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## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx UL 18.0060X	Issue No: 0	Certificate history:
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Issue No. 0 (2018-06-09)

Status: Current

Date of Issue: 2018-06-09

Applicant: Top Hi-Tech Co., Ltd.

9F, No. 1, Zhongshan Rd.

Tucheng District New Taipei City, 236

Taiwan

Equipment: LED Luminaire, Model L1601C Series

Optional accessory:

Type of Protection: Dust Protection by Enclosure "tb" and Restricted breathing "nR"

Marking:

Ex nR IIC T6 Gc Ex tb IIIC T85°C Db

-25°C ≤Ta ≤ +55°C

Approved for issue on behalf of the IECEx Erin LaRocco

Certification Body:

Position: Staff Engineer

Signature:

(for printed version)

Date: 2018-06-09

- 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:

UL LLC 333 Pfingsten Road Northbrook IL 60062-2096 United States of America





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Manufacturer: Top Hi-Tech Co., Ltd.

9F, No. 1, Zhongshan Rd.

Tucheng District New Taipei City, 236

Taiwan

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: 2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

IEC 60079-31 : 2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

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:

US/UL/ExTR18.0068/00

**Quality Assessment Report:** 

DE/TUR/QAR13.0016/01



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Schedule

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

The Model L1601C Series of LED luminaires is suitable for use in hazardous location classified as Zone 2 and Zone 21. This luminaire consists of one "nR"/"tb" chamber. The enclosure material is aluminum alloy and plastic. The light-transmitting part is made of plastic. The gasket is used to maintain the IP rating. The entry for wiring through integral cable gland maintains the degree of protection.

Please see Annex for additional information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The luminaire shall not be opened.

Potential electrostatic charging hazard – see instructions.

Annex:

Annex to IECEx UL 18.0060X Issue 0.pdf



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## **TYPE DESIGNATION**

Nomenclature for Luminaires:

The complete luminaire catalogue number example is as follows:

Cat.	THT	Н	1601	F	N	Н	С	9	D0	03
No.	1	2	3	4	5	6	7	8	9	10

1 - Brand name

THT = Top Hi-Tech Co., Ltd.

2 – Category of product

H = HazLoc LED lighting

3 - Model name

1601 = Model L1601C series

4 – Designates lamp length

D = Short size (1 ft)

E = Middle size (2 ft)

F = Long size (4 ft)

5 - Designates type of Top Cover

N = No Top Cover exist

6 - Designates type of LED module

H = SMD type LED bar

7 - Designates CCT of LED

C = Cool white

W = Warm white

8 - Designates voltage

1 = 110 Vac

2 = 220 Vac

9 = 277 Vac

9 - Designates wattage of LED lighting

A0 = 10 W

B0 = 20 W

D0 = 40 W

10 - Designates serial no

03 = 03 or

blank, for marketing purposes and no impact on safety



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### Models covered are as follows:

	Ambient	Gas Temperature	Dust Temperature
Model	Temperature range	Code	Rating
THTH1601DNH*1A003	-25°C to +55°C	T6	T85°C
THTH1601ENH*1B003	-25°C to +55°C	T6	T85°C
THTH1601FNH*1D003	-25°C to +55°C	T6	T85°C
THTH1601DNH*2A003	-25°C to +55°C	T6	T85°C
THTH1601ENH*2B003	-25°C to +55°C	T6	T85°C
THTH1601FNH*2D003	-25°C to +55°C	T6	T85°C
THTH1601DNH*9A003	-25°C to +55°C	T6	T85°C
THTH1601ENH*9B003	-25°C to +55°C	T6	T85°C
THTH1601FNH*9D003	-25°C to +55°C	T6	T85°C

## PARAMETERS RELATING TO THE SAFETY

THTH1601DNH\*1A003 - 110 Vac, 50/60 Hz, 10 W THTH1601ENH\*1B003 - 110 Vac, 50/60 Hz, 20 W THTH1601FNH\*1D003 - 110 Vac, 50/60 Hz, 40 W THTH1601DNH\*2A003 - 220 Vac, 50/60 Hz, 10 W THTH1601ENH\*2B003 - 220 Vac, 50/60 Hz, 20 W THTH1601FNH\*2D003 - 220 Vac, 50/60 Hz, 40 W THTH1601DNH\*9A003 - 277 Vac, 50/60 Hz, 10 W THTH1601ENH\*9B003 - 277 Vac, 50/60 Hz, 20 W THTH1601FNH\*9D003 - 277 Vac, 50/60 Hz, 40 W

### **MARKING**

Marking has to be readable and indelible; it has to include the following indications:

TOP HI-TECH CO., LTD Hazloc LED Lighting 9F, No.1, Zhongshan Road, Tucheng Dist. New Taipei City, Taiwan. (R.O.C) THTH1601FNHC9D003 V: 277Vac P: 40W SN:1801-001 DEMKO 18 ATEX 1945X IECEx UL 18.0060X

II 3 G Ex nR IIC T6 Gc ■ II 2 D Ex tb IIIC T85°C Db Ex nR IIC T6 Gc Ex tb IIIC T85°C Db

-25°C ≤ Ta ≤ +55°C



WARNING -The luminaire shall not be opened. WARNING - Potential Electrostatic Charging Hazard -



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TOP HI-TECH CO., LTD Hazloc LED Lighting

9F, No.1, Zhongshan Road, Tucheng Dist. New Taipei City, Taiwan. (R.O.C)

THTH1601①NH23403

Vac P: W SN:1801-001 DEMKO 18 ATEX 1945X IECEx UL 18.0060X

🐼 II 3 G Ex nR IIC T6 Gc Ex nR IIC T6 Gc

Ex tb IIIC T85°C Db ■ II 2 D Ex tb IIIC T85°C Db

-25°C ≤ Ta ≤ +55°C

Model Code:

THTH1601(1)NH(2)(3)(4)03

1:D=short size, E=middle size, F=long size 2. M3 screw Fix.

2:C=Cool White, W=Warm White

③:1=110 Vac, 2=220 Vac, 9=277 Vac

4:A0=10W, B0=20W, D0=40W

1. Plate Board Material: SUS304.

3. 0035 is the Notified Body number of TÜV Rheinland Industrie service GmbH.

4. SN number description as show the follow:

18 means 2018.

01 means first week

001 means number of product.