

# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX CQM 12.0016X** issue No.:1

Certificate history:  
Issue No. 1 (2014-4-17)  
Issue No. 0 (2012-7-3)

Status: **Current**

Date of Issue: **2014-04-17** Page 1 of 5

Applicant: **Warom Technology Incorporated Company**  
No. 555, Baoqian Road, Jiading District, Shanghai City  
Postal Code: 201 808  
China

Electrical Apparatus: **Explosion-proof light fittings Type BDD91-150/250/400**  
Optional accessory:

Type of Protection: **Flameproof enclosure "d", Protection by enclosure "t"**

Marking: For BDD91-150 and 250:  
Ex d IIC T<sub>1</sub> Gb, Ex t IIIC T<sub>1</sub> °C Db IP66  
-60°C ≤ Ta ≤ +55°C  
For BDD91-400:  
Ex d IIC T<sub>1</sub> Gb, Ex tb IIIC T<sub>1</sub> °C Db IP66  
-60°C ≤ Ta ≤ +55°C or -60°C ≤ Ta ≤ +40°C

Approved for issue on behalf of the IECEx  
Certification Body:

Zhang Wei

Position:

President

Signature:  
(for printed version)

Date:

2014-04-17

1. This certificate and schedule may only be reproduced in full.
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 the Official IECEx Website.

Certificate issued by:

China Quality Mark Certification Group Co., Ltd.  
No. 33 Zengguang Road, Haidian District,  
Beijing City, Postal code: 100037  
China





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Manufacturer: **Warom Technology Incorporated Company**  
No. 555, Baoqian Road, Jiading District, Shanghai City  
Postal Code: 201 808  
China

Additional Manufacturing location  
(s):

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 electrical apparatus 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 : 2007-10** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition: 5  
**IEC 60079-1 : 2007-04** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition: 6  
**IEC 60079-31 : 2008** Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'  
Edition: 1

*This Certificate does not indicate compliance with electrical 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/CQM/ExTR12.0031/00  
CN/CQM/ExTR12.0033/01

CN/CQM/ExTR12.0032/00

CN/CQM/ExTR12.0033/00

#### Quality Assessment Report:

CN/CQM/QAR07.0003/04





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## Schedule

### EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

#### Description of equipment

BDD91-... explosion-proof light fittings are of type " d " and type " t ". The enclosure material is aluminium alloy. The material of light transmitting part is toughened glass. The enclosure is comprised of a light source compartment and a ballast compartment. A lamp holder, a reflector, and a bulb are installed in the light source compartment. A ballast, a capacitor and a trigger (high pressure mercury lamp dose not have) are installed in the terminal compartment. These two compartments are divided by heat-proof rim. The heat-proof rim is installed with enclosure by thread. The wires going through two compartments are encapsulated by compound. Two cable entries are provided in the enclosure for connection of suitably certified cable glands or blanking plugs

#### Rating for BDD91-150 and BDD91-250

Rated voltage: 220V~240V AC, 50/60Hz

Type	Lamp power			Temperature classification	
	Metal halide lamp	High pressure mercury lamp	High pressure sodium lamp	Gas	Dust
BDD91-150	70W, 100W	80W	70W, 100W	T4	T130°C
	150W			T142°C	T142°C
		125W		T147°C	T147°C
BDD91-250	175W, 250W	175W, 250W	150W, 200W	T3	T190°C

#### CONDITIONS OF CERTIFICATION: YES as shown below:

1. Repair of the threaded joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in table 3 and table 4 of IEC 60079-1:2007.
2. The assembly shall be equipped with IECEx certified cable glands with a compatible mode of protection for the intended use. And temperature resistance of wire should adopt to temperature code of the light fittings, but for BDD91-400 high temperature resistant wire(185°C) should be used.
3. After deenergizing, delay 15 minutes before opening.
4. The explosion-proof light fittings are intended to be vertically mounted at a maximum of 30 degrees from the vertical.



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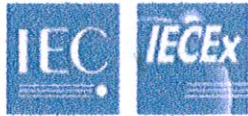
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**EQUIPMENT(continued):**

Rating for BDD91-400							
Type	Rated voltage	Lightsource	Rated power (W)	Temperature classification			
				-60°C ≤ Ta ≤ +55°C		-60°C ≤ Ta ≤ +40°C	
				Gas	Dust	Gas	Dust
BDD91-400	220-240V AC50/60Hz	HIE	175, 250	T4	T130°C	----	----
		HSE	150				
		HIE	400	T3	T190°C		
		HME	400				
		HSE	400				
	220V AC50/60Hz	HSE	250	T4	T130°C		
		HME	175				
	230/240V AC50/60Hz	HSE	250	--	--	T4	T130°C
		HME	175				



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## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

For BDD91-400:

1. Five kinds of new light sources are added:

High pressure sodium lamp(HSE), 150W, 250W; Metal halide lamp(HIE), 175W, 250W; High pressure mercury lamp (HME), 175W.

2. The Ex marking for explosive dust atmosphere is changed from "t" to "tb".