



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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Certificate No.: **IECEx CNE 25.0002X** Page 1 of 5 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2025-04-10

Applicant: **Crown Extra Lighting Co., Ltd.**
Building 2-5, No.19, Fenghuang Road, Tianning District,
Changzhou city, Jiangsu Province
China

Equipment: **Explosion-proof LED Light Fittings model BYS-□□□□ Series**

Optional accessory:

Type of Protection: **Ex db, Ex eb, Ex mb, Ex tb**

Marking: *Refer to general product information*

Approved for issue on behalf of the IECEx
Certification Body:

Mu Dayu

Position:

Certification Officer

Signature:
(for printed version)

Date:
(for printed version)

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2. This certificate is not transferable and remains the property of the issuing body.
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:

Nanyang Explosion Protected Electrical Apparatus Research Institute
No.20 North Zhongjing Rd
Nanyang, Henan(473008)
China





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Manufacturer: **Crown Extra Lighting Co., Ltd.**
Building 2-5, No.19, Fenghuang Road, Tianning District,
Changzhou city, Jiangsu Province
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 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

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 Report:

CN/CNE/ExTR25.0002/00

Quality Assessment Report:

NL/CNEX/QAR22.0002/01



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

- The BYS-□□□□ series Explosion-proof LED Light Fittings (hereinafter referred to as lighting fittings) is type of "db eb mb". The seal strip in the joints in order to conform to the structural requirements of dust ignition protection.

- For BYS-□□□En series Explosion-proof LED Light Fittings, IECEx certified Ex LED module, Ex driver power supply, Explosion-proof terminal block, Explosion-proof travel switch, reflector, positioning card etc. are installed inside Ex e enclosure.

- For BYS- □□□EM1~EM4 series Explosion-proof LED Light Fittings, IECEx certified Ex LED module, Ex driver power supply, Ex emergency power supply(with battery), Explosion-proof terminal block, Explosion-proof travel switch , reflector, positioning card etc. are installed inside Ex e enclosure

For nomenclature and further details, see Annex to this certificate.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1.The ambient temperature range is limited to:

- For BYS- □□□En, BYS- □□□EM2, BYS- □□□EM3 and BYS- □□□EM4 series Explosion-proof LED Light Fittings:-40°C...+40°C/+55°C.

- For BYS- □□□EM1 series Explosion-proof LED Light Fittings:-20°C...+40°C/+55°C.

2. To avoid explosion risks from static electricity, clean the lamp surface only with a wet cloth.

3. The schedule of limitations in the certificate for the Ex components used inside the explosion-proof light must be fulfilled.

4. Before application, separate IECEx certified cable gland are to be used, suitable for the conditions of use, rated minimum IP66 and correctly installed.

5. When using external emergency power supply, the external power supply and the main circuit power supply are not allowed to work simultaneously. The external emergency power supply should be located in a safe zone or meet explosion-proof requirements



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Equipment (continued):

- The Ex e enclosure of lighting fittings consist of body, lamp shade, The seal strip in the joints in order to conform to the structural requirements of dust ignition protection. The lamp shade is secured to the body with snap-fit mechanisms to fit, and The 2 latches on the diagonal corners of each light fittings enclosure have non-removable screws that can only be loosened or removed from the Ex e enclosure with a tool, The body is made of SMC plastic with min. thickness of 3.2mm, The transparent cover is made of PC Makrolon 2807 plastic with min. thickness of 3mm.

- There are most four cable entries on the body.



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Additional information:

The enclosure of Explosion-proof LED Light Fittings model BYS-□□□□ Series successfully passed the tests for the Ingress Protection Level IP66 to IEC 60529.

Annex:

[Annex to Certificate IECEx CNE 25.0002X issue 0.pdf](#)



Annex to Certificate IECEx CNE 25.0002X issue 0

Equipment or Protective System: Explosion-proof LED Light Fittings

Manufacturer: Crown Extra Lighting Co., Ltd.

Address: Building 2-5, No.19, Fenghuang Road, Tianning District,
Changzhou city, Jiangsu Province, China

Nomenclature:

Explosion-proof LED Light Fittings- Type BYS-□□□□ series

Rated power:

- BYS-01□□□: 10W, 15W, 20W, 30W, 40W

- BYS-02□□□: 20W, 30W, 40W, 50W, 60W

Ex marking: Refer to table 1.

Detail Technical Parameter: Refer to table 1

Table 1

No	Model	Input voltage/ Frequency	Power	Emergen cy power	Emergency voltage	Ex marking	Ambient temperatur e
1	BYS-01□□En	AC110~27 7V 50/60Hz	10W, 15W, 20W, 30W, 40W	--	--	Ex db eb mb IIC T6 Gb, Ex tb IIIC T80℃ Db	-40℃～ +40℃
						Ex db eb mb IIC T5 Gb, Ex tb IIIC T80℃ Db	-40℃～ +55℃
2	BYS-02□□En		20W, 30W, 40W, 50W, 60W	--	--	Ex db eb mb IIC T6 Gb, Ex tb IIIC T80℃ Db	-40℃～ +40℃
						Ex db eb mb IIC T5 Gb, Ex tb IIIC T80℃ Db	-40℃～ +55℃
3	BYS- 01□□EM1		10W, 15W, 20W, 30W, 40W	3.5W	3.6V- 3000mAh Ni- Cd battery Emergency power supply Cell: Type KRH26/51(C) 3000TX3, Rated capacity: 3000mAh, Nominal	Ex db eb mb IIC T6 Gb, Ex tb IIIC T80℃ Db	-20℃～ +40℃
						Ex db eb mb IIC T5 Gb, Ex tb IIIC T80℃ Db	-20℃～ +55℃
4	BYS- 02□□EM1		20W, 30W, 40W, 50W, 60W			Ex db eb mb IIC T6 Gb, Ex tb IIIC T80℃ Db	-20℃～ +40℃
						Ex db eb mb IIC T5 Gb, Ex tb IIIC T80℃ Db	-20℃～ +55℃

