



# 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 14.0029X Issue No: 0 Certificate history:  
Status: **Current** Page 1 of 3 Issue No. 0 (2016-01-19)  
Date of Issue: **2016-01-19**  
Applicant: **TOP HI-TECH CO.,LTD.**  
5F,NO.113,Zhongcheng Rd,  
Tucheng Dist,New Taipei City 236  
**Taiwan**  
Electrical Apparatus: **Universal Explosion Proof LED Lighting**  
Optional accessory: **THT-L1219**  
Type of Protection: **Ex d, Ex t**  
Marking:  
Ex d IIB + H2 T6...T4 Gb  
E x tb IIIC T55°C ... T105°C Db

Approved for issue on behalf of the IECEx  
Certification Body:

Dipl.-Ing. Klauspeter Graffi

Position:

Head of Certification Body

Signature:  
(for printed version)

Date:

  
2016-01-19

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: 2016-01-19 Page 2 of 3  
Manufacturer: TOP HI-TECH CO.,LTD.  
2F,No.113,Zhongcheng Rd, Tucheng Dist,New Taipei City 236  
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 electrical 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:

|   |  |
|---|--|
| <b>IEC 60079-0 : 2011</b><br>Edition:6.0  | Explosive atmospheres - Part 0: General requirements                                 |
| <b>IEC 60079-1 : 2007-04</b><br>Edition:6 | Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"    |
| <b>IEC 60079-31 : 2008</b><br>Edition:1   | Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't' |

*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/ExTR14.0039/00

#### Quality Assessment Report:

DE/TUR/QAR13.0016/00



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## Schedule

### EQUIPMENT:

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

Universal Explosion Proof LED Lighting

THT-EX1219\*\*\*\*\*-\*

### CONDITIONS OF CERTIFICATION: YES as shown below.

The G3/4" cable gland will be installed by end user, the rest unused holes shall be blocked by screw plug which comply with the requirements of standards IEC 60079-1 and IEC 60079-31.

The power cable will be installed by end user, and the end user can use the cable which is specified in the user manual only.

The end user must install earthing wire according to user manual before use.

WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS.

### Annex:

[DE-IECEx\\_TUR\\_14.0029X\\_00\\_Attachment\\_2016-01-19.pdf](#)



Attachment to to Certificate IECEX TUR 14.0029 X

**Device:** Universal Explosion Proof LED Lighting  
THT-EX1219\*\*\*\*\*\_\*

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

**Address:** 5F,NO.113,Zhongcheng Rd,  
Tucheng Dist,New Taipei City 236,  
Taiwan (R.O.C)

**General product information:**

Subject and type

Universal Explosion Proof LED Lighting type THT-EX1219\*\*\*\*\*\_\*

The description of type code:

**For model L1219A(LED carrier is Short Cylinder):**

| (1)    | (2)  | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------|-----|-----|-----|-----|-----|-----|-----|
| THT-EX | 1219 | *   | *   | S   | *   | 1   | *   | _*  |

- (1) Brand name.
- (2) Series designation, 1219=L1219 series.
- (3) C.C.T., C=Cool white, W=Warm white, R=Red light, G=Green light.
- (4) Voltage, A=24Vac, B=100Vac, C=110Vac, D=200Vac, E=220Vac, F=120Vac, G=208Vac.
- (5) Type of LED carrier, S=Short Cylinder.
- (6) Type of Top Cover, A=Tall type (L1105T), B=Short type (L1105S).
- (7) LED quantity, 1=1 LED.
- (8) LED watts choose, 1=10W, 2=20W, 3=33W.
- (9) Mounting type. W25=Wall mounting 25°; W90= Wall mounting 90°; H25=Hanging mounting 25°; H90= Hanging mounting 90°; C90=Ceiling mounting 90°; S25=Stanchion mounting 25°; S90=Stanchion mounting 90°; P30=Pendant mounting.

Remarks:

- 1.33W for Green and Red LED light source is not available.
- 2.24V Cool white and Warm white LED light source can be used with 20watt model only.
- 3.Green Light and Red Light LED source can be used with 10W and 20W under work voltage 220V only.

