

[1]

**EU-TYPE EXAMINATION CERTIFICATE**

[2]

**Equipment intended for use in potentially explosive atmospheres  
Directive 2014/34/EU**

[3]

Certificate Number: **EPT 16 ATEX 2510 X** issue 0

[4]

Equipment: **Explosion-Proof Emergency Box**Series: **BXP01**

[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.03/54571

[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 T6 Gb****Ex tb IIIC T80°C Db****Tamb: -25°C ~ +55°C**

Place and date of issue:

**Torino, 2016-09-23**

Dionisio Bucchieri  
Directive Responsible



Paolo Trisoglio  
Managing Director

**SGQ N° 133A  
PRD N° 119B**

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC  
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This Certificate has 6 pages and it is reproducible only in its entirety. Conditions of validity are reported below.

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**ANNEX**

[14]

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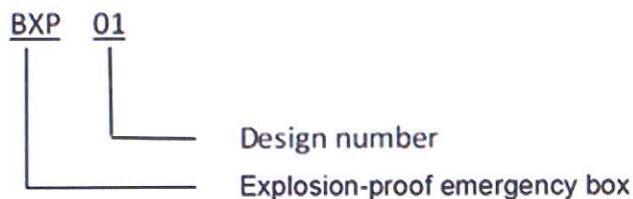

**[15] Equipment description**

BXP01 series Explosion-proof emergency box can be used in Zone 1 and Zone 2 hazardous areas where explosive atmospheres caused by mixtures of air and gases, vapors or mists are present occasionally or rarely, with gas of Group IIA, IIB, IIC and temperature class T1~T6, and are also capable of being applied in Zone 21 and 22 where combustible air/dust atmospheres are present occasionally or rarely.

The emergency box is of flameproof and tight dust protection type. O-rings in each joint surface make it applicable in dust atmospheres. The flameproof enclosure consists of enclosure and upper cover, both of which are made of aluminium alloy 101A. Minimum thickness is 3mm. If the blanket element(s) (stopping plugs) are removed during installation, ATEX certified cable gland(s) whose protection are not less than Ex db IIC Gb / Ex tb IIIC Db shall be installed.

An inverter power supply consisting of an emergency drive circuit board and a battery pack is provided inside the Ex d enclosure. The battery pack includes batteries and protection circuit battery back. The batteries are equipped with four CMICR18650F8 (2600 mAh, Nominal voltage: 3.7V) cells connected in series and each cell is connected to a shunt SR360 Silicon diode (3A/60V). In case of emergency the protection circuit can prevent over charge (16.8 VDC), over discharge (12 VDC) and short circuit, cutting off the supply when needed.

The degrees of protection provided by enclosures, according to EN 60529 and EN 60079-0 is IP66.

**Catalogue Number Logic**

**Electrical characteristics**

Input Voltage: 90~264V AC

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

Rated frequency: 50/60Hz

Rated Power: ≤40W

Battery Specifications: 2600mAh, 14.8V

Cell: type CMICR18650F, 2600mAh

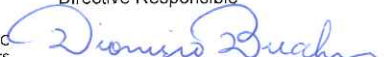
Nominal voltage: 3.7V.



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**Warning label**

- WARNING: POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS
- WARNING: DO NOT OPEN WHEN ENERGISED
- WARNING: DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

**Routine tests**

Each unit shall withstand an overpressure test according to EN60079-1:2014 Clause 16.1. The static overpressure test of Ex d chamber is no less than 14.2 bar (based on 1.5 times reference pressure).

No.	Types	Static Overpressure Test
1	Explosion-proof emergency box with Ex stopping plug	Exd chamber is not less than 14.2bar for 10s
2	Explosion-proof emergency box with cable glands	Exd chamber is not less than 14.1bar for 10s

[16] **Assessment Report n° EPT.16.REL.03/54571**

This EC-Type Examination Certificate is released after the positive result of the conformity assessment of the Council Directive 2014/34/UE and to harmonized technical standards listed in the 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.

[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.

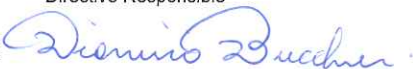
Scheduled documents are indicated with the symbol "✓". They cannot be modified without the explicit authorization of the Notified Body.

Document	Name	Rev.	Date	Scheduled
BOM	BXP01-MX-01	1.0	2015-6-30	✓
BOM	BXP01-MX-02	1.0	2015-6-30	✓
BXP01 Explosion-proof emergency box assembly drawing	BXP01-00.1	1.0	2015-6-30	✓
BXP01 Explosion-proof emergency box assembly drawing	BXP01-00.2	1.0	2015-6-30	✓
Enclosure	BXP01-01	1.0	2015-6-30	✓
Top cover	BXP01-02	1.0	2015-6-30	✓
Inverter power	BXP01-03	1.0	2015-6-30	✓
Nameplate	BXP01-04	1.0	2015-6-30	✓
Battery	BC9306A/B-02	1.0	2015-12-20	✓
Pressing plate	BXP01-06	1.0	2015-6-30	✓
Ceiling bracket	BXP01-07	1.0	2015-6-30	✓
Battery pressing plate	BXP01-08	1.0	2015-6-30	✓
Stopping plug	BC5401-25	2.0	2015-6-15	✓
Clamping nut	BC9305-17	1.0	2015-12-20	✓
T-plug	BC5401-32	1.0	2015-12-20	✓
Grounding unit	BHD01-05	1.0	2015-6-15	✓
Sealing ring	BC9300-06	1.0	2015-6-15	✓
BXP01 Explosion-proof emergency box Instruction Manual	TM20150302006	1.0	2015-03-20	✓
BXP01 Explosion-proof emergency box product description	TM20150302003	1.0	2015-03-20	✓
832-G1 Bicomponent room temperature curing encapsulation glue	JY20160229001	-	2016-01-17	✓
EPDM 4045 Material Description	JS20121021002	-	2012-10-21	✓
Material report of high temperature	JS20150702007	-	2015-07-02	✓


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grease 6001-1				
Test report for tensile strength of 101A aluminium alloy (-60°C)	20160402001	-	2016-04-02	✓
Material analysis report of 101A aluminium alloy	JY20160402002	-	2016-04-02	✓
Silastic Ethene150 Material Description	JS20121021032	-	-	✓
Specification of hydrostatic pressure test	JS20120321003	-	2012-10-21	✓
The operation regulation of Power frequency withstand voltage test	JS20150702005	1.0	2015-07-02	✓
5D1350A/B Fuse parameter specification	JY20160330004	-	2016-03-30	✓
Gas tightness stated of 18650 lithium secondary cell	Annex 1	-	2016-03-20	✓
T41 Battery pack specifications	Annex 2	A00	-	✓
SR360 Silicon Diode Specifications	Annex 3	-	-	✓
Test report of CMICR18650F lithium secondary cell (meet IEC61960:2011 standard)	Annex 4	-	2015-05-25	✓
CMICR18650F lithium secondary cell specification	Annex 5	-	2012-02-01	✓
COT stated of CMICR18650F lithium secondary cell	Annex 6	-	-	✓
BOM for BXP01 Inverter emergency power supply schematic	JY20160330002	1.0	2016-03-30	✓
BXP01 Inverter emergency power supply schematic	JY20160330005	-	2016-03-30	✓
Description for safety device of battery pack	JY20160425001	1.0	2016-04-25	✓


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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.

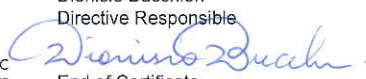


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End of Certificate

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