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					voltage:1.2V		
5	BYS-01□□EM2		10W, 15W, 20W, 30W, 40W	7W		Ex db eb mb IIC T6 Gb, Ex tb IIIC T80℃ Db	-40℃～ +40℃
						Ex db eb mb IIC T5 Gb, Ex tb IIIC T80℃ Db	-40℃～ +55℃
6	BYS-02□□EM2		20W, 30W, 40W, 50W, 60W	7W		Ex db eb mb IIC T6 Gb, Ex tb IIIC T80℃ Db	-40℃～ +40℃
						Ex db eb mb IIC T5 Gb, Ex tb IIIC T80℃ Db	-40℃～ +55℃
7	BYS-01□□EM3		10W, 15W, 20W, 30W, 40W	10W	9.6V- 3500mAh lithium iron phosphate battery Emergency power supply	Ex db eb mb IIC T6 Gb, Ex tb IIIC T80℃ Db	-40℃～ +40℃
						Ex db eb mb IIC T5 Gb, Ex tb IIIC T80℃ Db	-40℃～ +55℃
8	BYS-02□□EM3		20W, 30W, 40W, 50W, 60W	10W	Cell: Type IFR26650, Rated capacity: 3500mAh, Nominal voltage:3.2V.	Ex db eb mb IIC T6 Gb, Ex tb IIIC T80℃ Db	-40℃～ +40℃
						Ex db eb mb IIC T5 Gb, Ex tb IIIC T80℃ Db	-40℃～ +55℃
9	BYS-01□□EM4		10W, 15W, 20W, 30W, 40W	15W		Ex db eb mb IIC T6 Gb, Ex tb IIIC T80℃ Db	-40℃～ +40℃
						Ex db eb mb IIC T5 Gb, Ex tb IIIC T80℃ Db	-40℃～ +55℃
10	BYS-02□□EM4		20W, 30W, 40W, 50W, 60W	15W		Ex db eb mb IIC T6 Gb, Ex tb IIIC T80℃ Db	-40℃～ +40℃
						Ex db eb mb IIC T5 Gb, Ex tb IIIC T80℃ Db	-40℃～ +55℃

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The following models are covered by this certificate:

S/N	BYS	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Code	a		b	c	d	e
a	Explosion-proof LED Light Fittings					
b	Enclosure size 01=Short enclosure, 02=Long enclosure					
c	Dimming A=Non-Dimming, B=Dimming					
d	Power 10=10W, 15=15W, 20=20W, 30=30W, 40=40W, 50=50W, 60=60W					
e	En=No emergency Emergency EM1=Internal battery Emergency, Emergency power 3.5W EM2=Internal battery Emergency, Emergency power 7W EM3=Internal battery Emergency, Emergency power 10W EM4=Internal battery Emergency, Emergency power 15W					

- List of Ex components/Ex equipment and installed inside type BYS-□□□□ Explosion-proof LED Light Fittings

No.	Type	Ex marking IP degree	Certificate No.	Service temperature	Standards
1	Ex LED module GYD330-36	Ex mb IIC Gb	IECEx CNE 25.0006U	-40°C~+115°C	IEC 60079-0:2017 IEC 60079- 18:2017
2	Ex driver power supply GYD300□-□	Ex eb mb IIC Gb	IECEx CNE 25.0007U	-40°C~+100°C	IEC 60079-0:2017 IEC 60079-7:2017 IEC 60079- 18:2017
3	Ex emergency power supply	Ex eb mb IIC Gb	IECEx CNE 25.0008U	-40°C... +100°C	IEC 60079-0:2017

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	GYD320-□			Ni-Cd battery: -20°C~+70°C Lithium iron phosphate battery: -40°C~+70°C	IEC 60079-7:2017 IEC 60079-18:2017
4	Explosion-proof terminal block GYD3403-□, GYD3405-□ Rated voltage: Max. 400V AC/DC Rated current: Max. 16A	Ex eb IIC Gb	IECEx CNE 25.0004U	-40°C~+100°C	IEC 60079-0:2017 IEC 60079-7:2017
5	Explosion-proof travel switch GYD360-5 Rated voltage: Max. 400V AC/DC Rated current: Max. 5A	Ex db IIC Gb	IECEx CNE 25.0005U	-40°C~+80°C	IEC 60079-0:2017 IEC 60079-1:2014

Mounting Instructions:

See manufacturer's instructions.

Installation Instructions:

See manufacturer's instructions.

Routine tests:

1. Routine electric strength tests must be conducted according to Clause 7.1 of IEC 60079-7, as follows:
The BYS- □□□□ Series Explosion-proof LED Light Fittings must be subjected to a $(1000V+2Un) \times 1.2$ frequency voltage withstand test, during minimum 100ms.
2. For Group II equipment of BYS- 01 □ □ □ Series Explosion-proof LED Light Fittings should be subjected to routine testing for maximum surface temperature which is not higher than the temperature or temperature class marked on the product

Descriptive Documents:

Detailed in the Test Report Cover document. (ref.CQST/ExTR2501G009)

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