**For model L1219B(LED carrier is Cylinder):**

| (1)    | (2)  | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------|-----|-----|-----|-----|-----|-----|-----|
| THT-EX | 1219 | *   | *   | C   | *   | 5   | *   | _*  |

- (1) Brand name
- (2) Series designation, 1219=L1219 series.
- (3) C.C.T., C=Cool white, W=Warm white.
- (4) Voltage, B=100Vac, C=110Vac, D=200Vac, E=220Vac, F=120Vac, G=208Vac.
- (5) Type of LED carrier, C=Cylinder.
- (6) Type of Top Cover, A=Tall type (L1105T), B=Short type (L1105S).
- (7) LED quantity, 5=5 LEDs.
- (8) LED watts choose, 1=10W, A=10W+20W, B=10W+33W, D=10W+20W+33W.
- (9) Mounting type. W25=Wall mounting 25°; W90= Wall mounting 90°; H25=Hanging mounting 25°; H90= Hanging mounting 90°; C90=Ceiling mounting 90°; S25=Stanchion mounting 25°; S90=Stanchion mounting 90°; P30=Pendant mounting.



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Remarks:

1. When LED watts choose is "1," it consists of 10W LED, the highest wattage is 50W.
2. When LED watts choose is "A," it consists of 10W and 20W LED, the highest wattage is 90W.
3. When LED watts choose is "B," it consists of 10W and 33W LED, the highest wattage is 73W.
4. When LED watts choose is "D," it consists of 10W, 20W and 33W LED, the highest wattage is 83W.

**For model L1219C(LED carrier is Triangular):**

| (1)    | (2)  | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------|-----|-----|-----|-----|-----|-----|-----|
| THT-EX | 1219 | *   | *   | T   | *   | 4   | *   | -*  |

- (1) Brand name
- (2) Series designation, 1219=L1219 series.
- (3) C.C.T., C=Cool white, W=Warm white.
- (4) Voltage, A=24Vac, B=100Vac, C=110Vac, D=200Vac, E=220Vac, F=120Vac, G=208Vac.
- (5) Type of LED carrier, T=Triangular.
- (6) Type of Top Cover, A=Tall type (L1105T), B=Short type (L1105S).
- (7) LED quantity, 4=4 LEDs.
- (8) LED watts choose, 1=10W, 2=20W, A=10W+20W, B=10W+33W, D=10W+20W+33W.
- (9) Mounting type. W25=Wall mounting 25°; W90= Wall mounting 90°; H25=Hanging mounting 25°; H90= Hanging mounting 90°; C90=Ceiling mounting 90°; S25=Stanchion mounting 25°; S90=Stanchion mounting 90°; P30=Pendant mounting.

Remarks:

1. When LED watts choose is "1," it consists of 10W LED, the highest wattage is 40W.
2. When LED watts choose is "2," it consists of 20W LED, the highest wattage is 80W.
3. When LED watts choose is "A," it consists of 10W and 20W LED, the highest wattage is 70W.
4. When LED watts choose is "B," it consists of 10W and 33W LED, the highest wattage is 63W.
5. When LED watts choose is "D," it consists of 10W, 20W and 33W LED, the highest wattage is 73W.
6. When voltage is 24V, only 80W is available.

**For model L1219D(LED carrier is Warning Light):**

| (1)    | (2)  | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|--------|------|-----|-----|-----|-----|-----|-----|-----|
| THT-EX | 1219 | *   | *   | W   | A   | 0   | 1   | -*  |

- (1) Brand name
- (2) Series designation, 1219=L1219 series.
- (3) C.C.T., B=Blue light, Y=Yellow light, R=Red light, G=Green light.
- (4) Voltage, A=24Vac, B=100Vac, C=110Vac, D=200Vac, E=220Vac, F=120Vac, G=208Vac.
- (5) Type of LED carrier, W=Warning Light.
- (6) Type of Top Cover, A=Tall type (L1105T).
- (7) LED quantity, 0=Warning light set.
- (8) LED watts choose, 1=10W.
- (9) Mounting type. W25=Wall mounting 25°; W90= Wall mounting 90°; H25=Hanging mounting 25°; H90= Hanging mounting 90°; C90=Ceiling mounting 90°; S25=Stanchion mounting 25°; S90=Stanchion mounting 90°; P30=Pendant mounting.

Description

The lamp Universal Explosion Proof LED Lighting type THT-EX1219\*\*\*\*\*-\* is suitable for hazardous area zone 1, zone 2, zone 21 and zone 22.

The lamp has metallic enclosure(ADC12) with a coating on it(40~80µm).

The lamp including two different top cover(tall and short) and four different lamppost(Short cylinder, Cylinder, Triangular Prism and Warning light).

Mounting type. W25=Wall mounting 25°; W90= Wall mounting 90°; H25=Hanging mounting 25°; H90= Hanging mounting 90°; C90=Ceiling mounting 90°; S25=Stanchion mounting 25°; S90=Stanchion mounting 90°; P30=Pendant mounting.



