



- (2) **Equipment and protective systems intended for use in potentially explosive atmospheres**
Directive 94/9/EC

(1) **EC-TYPE EXAMINATION CERTIFICATE**

- (3) Number of the EC type examination certificate: **INERIS 13ATEX0062X**

- (4) Equipment or protective system:

LED EXPLOSION-PROOF FLOODLIGHT TYPE BC9101...

- (5) Manufacturer:

Zhejiang Tormin Electrical CO., LTD.

- (6) Address:

**No. 4978, Airport Road, Wenzhou City,,
Zhejiang Province, China**

- (7) This equipment or protective system and any other acceptable alternative of this one are described in the annex of this certificate and the descriptive documents quoted in this annex.

- (8) INERIS, notified body and identified under number 0080, in accordance with article 9 of Council Directive 94/9/EC of the 23rd March 1994, and accredited by COFRAC under number 5-0045 for certification of products and services (scope of accreditation available on the website www.cofrac.fr) certifies that this equipment or protective system fulfils the Essential of Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, described in annex II of the Directive.

The examinations and the tests are consigned in report No 027927.

- (9) The respect of the Essential Health and Safety Requirements is ensured by:


- conformity with:

EN 60079-0 : 2009
EN 60079-1 : 2007
EN 60079-31 : 2009

IEC 60079-0 : 2007
IEC 60079-1 : 2007
IEC 60079-31 : 2008

- specific solutions adopted by the manufacturer to meet the Essential Health and Safety Requirements described in the descriptive documents.

- (10) Sign X, when it is placed following the Number of the EC type examination certificate, indicates that this equipment and protective system is subjected to the special conditions for safe use, mentioned in the annex of this certificate.
- (11) This EC type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system, these are not covered by this certificate.
- (12) The marking of the equipment or the protective system will have to contain:

 II 2 GD

Verneuil-en-Halatte, 2013.12.13

A blue ink signature of T. Houeix.

The Chief Executive Officer of INERIS,
By delegation
T. HOUeix
Ex Certification Officer

(13)

ANNEX

(14)

EC TYPE EXAMINATION CERTIFICATE N° INERIS 13ATEX0062X

(15)

DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

The LED Explosion-proof Floodlight type BC9101... is composed of a single compartment where is installed all the equipment (LEDs, lenses, reflector, terminals, ect.). It gets the degree of protection IP66, according to EN/IEC 60529 standards.

PARAMETERS RELATING TO THE SAFETY

Table 1: Ratings :

Type	Power (W)	Input Voltage
BC9101-L25H	25	AC 90-305 V 50 Hz/60 Hz
BC9101-L40H	40	
BC9101-L60H	60	
BC9101-L80H	80	
BC9101-L25L	25	DC 18-55 V AC 18-43 V 50 Hz/60 Hz
BC9101-L40L	40	

MARKING

Marking has to be readable and indelible; it has to include the following indications:

Zhejiang Tormin Electrical CO., LTD.

China, Zhejiang,

BC9101...(*)

INERIS 13ATEX0062X

(Serial number)

(Year of construction)

⊕ II 2 GD

Ex d IIB T6 Gb

Ex tb IIIC T80°C Db IP66

Tamb : -40°C to +45°C

Cable entries : See instructions

WARNING: - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

(*) See table 1 for the types.

Marking may be carried out in the language of the country of use.

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

ROUTINE EXAMINATIONS AND TESTS

In accordance with § 16.1 of the EN 60079-1 standard, each apparatus defined above must have successfully passed before delivery an overpressure test, of a period comprised between 10 and 60 seconds under 8 bar.

(16) DESCRIPTIVE DOCUMENTS

The descriptive documents quoted hereafter constitute the technical documentation of the equipment, subject of this certificate.

- | | |
|--|---------------------|
| - Instruction manual n° TM20120714001 ver. 1.0 (6 pages) | dated on 2012.12.10 |
| - Descriptive notice n° TM20120714002 ver. 1.0 (4 pages) | dated on 2012.12.03 |
| - List of components n° BC9101-MX-01 ver. 1.0 | dated on 2012.06.22 |
| - List of components n° BC9302-MX-02 ver. 1.0 | dated on 2012.06.22 |
| - Drawing n° BC9101-00.1~4 ver. 1.0 (2 pages) | dated on 2012.06.22 |
| - Drawing n° BC9101-00.5~6 ver. 1.0 (2 pages) | dated on 2012.06.22 |
| - Drawing n° BC9101-01 ver. 1.0 | dated on 2012.06.22 |
| - Drawing n° BC9101-02 ver. 1.0 | dated on 2012.06.22 |
| - Drawing n° BC9101-03 ver. 1.0 | dated on 2012.06.22 |
| - Drawing n° BC9101-03-01 ver. 1.0 | dated on 2012.06.22 |
| - Drawing n° BC9101-03-02 ver. 1.0 | dated on 2012.06.22 |
| - Drawing n° BC9101-03-03 ver. 1.0 | dated on 2012.06.22 |
| - Drawing n° BC9101-03-04 ver. 1.0 | dated on 2012.06.22 |
| - Drawing n° BC9101-03-05 ver. 1.0 | dated on 2012.06.22 |

- Drawing n° BC9101-04 ver. 1.0
- Drawing n° BC9101-05 ver. 1.0
- Drawing n° BC9101-06 ver. 1.0
- Drawing n° BC9101-07 ver. 1.0
- Drawing n° BC9101-08 ver. 1.0
- Drawing n° ZY8101-02 ver. 1.0
- Drawing n° DGS24-127L(A)-12 ver. 1.0
- Drawing n° DGS24-127L(A)-12-01 ver. 1.0
- Drawing n° DGS24-127L(A)-12-02 ver. 1.0
- Drawing n° DGS24-127L(A)-12-03 ver. 1.0
- Drawing n° BC9200-17 ver. 1.0
- Drawing n° BC9300-06 ver. 1.0
- Drawing n° BC9300-07 ver. 1.0
- Drawing n° BC9700-03 ver. 1.0
- Datasheet of HT6308 n° JS20121021001
- Datasheet of EPDM 4045 n° JS20121021002
- Specification of overpressure test n° JS20120321003
- Report n° JS20121021005
- Report n° JS20120521005
- Report n° JS20130115004
- Datasheet of Silastic Ethene 150 n° JS20120620003
- Procedure for sealing n° TM/GY-0201 ver.2.0

dated on 2012.06.22
 dated on 2012.06.22
 dated on 2012.06.22
 dated on 2012.06.22
 dated on 2012.06.22
 dated on 2012-05-08
 dated on 2009.11.24
 dated on 2009.11.24
 dated on 2009.11.24
 dated on 2009.11.24
 dated on 2012.06.20
 dated on 2012.06.20
 dated on 2012.06.22
 dated on 2012.06.22
 dated on 2009.11.24
 dated on 2012.10.21
 dated on 2012.10.21
 dated on 2012.03.21
 dated on 2012.10.21
 dated on 2012.05.21
 dated on 2012.01.15
 dated on 2012.06.20
 dated on 2012.06.15

(17) SPECIAL CONDITIONS FOR SAFE USE

The width of flameproof joints is more than the values specified in the tables of the EN 60079-1 standard.

The other conditions are stipulated in the instructions.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

The respect of the Essential Health and Safety Requirements is ensured by:

- Conformity to the standards quoted in clause (9).
- All provisions adopted by the manufacturer and defined in the descriptive documents.