EU-TYPE EXAMINATION CERTIFICATE



[2] Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

[3] EU-Type Examination Certificate Number: CNEX 18 ATEX 0020 X Issue 0
 [4] Equipment: Explosion-proof LED lightings model HRD95 Series
 [5] Manufacturer: Warom Technology Incorporated Company
 [6] Address: No. 555# Baoqian Road, Jiading, Shanghai P.R. China

- [7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] CNEX-Global B.V., Notified Body number 2614, in accordance with Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No. 18036.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-28:2015 EN 60079-31: 2014 except in respect of those requirements listed at item 18 of the Schedule.

- [10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to specific conditions for use specified in the schedule to this certificate.
- [11] This EU Type examination certificate relates only to the design and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- [12] The marking of the equipment or protective system shall include the following:

EX II 2 G Ex db op is IIC T6...T4 Gb
EX II 2 D Ex tb op is IIIC T71°C..T114°C Db

Certification officer : Wu Jianguo

Signature:

Date of issue

[1]

: 2018-06-19

Certification Body

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

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CNEX-FM-603E Issue 4

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SCHEDULE EU-TYPE EXAMINATION CERTIFICATE No. CNEX 18 ATEX 0020 X Issue 0

Report: 18036

Description of equipment: [15]

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 and optical safety 'op is' for dust atmospheres. They are fitted with toughened glass windows.

Nomenclature for model HRD95-a-b-c:

HRD95 .-

Explosion-proof LED lightings

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 Vac

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 ℃ | 86°C (T5) | T86 ℃ |
| | 60W | 71°C (T6) | T71℃ | 86°C (T5) | T86 ℃ |
| | 90W | 82°C (T5) | T82℃ | 97°C (T4) | T97 ℃ |
| HRD95-160-□□ - | 120W | 76°C (T6) | T76℃ | 91°C (T5) | T91 ℃ |
| | 160W | 93°C (T5) | T93 ℃ | 108°C (T4) | T108℃ |
| HRD95-240-□□ | 200W | 81°C (T5) | T81 ℃ | 96°C (T4) | T96 ℃ |
| | 240W | 99°C (T4) | T99℃ | 114°C (T4) | T114℃ |

Mounting Instructions:

Refer to the manufacturer's instructions.

Installation Instructions:

Refer to the manufacturer's instructions.

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

[16] **Descriptive Documents:**

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

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SCHEDULE EU-TYPE EXAMINATION CERTIFICATE No. CNEX 18 ATEX 0020 X Issue 0

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[17] Specific Conditions for Use:

The ambient temperature range is limited to -40 °C ... +40 °C, or -40 °C ... +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 EN 60079-1:2014.

Before application, ATEX 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 $^{\circ}$ C in ambient temperature of -40 $^{\circ}$ C ... +55 $^{\circ}$ C.

[18] Essential Health and Safety Requirements:

Concerning ESR this Schedule verifies compliance with the Annex III of 2014/34/EU directive only. The manufacturer's Declaration of Conformity declares compliance with other relevant requirements and Directives.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.

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 EN 60529.