

# TYPE EXAMINATION CERTIFICATE



[2] **Equipment or Protective System intended for use  
in Potentially Explosive Atmospheres  
Directive 2014/34/EU**

[3] Type Examination Certificate Number: **DEMKO 18 ATEX 1938X Rev. 0**

[4] Product: **LED Surface-mounted Luminaires, L1403AS Series**

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

[6] Address: **9F, No. 1, Zhongshan Rd, Tucheng District, New Taipei, 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. **4788107376.1.1**

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

**EN 60079-0:2012 + A11:2013**

**EN 60079-15:2010**

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:

 **II 3 G Ex nR IIC T5 Gc**

**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:** 2018-08-08

**Certification Body**

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark  
Tel. +45 44 85 65 65, [info.dk@ul.com](mailto:info.dk@ul.com), [www.ul.com](http://www.ul.com)



## Schedule

### TYPE EXAMINATION CERTIFICATE No.

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Description of Product:

L1403AS series of luminaires are composed of Tank, LED Module, PC Cover Gasket, PC (Plastic) Cover and AL Cover to form as a LED compartment at luminaire bottom; the Tank top also incorporates a Top Cover, O-ring for Cable Gland assembly. The constructions of all Tank, Gasket, O-ring and Cable Gland assemblies are evaluated for "nR" and "tb" protection. All Tank assemblies including AL Cover and Top Cover are die-cast aluminum alloy, the PC Cover as the optic part is a plastic material and secured between Tank and AL cover; all Cable Gland assemblies are stainless steel with the O-ring and Sealing Ring secured inside to form as the protection. The equipment is LED (light emitting diode) luminaire intended for surface trunnion (wall and hanging mounting), stanchion, and pendant-mounted installation.

Nomenclatures for Luminaires, L1403AS Series Models:

The complete luminaire Model number breakdown is as follows:

Models	THT	H	1403	Z	C	K	C	2	I5
	1	2	3	4	5	6	7	8	9

1 – Designates basic series

THT – Basic series for all luminaires

2 – Designates type of luminaires

H – HazLoc LED lighting

3 – Designates model name

1403 – L1403AS series

4 – Designates internal control code

Z – For all luminaires

5 – Designates type of top Cover

C – Top Cover with opening

6 – Designates type of LED module

K – SMD type LED

7 – Designates CCT (Correlated Color Temperature) of LED

C – Cool white;  
W – Warm white

8 – Designates voltage of LED module

1 – 110Vac;  
2 – 220Vac;  
9 – 277Vac

9 – Designates wattage of LED luminaires

F5 – 65W;  
G5 – 75W;  
H0 – 80W;  
I5 – 95W

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.

Temperature range:

The relation between ambient temperature and the assigned temperature class is as follows:

**Ambient temperature range**

$-25^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$

**Temperature class**

T5

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#### Electrical data

L1403AS series ratings are covered as below Models:

THTH1403ZCK\*1F5 - 110 Vac, 50/60 Hz, 65 W;  
THTH1403ZCK\*1G5 - 110 Vac, 50/60 Hz, 75 W;  
THTH1403ZCK\*1H0 - 110 Vac, 50/60 Hz, 80 W;  
THTH1403ZCK\*1I5 - 110 Vac, 50/60 Hz, 95 W;  
THTH1403ZCK\*2F5 - 220 Vac, 50/60 Hz, 65 W;  
THTH1403ZCK\*2G5 - 220 Vac, 50/60 Hz, 75 W;  
THTH1403ZCK\*2H0 - 220 Vac, 50/60 Hz, 80 W;  
THTH1403ZCK\*2I5 - 220 Vac, 50/60 Hz, 95 W;  
THTH1403ZCK\*9F5 - 277 Vac, 50/60 Hz, 65 W;  
THTH1403ZCK\*9G5 - 277 Vac, 50/60 Hz, 75 W;  
THTH1403ZCK\*9H0 - 277 Vac, 50/60 Hz, 80 W;  
THTH1403ZCK\*9I5 - 277 Vac, 50/60 Hz, 95 W.

#### Routine tests:

Routine restricted breathing testing is required according to Cl. 23.2.3.2.1.2 of EN 60079-15.

[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.

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#### Special Conditions of Use:

- The luminaire shall not be opened.
- Potential electrostatic charging hazard – See instructions.
- The luminaire does not have a test port fitted.

[18]

#### Essential Health and Safety Requirements

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

#### Additional information

The L1403AS series have in addition passed the tests for Ingress Protection to IP67 in accordance with EN60529:1991+A1:2000+A2:2013.



The trademark

will be used as the company identifier on the marking label.