



# 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](http://www.iecex.com)

Certificate No.: **IECEx CNE 24.0009X** Page 1 of 4 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2024-12-11

Applicant: **Warom Technology Incorporated Company**  
No. 555 Baoqian Road,  
Jiading District,  
Shanghai  
China

Equipment: **Explosion-proof Light Fittings model BnY81- LED □×□ □ Series and BnY81- LED □×□ □ J Series**

Optional accessory:

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

Marking: **- Type BnY81- LED □ × □ □ series:**  
Ex ec mb IIC T5 Gc, Ex tb IIIC T80°C Db (-40°C≤Ta≤+40°C)  
Ex ec mb IIC T4 Gc, Ex tb IIIC T80°C Db (-40°C≤Ta≤+60°C)

**- Type BnY81- LED □ × □ □ J series**  
Ex db ec mb IIC T5 Gc, Ex tb IIIC T80°C Db (-40°C≤Ta≤+40°C)  
Ex db ec mb IIC T4 Gc, Ex tb IIIC T80°C Db (-40°C≤Ta≤+58°C)

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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Certificate issued by:

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





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Manufacturer: **Warom Technology Incorporated Company**  
No. 555 Baoqian Road,  
Jiading District,  
Shanghai  
**China**

Manufacturing locations: **Warom Technology Incorporated Company**  
No. 555 Baoqian Road,  
Jiading District,  
Shanghai  
**China**

**Warom Technology Mena Fzco**  
Plot No.S31223, Jebel Ali Free Zone  
Dubai 263667  
**United Arab Emirates**

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 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

[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/ExTR24.0009/00](#)

Quality Assessment Report:

[CN/CQM/QAR07.0003/13](#)



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## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The BnY81- LED □×□ □ series and BnY81- LED □×□ □J series Explosion-proof Light Fittings are constructed in type of protection increased safety enclosure 'ec' for explosive gas atmospheres and in type of protection by enclosure 'tb' for explosive dust atmospheres. The BnY81- LED □×□ □ series features an "ec mb" type design, while the BnY81- LED □×□ □J series includes additional "db ec mb" features with an emergency controller and battery pack. The light-transmitting parts are made of polycarbonate and the enclosures of their bodys are made of SMC plastic. Key components include LED modules, IECEx certified Explosion-proof LED Driver, Explosion-proof LED Emergency Controller, Explosion-proof terminal block and Explosion-proof indicator light module. There are most four cable entries provided.

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

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

1. The ambient temperature range is limited to:
  - For BnY81- LED □×□ □ series Explosion-proof Light Fittings:-40°C...+40°C/+60°C.
  - For BnY81- LED □×□ □J series Explosion-proof Light Fittings:-40°C...+40°C/+58°C.
2. For the "ec" enclosures of the BnY81- LED □×□ □ series and BnY81- LED □×□ □J series Explosion-proof Light Fittings, before application, separate IECEx certified Ex eb IIC Gb and/or Ex tb IIIC Db IP66 cable glands and/or stopping plugs (size M25×1.5) must be applied, rated minimum IP66, suitable for the conditions of use and correctly installed.
3. To avoid explosion risks from static electricity, clean the lamp surface only with a wet cloth.



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**Additional information:**

The enclosures of the Explosion-proof Light Fittings have successfully passed the tests for the Ingress Protection level IP66 to IEC 60529.

**Annex:**

[Annex to Certificate IECEx CNE 24.0009X issue 0.pdf](#)



## Annex to Certificate IECEx CNE 24.0009X issue 0

**Equipment or Protective System:** Explosion-proof Light Fittings  
**Manufacturer:** Warom Technology Incorporated Company  
**Address:** No. 555 Baoqian Road, Jiading District, Shanghai, P.R.China

### Nomenclature:

S/N	BnY81	-	LED	<input type="checkbox"/>	x	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Code	a		b	c		d	e	f
a	Explosion-proof Light Fittings							
b	LED light source							
c	LED light source power (W)							
d	Number of light sources (No annotations are required for LED SMT)							
e	Mounting: L: pole type X: ceiling type B: wall type D: pendant chain type G: pendant pole type							
f	J: Emergency lighting (optional)							

