



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEX UL 21.0111X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2022-03-31

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

Equipment: **LED Luminaires, Model L1733NS Series – Models THTH1733SS and THTH1733SZ Series**

Optional accessory:

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

Marking: Ex nR IIC T4 Gc
Ex tb IIIC T110°C Db
-20°C ≤ Ta ≤ +40°C or
-20°C ≤ Ta ≤ +45°C or
-20°C ≤ Ta ≤ +50°C

Approved for issue on behalf of the IECEx
Certification Body:

Lucy Frieders

Position:

Staff Engineer

Signature:
(for printed version)

Date:
(for printed version)

2022-03-31

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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 www.iecex.com or use of this QR Code.



Certificate issued by:

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





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Tucheng District
New Taipei City, 236
Taiwan

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

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 equipment 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](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-15:2017](#) Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:5.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

This Certificate **does not** indicate compliance with 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/ExTR21.0115/00](#)

Quality Assessment Report:

[DE/TUR/QAR13.0016/04](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Model L1733NS Series of LED luminaires is suitable for use in hazardous location classified as Zone 2 and Zone 21. This luminaire consists of "nR"/"tb" LED array chamber and/or sensor 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.
- The gasket not to be replaced in the field.

Annex:

[Annex to IECEx UL 21.0111X Issue 0.pdf](#)



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TYPE DESIGNATION

Nomenclature for Luminaires:

The complete luminaire catalogue number example is as follows:

Cat. No.	THT	H	1733S	S	K	C	H	U0
	1	2	3	4	5	6	7	8

1 – Brand name

THT = Top Hi-Tech Co., Ltd.

2 – Category of product

H = HazLoc LED luminaire

3 – Model name

1733S = Model L1733NS Series

4 – Designates type of sensor

S = With sensor
Z = Without sensor

5 – Designates type of LED module

K = SMD type

6 – Designates CCT of LED

C = Cool white
W = Warm white

7 – Designates voltage of luminaire

1 = 110 Vac (For 120W/140W/150W/170W/200W only)
6 = 120 Vac (For 120W/140W/150W/170W/200W only)
2 = 220 Vac (For 120W/140W/150W/170W/200W only)
D = 230 Vac (For 120W/140W/150W/170W/200W only)
9 = 277 Vac (For 120W/140W/150W/170W/200W only)
H = 100~277 Vac

8 – Designates wattage of luminaire

J0 = 100W (For 100~277 Vac only)
K0 = 110W (For 100~277 Vac only)
L0 = 120W
M0 = 130W (For 100~277 Vac only)
N0 = 140W
P0 = 150W
Q0 = 160W (For 100~277 Vac only)
R0 = 170W
U0 = 200W

Models covered are as follows:

Models	Ambient Temperature Range	'nR' Temperature Code	'tb' Temperature Rating
THTH1733SwKx1zz	-20°C to +50°C	T4	T110°C
THTH1733SwKx6zz	-20°C to +50°C	T4	T110°C
THTH1733SwKx2zz	-20°C to +50°C	T4	T110°C
THTH1733SwKxDzz	-20°C to +50°C	T4	T110°C
THTH1733SwKx9zz	-20°C to +50°C	T4	T110°C
THTH1733SwKxHz	-20°C to +40°C	T4	T110°C
	-20°C to +45°C	T4	T110°C

w can be S or Z; x can be C or W; zz can be L0, N0, P0, R0 or U0; z can be J0, K0, L0, M0, N0, P0, Q0, R0 or U0



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PARAMETERS RELATING TO THE SAFETY

Electrical Rating:

Models	Voltage (Vac)	Frequency (Hz)	Wattage (W)
THTH1733SwKx1zz	110	50/60	120/140/150/170/200
THTH1733SwKx6zz	120	50/60	120/140/150/170/200
THTH1733SwKx2zz	220	50/60	120/140/150/170/200
THTH1733SwKxDzz	230	50/60	120/140/150/170/200
THTH1733SwKx9zz	277	50/60	120/140/150/170/200
THTH1733SwKxHz	100~277	50/60	100/110/120/130/140/150/160/170/200

w can be S or Z; x can be C or W; zz can be L0, N0, P0, R0 or U0; z can be J0, K0, L0, M0, N0, P0, Q0, R0 or U0

