[15.3] **Safety Ratings:** N/A

[15.4] **Ambient temperature and temperature classes:**

Ambient temperature range: from -40°C to +55°C. Temperature class: T6 for EPL Gb, T80°C for EPL Db.

[15.5] **Degree of protection (IP code):**

IP66

[15.6] **Warnings:**

WARNING-DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

WARNING – DO NOT OPEN WHEN ENERGIZED

WARNING-POTENTIAL ELECTROSTATIC CHARGING HAZARD-SEE INSTRUCTIONS

CAUTION - USE FASTENERS WITH YIELD STRESS $\geq 450\text{MPa}$

CAUTION – USE CABLE and GLANDS according to INSTRUCTIONS

[13] Annex

[14] EU-type Examination Certificate number: **IMQ 25 ATEX 004 X**

[16] **Report:** AT24-01 12436-01

[16.1] **Routine (factory) tests:**

The manufacturer shall carry out the routine test prescribed at clauses 27 of the EN 60079-0.
Static overpressure test in accordance with IEC/EN 60079-1 clause 15.2.3 shall be conducted: 1.21 MPa (12.1 bar), for a period at least 10 s.

[16.2] **Conformity with the documentation:**

The manufacturer shall carry out the verifications or tests necessary to ensure that the product complies with the documentation.

Marking the equipment in accordance with Clause 29 of EN 60079-0, the manufacturer attests on his own responsibility that:

- the equipment has been constructed in accordance with the applicable requirements of the relevant standards in safety matters;
- the routine verifications and routine tests in 28.1 of EN 60079-0 have been successfully completed with positive results.

[16.3] **Installation conditions:**

Above referred equipment is foreseen to be installed in locations where there are environmental conditions, as clearly specified at clause 1, par. 2 of EN 60079-0.

Installation and use in atmospheric and environmental conditions that are out of above-mentioned intervals request special considerations and additional measures by the side of installer or user.

These should be specified to the manufacturer by the user;

It is not a required by applicable standard listed in [9] that the certification body confirm suitability for the adverse conditions.

Installation of equipment has to proceed according to EN 60079-14.

[17] **Specific Condition of use (X):**

Contact the original manufacturer for the information of dimension of flameproof joint.

The product is installed in explosive gas and dust atmosphere. When equipment is provided with NPT or metric threads entries, separated certified cable glands or blanking elements with Ex marking Ex db IIC Gb and Ex tb IIIC Db, IP66 shall be used for installation. When equipment is provided with G threads, integrated cable glands or T-plug provided with equipment shall be used.

Only metric or NPT thread adapter can be used, each entry shall have no more than one.

Separated thread adapters shall be used during installation. They shall have Ex marking Ex db IIC Gb and Ex tb IIIC Db, IP66.

The maximum temperature of cable entry and branch points are 77°C and 102°C, choose proper cable and cable glands during installation.

[18] **Essential Health and safety Requirements:**

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed in [9].

This Certificate **does not** cover hazards coming from environmental conditions different from those clearly and precisely indicated and covered in clause 1 of EN 60079-0.

ESHR 1.2.7 According Annex VIII of the Directive

ESHR 1.4 Not verified.

[13] **Annex**

[14] EU-type Examination Certificate number: **IMQ 25 ATEX 004 X**

ESHR 1.5 Not verified.
ESHR 3 Not applied.

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at [9], the following are considered relevant to this product, and conformity is demonstrated in the report: none.

[19] **Descriptive documents:** DL- AT24-0112436-01, issue 0, dated 2025-01-17.

[20] **Certification Validity Conditions:**

The use of this Certificate is subject to the Certification Scheme and to the Regulation applicable to holders of IMQ Certificates.

The validity of this certificate is subject to the condition that the manufacturer complies with the results of the document review and of the pertinent requirement if any included, recorded in the relevant copy of documentation as per 19.

One copy of the mentioned documentation is kept in IMQ file.

[21] **Variations**

Issue 0