



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

Certificate No.: IECEx UL 18.0059X Issue No: 0 Certificate history:
Issue No. 0 (2018-09-05)

Status: **Current**

Date of Issue: **2018-09-05** Page 1 of 3

Applicant: **Top Hi-Tech Co., Ltd.**
9F, No.1, Zhongshan Rd.
Tucheng Dist.
New Taipei City 236
Taiwan

Equipment: **LED Luminaire, Model L1703 Series**
Optional accessory:

Type of Protection: **Restricted Breathing "nR", Dust Protection by Enclosure "tb"**

Marking:
Ex nR IIC T4 Gc
Ex tb IIIC T120°C Db
-40°C ≤ Ta ≤ +55°C

Approved for issue on behalf of the IECEx
Certification Body:

Katy A. Holdredge

Position:

Senior Staff Engineer

Signature:
(for printed version)

Date:

2018-09-05

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

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 Dist.
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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
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:

[US/UL/ExTR18.0067/00](#)

Quality Assessment Report:

[DE/TUR/QAR13.0016/02](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Model L1703 Series of LED luminaires is suitable for use in hazardous location classified as Zone 2 and Zone 21. This luminaire consists of two interconnecting "nR"/"tb" chambers: one is the top cover for wiring connection to cable gland, the other one is the LED array chamber.

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.
- The luminaire does not have a test port fitted.

Annex:

[Annex to IECEx UL 18.0059X Issue 0.pdf](#)



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TYPE DESIGNATION

Nomenclature for Luminaires:

The complete luminaire catalogue number example is as follows:

Cat.	THT	H	1703	Z	C	A	C	9	J0
No.	1	2	3	4	5	6	7	8	9

- 1 – Brand name
THT = Top Hi-Tech Co., Ltd.
- 2 – Category of product
H = HazLoc LED lighting
- 3 – Model name
1703 = Model L1703 series
- 4 – Designates serial no
Z = Z or blank, for marketing purposes and no impact on safety
- 5 – Designates type of Top Cover
C = Top Cover with opening
- 6 – Designates type of LED module
A = DOB type
K = SMD type
- 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
F0 = 60 W
F5 = 65 W
G5 = 75 W
H0 = 80 W
I0 = 90 W
I5 = 95 W
J0 = 100 W



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Models covered are as follows:

Model	Ambient Temperature range	Gas Temperature Code	Dust Temperature Rating
THTH1703ZCA*1F0	-40°C to +55°C	T4	T120°C
THTH1703ZCK*1F5	-40°C to +55°C	T4	T120°C
THTH1703ZCK*1G5	-40°C to +55°C	T4	T120°C
THTH1703ZCA*1H0	-40°C to +55°C	T4	T120°C
THTH1703ZCA*1I0	-40°C to +55°C	T4	T120°C
THTH1703ZCK*1I5	-40°C to +55°C	T4	T120°C
THTH1703ZCA*1J0	-40°C to +55°C	T4	T120°C
THTH1703ZCA*2F0	-40°C to +55°C	T4	T120°C
THTH1703ZCK*2F5	-40°C to +55°C	T4	T120°C
THTH1703ZCK*2G5	-40°C to +55°C	T4	T120°C
THTH1703ZCA*2H0	-40°C to +55°C	T4	T120°C
THTH1703ZCA*2I0	-40°C to +55°C	T4	T120°C
THTH1703ZCK*2I5	-40°C to +55°C	T4	T120°C
THTH1703ZCA*2J0	-40°C to +55°C	T4	T120°C
THTH1703ZCA*9F0	-40°C to +55°C	T4	T120°C
THTH1703ZCK*9F5	-40°C to +55°C	T4	T120°C
THTH1703ZCK*9G5	-40°C to +55°C	T4	T120°C
THTH1703ZCA*9H0	-40°C to +55°C	T4	T120°C
THTH1703ZCA*9I0	-40°C to +55°C	T4	T120°C
THTH1703ZCK*9I5	-40°C to +55°C	T4	T120°C
THTH1703ZCA*9J0	-40°C to +55°C	T4	T120°C

