



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

Certificate No.: IECEx TUR 17.0058X Issue No: 0 Certificate history:  
Issue No. 0 (2018-06-12)

Status: **Current** Page 1 of 3

Date of Issue: **2018-06-12**

Applicant: **TOP HI-TECH CO.,LTD.**  
9F.,No.1, Zhongshan Rd.,Tucheng Dist.,New Taipei City 23680  
**Taiwan**

Equipment: **Universal Explosion Proof LED Lighting**  
Optional accessory: **THTE1701ACK\*A\*.\***

Type of Protection: **"db" and "tb"**

Marking:  
Ex db IIC T4 Gb  
Ex tb IIIC T130°C Db (-20°C≤Ta≤+55°C)  
Ex db IIC T5 Gb  
Ex tb IIIC T95°C Db (-20°C≤Ta≤+40°C)

Approved for issue on behalf of the IECEx  
Certification Body:

Dipl.-Ing. Klauspeter Graffi

Position:

Head of Certification Body

Signature:  
(for printed version)

*Klauspeter Graffi*

Date:

*2018-06-12*

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:

**TUV Rheinland Industrie Service GmbH**  
Am Grauen Stein  
51105 Cologne  
Germany





# IECEX Certificate of Conformity

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Date of Issue: 2018-06-12 Page 2 of 3  
Manufacturer: TOP HI-TECH CO.,LTD.  
9F.,No.1, Zhongshan Rd.,Tucheng Dist.,New Taipei City 23680  
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 Explosive atmospheres - Part 0: General requirements  
Edition:6.0  
IEC 60079-1 : 2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:7.0  
IEC 60079-31 : 2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

*This Certificate **does not** indicate compliance with 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:

[DE/TUR/ExTR17.0058/00](#)

Quality Assessment Report:

[DE/TUR/QAR13.0016/00](#)

[DE/TUR/QAR13.0016/01](#)

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



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

#### Description:

The lamp Universal Explosion Proof LED Lighting type THTE1701ACK\*A\*-\* is designed according to the standard structure of the IEC 60079-0, IEC 60079-1 and IEC 60079-31. The suitable hazardous areas are zone1, zone2, zone21 and zone22.

The enclosure of lamp is made by aluminium alloy (ADC12).

The method of lamp mounting includes pendant, wall, adjustable trunnion mounting bracket, electrical tube mounting.

The external earthing of enclosure is provided.

#### Subject and type:

Universal Explosion Proof LED Lighting. Type THTE1701ACK\*A\*-\*

#### Parameters:

##### Electrical parameters

Rated voltage 120 Vac~277 Vac ( $\pm 10\%$ ), 50 & 60 Hz

Rated power 60W, 80W, 100W

##### Thermal parameters

Temperature class T4(-20°C $\leq$ Ta $\leq$ +55°C)

T5(-20°C $\leq$ Ta $\leq$ +40°C)

Maximum surface temperature 97.4°C (-20°C $\leq$ Ta $\leq$ +55°C)

82.4°C (-20°C $\leq$ Ta $\leq$ +40°C)

### SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Do not clean or rub when an explosive atmosphere may be present.
2. A copper plate used as one part of flameproof joint, and the safe use information in the instruction for the copper shall be observed strictly.
3. The maximum cable length from conductor branching point of cable gland to inside flameproof enclosure no more than 16.5 cm when installed.
4. Maintenance work is not permitted on flameproof enclosures. Repairs are only to be carried out by the manufacturer.

### Annex:

[DE-IECEX\\_TUR\\_17.0058X\\_00\\_Attachment\\_2018-06-06.pdf](#)



Attachment to Certificate IECEx TUR 17.0058 X

**Device:** Universal Explosion Proof LED Lighting  
THTE1701ACK\*A\*.\*

**Manufacturer:** TOP HI-TECH CO., LTD.

**Address:** 9F.,No.1, Zhongshan Rd.,Tucheng Dist.,New Taipei City 23680,  
Taiwan

**General product information:**

Description:

The lamp Universal Explosion Proof LED Lighting type THTE1701ACK\*A\*.\* is designed according to the standard structure of the IEC 60079-0, IEC 60079-1 and IEC 60079-31. The suitable hazardous areas are zone1, zone2, zone21 and zone22.

The enclosure of lamp is made by aluminium alloy (ADC12).

The method of lamp mounting includes pendant, wall, adjustable trunnion mounting bracket, electrical tube mounting.

The external earthing of enclosure is provided.

Subject and type:

Universal Explosion Proof LED Lighting. Type THTE1701ACK\*A\*.\*

THT	E	1701	A	C	K	C	A	J0	-S25
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

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

(2) Category of product, E = Explosion proof lighting fixtures

(3) Model name, 1701 = Model L1701 series

(4) Sub-series designation, A = Use EVERLIGHT SMD LED and PHILIPS supplier

(5) Designates type of Top Cover, C = Top Cover with opening

(6) Designates type of LED module, K = SMD LED

(7) Designates C.C.T of LED, C = Cool white, W = Warm white

(8) Designates voltage, A=120~277V

(9) Designates wattage of LED lighting, J0 = 100W, H0=80W, F0=60W

(10) Mounting type, S25 = Bending electrical tube 25°

S90 = Bending electrical tube 90°

P90 = Straight electrical tube 90°

WHT = Two position (wall/Pendant) adjustable trunnion, each position with two aiming angles

Parameters:

Electrical parameters

Rated voltage 120 Vac~277 Vac (±10%), 50 & 60 Hz

Rated power 60W, 80W, 100W

Thermal parameters

Temperature class T4(-20°C≤Ta≤+55°C)

T5(-20°C≤Ta≤+40°C)

Maximum surface temperature 97.4°C (-20°C≤Ta≤+55°C)

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