[1] # 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: **UL 21 ATEX 2555X Rev. 0**

[4] Product: **LED Luminaires, Models L2102 Series**

[5] Manufacturer: **Top Hi-Tech Co., Ltd.**

[6] Address: **9F, No. 1, Zhongshan Rd, Tucheng District, New Taipei City 236, Taiwan (R.O.C)**

[7] This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8] UL International Demko A/S, notified body number 0539 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to design and construction of products 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. **US/UL/ExTR21.0049/00.**

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

EN IEC 60079-0:2018 **EN 60079-1: 2014** **EN 60079-31:2014**

[10] If the sign "**X**" is placed after the certificate number, it indicates that the product is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by the certificate.

[12] The marking of the product shall include the following:

II 2 G Ex db IIC T6 Gb

II 2 D Ex tb IIIC T85°C Db

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: 2021-11-16

Notified 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] [14]

Schedule
EU-TYPE EXAMINATION CERTIFICATE No.
UL 21 ATEX 2555X Rev. 0

[15] Description of Product

The Model L2102 Series of LED luminaires is suitable for use in hazardous location classified as Zone 1 and Zone 21. This luminaire consists of one “db”/”tb” chamber. The enclosure material is aluminum alloy. The light-transmitting parts are made of tempered flat glass. The gasket is used to maintain the IP rating. The entry for wiring through integral cable gland maintains the degree of protection.

Nomenclature for Luminaires:

The complete luminaire catalogue number example is as follows:

Cat. No.	THT	E	2102	A	B	K	C	H	F0
	1	2	3	4	5	6	7	8	9

1 – Brand name
THT = Top Hi-Tech Co., Ltd.

2 – Category of product
E = Explosion proof LED luminaire

3 – Model name
2102 = Model L2102 Series

4 – Designates LED luminaire supply type
A = AC supply
D = DC supply

5 – Designates input voltage of LED module
B = DC type

6 – Designates type of LED module
K = SMD type

7 – Designates CCT of LED
C = Cool white
W = Warm white

8 – Designates voltage of LED luminaire
H = 100~277 Vac
L = 125 Vdc

9 – Designates wattage of LED luminaire
C0 = 30 W
C5 = 35 W
D0 = 40 W
D5 = 45 W
E0 = 50 W
E5 = 55 W
F0 = 60 W

Models covered are as follows:

Models	Ambient Temperature range	Gas Temperature Code	Dust Temperature Rating
THTE2102ABKxHz	-20°C to +40°C	T6	T85°C
THTE2102DBKxLz	-20°C to +50°C	T6	T85°C
x can be C or W; z can be C0, C5, D0, D5, E0, E5 or F0			

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 not covered in this certificate.

Electrical data

Models	Frequency (Hz)	Voltage	Wattage (W)
THTE2102ABKxHz	50/60	100~277 Vac	30/35/40/45/50/55/60
THTE2102DBKxLz	50/60	125 Vdc	30/35/40/45/50/55/60
x can be C or W; z can be C0, C5, D0, D5, E0, E5 or F0			

Routine tests

Routine overpressure tests in accordance with EN 60079-1:2014 shall be conducted on all units in accordance with clause 15.2.3.2, at a pressure of 9.65 bar (140 psi) for a duration of not less than 10 seconds. There shall be no sign of damage, deformation or rupture that will invalidate the concept of protection.

[13] **Schedule**

[14] **EU-TYPE EXAMINATION CERTIFICATE No.**

UL 21 ATEX 2555X Rev. 0

[16] Descriptive Documents

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

[17] Specific conditions of use:

- The luminaire shall not be opened.
- The flameproof joints are not intended to be disassembled or repaired.
- Potential electrostatic charging hazard – see instructions.

[18] Essential Health and Safety Requirements

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

Additional information

The Model L2102 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.

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.