PARAMETERS RELATING TO THE SAFETY

THTH1703ZCA*1F0 – 110 Vac, 50/60 Hz, 60 W
THTH1703ZCK*1F5 – 110 Vac, 50/60 Hz, 65 W
THTH1703ZCK*1G5 – 110 Vac, 50/60 Hz, 75 W
THTH1703ZCA*1H0 – 110 Vac, 50/60 Hz, 80 W
THTH1703ZCA*1I0 – 110 Vac, 50/60 Hz, 90 W
THTH1703ZCK*1I5 – 110 Vac, 50/60 Hz, 95 W
THTH1703ZCA*1J0 – 110 Vac, 50/60 Hz, 100 W
THTH1703ZCA*2F0 – 220 Vac, 50/60 Hz, 60 W
THTH1703ZCK*2F5 – 220 Vac, 50/60 Hz, 65 W
THTH1703ZCK*2G5 – 220 Vac, 50/60 Hz, 75 W
THTH1703ZCA*2H0 – 220 Vac, 50/60 Hz, 80 W
THTH1703ZCA*2I0 – 220 Vac, 50/60 Hz, 90 W
THTH1703ZCK*2I5 – 220 Vac, 50/60 Hz, 95 W
THTH1703ZCA*2J0 – 220 Vac, 50/60 Hz, 100 W
THTH1703ZCA*9F0 – 277 Vac, 50/60 Hz, 60 W
THTH1703ZCK*9F5 – 277 Vac, 50/60 Hz, 65 W
THTH1703ZCK*9G5 – 277 Vac, 50/60 Hz, 75 W
THTH1703ZCA*9H0 – 277 Vac, 50/60 Hz, 80 W
THTH1703ZCA*9I0 – 277 Vac, 50/60 Hz, 90 W
THTH1703ZCK*9I5 – 277 Vac, 50/60 Hz, 95 W
THTH1703ZCA*9J0 – 277 Vac, 50/60 Hz, 100 W



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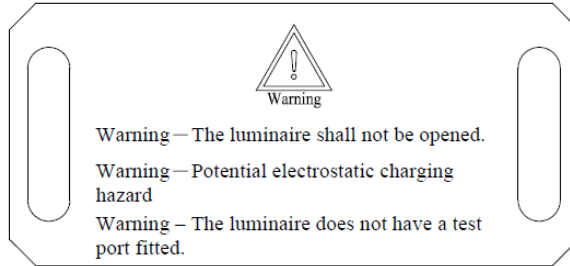
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MARKING

TOP HI-TECH CO., LTD Hazloc LED Lighting
9F, No.1, Zhongshan Road, Tucheng Dist. New Taipei City, Taiwan. (R.O.C)
THTH1703ZCAC1F0 $-40^{\circ}\text{C} \leq \text{Ta} \leq +55^{\circ}\text{C}$
V: 110Vac P:60W SN:1801-001
DEMKO 18 ATEX 2123X IECEx UL 18.0059X
CE 0035 II 2 D Ex tb IIC T120°C Db Ex tb IIC T120°C Db
DEMKO 18 ATEX 1960X IECEx UL 18.0059X
CE II 3 G Ex nR IIC T4 Gc Ex nR IIC T4 Gc



TOP HI-TECH CO., LTD Hazloc LED Lighting
9F, No.1, Zhongshan Road, Tucheng Dist. New Taipei City, Taiwan. (R.O.C)
THTH1703ZC①②③④ $-40^{\circ}\text{C} \leq \text{Ta} \leq +55^{\circ}\text{C}$
V: 110Vac P:60W SN:1801-001
DEMKO 18 ATEX 2123X IECEx UL 18.0059X
CE 0035 II 2 D Ex tb IIC T120°C Db Ex tb IIC T120°C Db
DEMKO 18 ATEX 1960X IECEx UL 18.0059X
CE II 3 G Ex nR IIC T4 Gc Ex nR IIC T4 Gc

NOTE:

1. Plate Board Material:SUS304.
2. M3 screw Fix.
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.

Model Code:

THTH1703ZC①②③④

①:A=DOB type, K=SMD type

②:C=Cool White, W=Warm White

③:1=110 Vac, 2=220 Vac, 9=277 Vac

④:F0=60W, F5=65W, G5=75W, H0=80W, I0=90W, I5=95W, J0=100W

ROUTINE EXAMINATIONS AND TESTS

Routine restricted breathing testing according to clause 23.2.3.2.1.2 of IEC 60079-15 is required.