# TYPE EXAMINATION CERTIFICATE



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

- [3] Type Examination Certificate Number: UL 21 ATEX 2631X Rev. 0
- [4] Product: LED Luminaires, Models L1733NS Series Models THTH1733SS and THTH1733SZ Series
- [5] Manufacturer: Top Hi-Tech Co., Ltd.

[2]

- [6] Address: 9F, No. 1, Zhongshan Rd., Tucheng District, New Taipei City 236, Taiwan (R.O.C)
- [7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] UL International Demko A/S certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential report no. US/UL/ExTR21.0115/00.

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

EN IEC 60079-0:2018

EN IEC 60079-15: 2019

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 product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- [11] This Type examination certificate relates only to the design of the specified product, and not to specific items of product subsequently manufactured.
- [12] The marking of the product shall include the following:



# Certification Manager

Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2022-03-31

**Certification Body** 

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com



#### [13]

## **Schedule** TYPE EXAMINATION CERTIFICATE No. [14] UL 21 ATEX 2631X Rev. 0

#### [15] **Description of Product:**

The Model L1733NS Series of LED luminaires is suitable for use in hazardous location classified as Zone 2. This luminaire consists of "nR" LED array chamber and/or sensor chamber.

#### Nomenclature for Luminaires:

The complete luminaire catalogue number example is as follows:

Cat.	THT	Н	1733S	S	K	С	Н	U0
No.	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:

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Models	Ambient Temperature Range	'nR' Temperature Code					
THTH1733SwKx1zz	-20°C to +50°C	T4					
THTH1733SwKx6zz	-20°C to +50°C	T4					
THTH1733SwKx2zz	-20°C to +50°C	T4					
THTH1733SwKxDzz	-20°C to +50°C	T4					
THTH1733SwKx9zz	-20°C to +50°C	T4					
THTH1733SwKxHz	-20°C to +40°C	T4					
IHIHI/333WKXHZ	-20°C to +45°C	T4					
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							

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 2) to the scope of EN 60079-28:2015.



[13]

## [14]

# **Schedule** TYPE EXAMINATION CERTIFICATE No. UL 21 ATEX 2631X Rev. 0

#### Electrical data:

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 7: x can be C or W: zz can be L0, N0, P0, R0 or L10: z can be L0, K0, L0, M0, N0, P0, Q0, R0 or L10							

Routine tests:
Routine dielectric strength testing according to clause 12.1 of EN 60079-15 is required.

Routine restricted breathing testing according to clause 12.2.2.1.2 of EN 60079-15 is required.

#### [16] **Descriptive Documents**

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

#### Special Conditions of Use: [17]

- 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.

#### **Essential Health and Safety Requirements** [18]

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

## Additional information

The Models L1733NS Series has in addition passed the tests for Ingress Protection to IP67 in accordance with EN60529:1991+A1:2000+A2:2013.

The trademark THT-EX or THT-EX will be used as the company identifier on the marking label.

