



# 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 CNEX 18.0024X

Issue No: 0

Certificate history:

Issue No. 0 (2018-06-19)

Status: Current

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Date of Issue: 2018-06-19

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

Equipment: Explosion-proof LED lightings model HRD95 Series

Optional accessory:

Type of Protection: db, tb, op is

Marking:

Ex db op is IIC T6...T4 Gb

Ex tb op is IIIC T71°C...T114°C Db

Approved for issue on behalf of the IECEx  
Certification Body:

Wu Jianguo

Position:

Certification Officer

Signature:  
(for printed version)

Date:

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:

CNEX-Global B.V.  
Utrechtseweg 310-B38,  
6812AR, Arnhem  
The Netherlands





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Manufacturer: Warom Technology Incorporated Company  
No. 555# Baoqian Road, Jiading, Shanghai  
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 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 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-28 : 2015 Edition:2	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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:

NL/CNEX/ExTR18.0034/00

### Quality Assessment Report:

CN/CQM/QAR07.0003/07

GB/CML/QAR18.0003/00





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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The LED Explosion-proof Lighting models HRD95-90-..., HRD95-160-... and HRD95-240-... are made of aluminum, constructed with types of explosion protection flameproof enclosure 'db' and optical safety 'op is' for explosive gas atmospheres, as well as with type of explosion protection protection by enclosure 'tb' and optical safety 'op is' for dust atmospheres. They are fitted with toughened glass windows.

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

### Additional Information:

The enclosure of the LED Explosion-proof Lighting models HRD95-90-..., HRD95-160-... and HRD95-240-... successfully passed the tests for the Ingress Protection level IP66 to IEC 60529.

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

The ambient temperature range is limited to -40 °C to +40 °C, or -40 °C to +55 °C.

The width of flameproof joints is more than the minimum values specified in IEC 60079-1 standard. If needed, repair of the flameproof joints must only 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 4 of IEC 60079-1:2014.

Before application, IECEx certified cable glands and plugs must be incorporated, rated minimum IP66, suitable for the conditions of use and correctly installed.

Use heat-resisting cables suitable for operating temperatures greater than 75 °C in ambient temperature of -40 °C ... +55 °C.

### Annex:

P18036IA-CC IECEx CNEX 180024X Annex.pdf

## Annex to Certificate IECEx CNEX 18.0024X issue 0

**Equipment or Protective System:** Explosion-proof LED lightings model HRD95 Series

**Manufacturer:** Warom Technology Incorporated Company

**Address:** No. 555# Baoqian Road, Jiading, Shanghai, P.R. China

**Nomenclature for model HRD95-a-b-c:**

- HRD95 - Explosion-proof LED lightings
- a - Enclosure type: 90, 160, 240
- b - Lamp power: 30 W, 60 W, 90 W, 120 W, 160 W, 200 W, 240 W
- c - Mounting type: K=Bracket, X=Ceiling, D=Hook, G=Pendant pole, B=Wall, L=Pole

**Electrical Data:**

Rated voltage ..... : 100 – 277 Vac, 130 - 250 Vdc

Rated power ..... : 30 W, 60 W, 90 W, 120 W, 160 W, 200 W or 240 W

Rated frequency ..... : 50/60 Hz

The relation between rated power, ambient temperature range, surface temperature and T-class, is as follows:

Type of production	Rated power	Ambient temperature / T-class			
		-40 °C ≤ Ta ≤ +40 °C		-40 °C ≤ Ta ≤ +55 °C	
		Gas	Dust	Gas	Dust
HRD95-90-□□	30W	71°C(T6)	T71°C	86°C(T5)	T86°C
	60W	71°C(T6)	T71°C	86°C(T5)	T86°C
	90W	82°C(T5)	T82°C	97°C(T4)	T97°C
HRD95-160-□□	120W	76°C(T6)	T76°C	91°C(T5)	T91°C
	160W	93°C(T5)	T93°C	108°C(T4)	T108°C
HRD95-240-□□	200W	81°C(T5)	T81°C	96°C(T4)	T96°C
	240W	99°C(T4)	T99°C	114°C(T4)	T114°C

**Mounting Instructions:**

See manufacturer's instructions.

**Installation Instructions:**

See manufacturer's instructions.

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This Annex may only be reproduced in its entirety and without any change



## Annex to Certificate IECEx CNEX 18.0024X issue 0

### Routine Tests:

Each enclosure shall be submitted to a routine overpressure test during 10 seconds, according to IEC 60079-1 clause 16.1, with a minimum pressure of the following table.

No.	Type of product	Chamber	Static Minimum pressure (bar)
1	HRD95-90-□□	d1 Light cavity	13.1
		d2 Power cavity	13.7
		d3 Junction cavity	10.4
		d4 Junction cavity	11.4
		d5 Junction cavity	11.7
		d6 Junction cavity	12.8
		d7 Junction cavity	11.3
No.	Type of product	Chamber	Static Minimum pressure (bar)
2	HRD95-160-□□	d8 Light cavity	13.0
		d9 Power cavity	14.6
		d3 Junction cavity	10.4
		d4 Junction cavity	11.4
		d5 Junction cavity	11.7
		d6 Junction cavity	12.8
		d7 Junction cavity	11.3
3	HRD95-240-□□	d10 Light cavity	13.1
		d11 Power cavity	14.5
		d3 Junction cavity	10.4
		d4 Junction cavity	11.4
		d5 Junction cavity	11.7
		d6 Junction cavity	12.8

### Descriptive Documents:

Detailed in the Test Report Cover document. (ref. CQST/ExTR1804G001)