MARKING

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

TOP HI-TECH CO., LTD Universal Hazloc LED Lighting THTH1733S①K②H③ V : V P : W A : A SN : xxyy-zzz	UL 21 ATEX 2631X CE Ⓜ II 3 G Ex nR IIC T4 Gc UL 21 ATEX 2629X CE Ⓜ II 2 D Ex tb IIIC T110°C Db Ambient temperature: -20°C ≤ Ta ≤ +40°C 9F, No.1, Zhongshan Road, Tucheng Dist. New Taipei City, 236, Taiwan (R.O.C)	IECEx UL 21.0111X Ex nR IIC T4 Gc IECEx UL 21.0111X Ex tb IIIC T110°C Db	WARNING -THE LUMINAIRE SHALL NOT BE OPENED. WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD. - SEE INSTRUCTIONS. WARNING-THE LUMINAIRE DOES NOT HAVE A TEST PORT FITTED. WARNING-THE GASKET NOT TO BE REPLACED IN THE FIELD
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TOP HI-TECH CO., LTD Universal Hazloc LED Lighting THTH1733SSKCHU0 V : 100~277 V P : 200 W A : 0.7~2.0A SN : 2121-099	UL 21 ATEX 2631X CE Ⓜ II 3 G Ex nR IIC T4 Gc UL 21 ATEX 2629X CE Ⓜ II 2 D Ex tb IIIC T110°C Db Ambient temperature: -20°C ≤ Ta ≤ +40°C 9F, No.1, Zhongshan Road, Tucheng Dist. New Taipei City, 236, Taiwan (R.O.C)	IECEx UL 21.0111X Ex nR IIC T4 Gc IECEx UL 21.0111X Ex tb IIIC T110°C Db	WARNING -THE LUMINAIRE SHALL NOT BE OPENED. WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD. - SEE INSTRUCTIONS. WARNING-THE LUMINAIRE DOES NOT HAVE A TEST PORT FITTED. WARNING-THE GASKET NOT TO BE REPLACED IN THE FIELD
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TOP HI-TECH CO., LTD Universal Hazloc LED Lighting THTH1733S①K②H③ V : V P : W A : A SN : xxyy-zzz	UL 21 ATEX 2631X CE Ⓜ II 3 G Ex nR IIC T4 Gc UL 21 ATEX 2629X CE Ⓜ II 2 D Ex tb IIIC T110°C Db Ambient temperature: -20°C ≤ Ta ≤ +45°C 9F, No.1, Zhongshan Road, Tucheng Dist. New Taipei City, 236, Taiwan (R.O.C)	IECEx UL 21.0111X Ex nR IIC T4 Gc IECEx UL 21.0111X Ex tb IIIC T110°C Db	WARNING -THE LUMINAIRE SHALL NOT BE OPENED. WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD. - SEE INSTRUCTIONS. WARNING-THE LUMINAIRE DOES NOT HAVE A TEST PORT FITTED. WARNING-THE GASKET NOT TO BE REPLACED IN THE FIELD
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- ① Designates type of Sensor.
S =With Sensor, Z =Without Sensor
- ② Designates CCT of LED.
C = Cool white, W = Warm white
- ③ Designates wattage rating of the luminaire,
J0=100W, K0=110W, L0=120W, M0=130W, N0=140W, P0=150W, Q0=160W, R0=170W, U0=200W



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TOP HI-TECH CO., LTD Universal Hazloc LED Lighting THTH1733S①K②③④ V : V P : W A : A SN : xxyy-zzz	CE @ II 3 G Ex nR IIC T4 Gc UL 21 ATEX 2629X CE @ II 2 D Ex tb IIIC T110°C Db Ambient temperature: -20°C ≤ Ta ≤ +50°C	IECEx UL 21.0111X Ex nR IIC T4 Gc IECEx UL 21.0111X Ex tb IIIC T110°C Db	WARNING -THE LUMINAIRE SHALL NOT BE OPENED. WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD. - SEE INSTRUCTIONS. WARNING-THE LUMINAIRE DOES NOT HAVE A TEST PORT FITTED. WARNING-THE GASKET NOT TO BE REPLACED IN THE FIELD
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TOP HI-TECH CO., LTD Universal Hazloc LED Lighting THTH1733SSK9U0 V : 277 V P : 200 W A : 2.0A SN : 2121-099	CE @ II 3 G Ex nR IIC T4 Gc UL 21 ATEX 2629X CE @ II 2 D Ex tb IIIC T110°C Db Ambient temperature: -20°C ≤ Ta ≤ +50°C	IECEx UL 21.0111X Ex nR IIC T4 Gc IECEx UL 21.0111X Ex tb IIIC T110°C Db	WARNING -THE LUMINAIRE SHALL NOT BE OPENED. WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD. - SEE INSTRUCTIONS. WARNING-THE LUMINAIRE DOES NOT HAVE A TEST PORT FITTED. WARNING-THE GASKET NOT TO BE REPLACED IN THE FIELD
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- ① Designates type of Sensor,
S =With Sensor, Z =Without Sensor
- ② Designates CCT of LED,
C = Cool white, W = Warm white
- ③ Designates voltage of LED module,
1=110V, 2=220V, 6=120V, 9=277V, D=230V
- ④ Designates wattage rating of the luminaire,
L0=120W, N0=140W, P0=150W, R0=170W, U0=200W

SN number description as show the follow :
 -xx means Two yards after the first AD.
 -yy means Week number.
 -zzz means Current week code.

ROUTINE EXAMINATIONS AND TESTS

Each pieces of equipment defined above has to have successfully passed; before delivery:

- Routine dielectric strength testing according to clause 12.1 of IEC 60079-15 is required.
- Routine restricted breathing testing according to clause 12.2.2.1.2 of IEC 60079-15 is required.