### Detail Technical Parameter:

#### - BnY81- LED ☐x☐ ☐ Series

Model/type	Light source power (W)	Light source type	Rated voltage / Rated frequency	Ambient temperature/ temperature classification			
				Ta≤+40℃		Ta≤+60℃	
				Gas	Dust	Gas	Dust
BnY81-LED 9×2□	9×2	LED Lamp tube	100~277V AC 50Hz/60Hz  130~250V DC	T5	T80℃	T4	T80℃
BnY81-LED 14×2□	14×2						
BnY81-LED 28×2□	28×2						
BnY81-LED 20□	20	LED SMT					
BnY81-LED 40□	40						
BnY81-LED 60□	60						

Certification Body: Nanyang Explosion Protected Electrical Apparatus Research Institute  
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## Annex to Certificate IECEx CNE 24.0009X issue 0

### - BnY81- LED □×□ □ J Series

Model/type	Light source power (W)	Emergence power (W)	Light source type	Rated voltage / Rated frequency	Ambient temperature/ temperature classification			
					Ta≤+40℃		Ta≤+58℃	
					Gas	Dust	Gas	Dust
BnY81-LED 9×2□J	9×2	9×2	LED Lamp tube	100~277V AC 50Hz/60Hz  130~250V DC	T5	T80℃	T4	T80℃
BnY81-LED 14×2□J	14×2	14×2						
BnY81-LED 28×2□J	28×2	28						
BnY81-LED 20□J	20	20	LED SMT					
BnY81-LED 40□J	40	20						
BnY81-LED 60□J	60	30						

### List of Ex components/Ex equipment:

- List of Ex components/Ex equipment for type BnY81- LED □×□ □ Explosion-proof Light Fittings

No.	Type	Ex marking IP degree	Certificate No.	Standards
1	HLV-Y20 or HLV-Y30 Explosion-proof LED Driver	Ex mb IIC Gb	IECEx CQM 23.0041U	IEC 60079-0:2017 IEC 60079-18:2017
2	TC8050-25/2 & TC8050-25/3 Explosion-proof terminal block	Ex eb IIC Gb	IECEx CQM 21. 0007U	IEC 60079-0:2017 IEC 60079-7:2017

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## Annex to Certificate IECEx CNE 24.0009X issue 0

- List of Ex components/Ex equipment for type BnY81- LED ☐ × ☐ ☐ J Explosion-proof Light Fittings

No.	Type	Ex marking IP degree	Certificate No.	Standards
1	HLV-Y20 or HLY-Y30 Explosion-proof LED Driver	Ex mb IIC Gb	IECEX CQM 23.0041U	IEC 60079-0:2017 IEC 60079-18:2017
2	HLY-J Explosion-proof LED Emergency Controller	Ex mb IIC Gb	IECEX CQM 23.0042U	IEC 60079-0:2017 IEC 60079-18:2017
3	TC8050-25/2 & TC8050-25/3 Explosion-proof terminal block	Ex eb IIC Gb	IECEX CQM 21. 0007U	IEC 60079-0:2017 IEC 60079-7:2017
4	BM-D Explosion-proof indicator light module	Ex db eb IIC Gb	IECEX CQM 24.0043U	IEC 60079-0:2017 IEC 60079-1:2014 IEC 60079-7:2017

### Mounting Instructions:

See manufacturer's instructions.

### Installation Instructions:

See manufacturer's instructions.

### Routine tests:

Routine electric strength tests must be conducted according to Clause 7.1 of IEC 60079-7, as follows:

The BnY81- LED ☐ × ☐ ☐ series and BnY81- LED ☐ × ☐ ☐ J series Explosion-proof Light Fittings must be subjected to a  $(1000V+2U_n) \times 1.2$  frequency voltage withstand test, during minimum 100ms.

### Descriptive Documents:

Detailed in the Test Report Cover document. (ref. CQST/ExTR2408G017)

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