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Parameters

Electrical parameters

|               |                    |                    |
|---------------|--------------------|--------------------|
| Rated voltage | 24VAC              | THT-EX1219*A****-* |
|               | 100VAC             | THT-EX1219*B****-* |
|               | 110VAC             | THT-EX1219*C****-* |
|               | 120VAC             | THT-EX1219*F****-* |
|               | 200VAC             | THT-EX1219*D****-* |
|               | 208VAC             | THT-EX1219*G****-* |
|               | 220VAC             | THT-EX1219*E****-* |
| Rated power   | 10W                | THT-EX1219**S*11-* |
|               |                    | THT-EX1219**W*01-* |
|               | 20W                | THT-EX1219**S*12-* |
|               | 33W                | THT-EX1219C*S*13-* |
|               |                    | THT-EX1219W*S*13-* |
|               | 40W                | THT-EX1219**T*41-* |
|               | 50W                | THT-EX1219**C*51-* |
|               | 63W                | THT-EX1219**T*4B-* |
|               | 70W                | THT-EX1219**T*4A-* |
|               | 73W                | THT-EX1219**T*4D-* |
|               |                    | THT-EX1219**C*5B-* |
|               | 80W                | THT-EX1219**T*42-* |
|               | 83W                | THT-EX1219**C*5D-* |
| 90W           | THT-EX1219**C*5A-* |                    |

Thermal parameters

Ambient temperature range  $-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$

|                   |                    |                    |
|-------------------|--------------------|--------------------|
| Temperature class | T6                 | THT-EX1219**S*1*-* |
|                   |                    | THT-EX1219**WA01-* |
|                   |                    | THT-EX1219**TA**-* |
|                   |                    | THT-EX1219*ATB42-* |
| T5                | THT-EX1219**CA**-* |                    |
|                   | THT-EX1219*BCB**-* |                    |
|                   | THT-EX1219CET*42-* |                    |
| T4                | THT-EX1219CECB5A-* |                    |
|                   | THT-EX1219WETB42-* |                    |

Maximum surface temperature[Tmax (°C)]:

Model L1219A is marked with T60°C...T80°C  
 Model L1219B is marked with T90°C...T105°C  
 Model L1219C is marked with T65°C...T105°C  
 Model L1219D is marked with T55°C

See following table for details:

| Model L1219A       | Tmax marking | Model L1219B       | Tmax marking |
|--------------------|--------------|--------------------|--------------|
| Type code          |              | Type code          |              |
| THT-EX1219CASA12-* | <b>T60°C</b> | THT-EX1219CBCA5A-* | <b>T95°C</b> |
| THT-EX1219CESA13-* | T70°C        | THT-EX1219CECA5A-* | T100°C       |
| THT-EX1219WASA12-* | T60°C        | THT-EX1219WBCA5A-* | T90°C        |
| THT-EX1219WESA13-* | T70°C        | THT-EX1219WECA5A-* | T100°C       |



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|                    |               |                    |               |
|--------------------|---------------|--------------------|---------------|
| THT-EX1219GESA12-* | T60°C         | THT-EX1219CBCB5A-* | T95°C         |
| THT-EX1219RESA12-* | T70°C         | THT-EX1219CECB5A-* | <b>T105°C</b> |
| THT-EX1219CASB12-* | T60°C         | THT-EX1219WBCB5A-* | T100°C        |
| THT-EX1219CESB13-* | T70°C         | THT-EX1219WECB5A-* | T105°C        |
| THT-EX1219WASB12-* | T60°C         | /                  |               |
| THT-EX1219WESB13-* | <b>T80°C</b>  | /                  |               |
| THT-EX1219GESB12-* | T60°C         | /                  |               |
| THT-EX1219RESB12-* | T60°C         | /                  |               |
|                    |               |                    |               |
| Model L1219C       | Tmax          | Model L1219D       | Tmax          |
| Type code          | marking       | Type code          | marking       |
| THT-EX1219CATB42-* | T75°C         | THT-EX1219BAWA01-* | T55°C         |
| THT-EX1219WETB42-* | <b>T105°C</b> | THT-EX1219BEWA01-* | T55°C         |
| THT-EX1219CATA42-* | T70°C         | THT-EX1219GAWA01-* | T55°C         |
| THT-EX1219CETB42-* | T95°C         | THT-EX1219GEWA01-* | T55°C         |
| THT-EX1219CETA42-* | T100°C        | THT-EX1219RAWA01-* | T55°C         |
| THT-EX1219WATA42-* | <b>T65°C</b>  | THT-EX1219REWA01-* | T55°C         |
| THT-EX1219WETA42-* | T65°C         | THT-EX1219YAWA01-* | T55°C         |
| THT-EX1219WATB42-* | T70°C         | THT-EX1219YEWA01-* | T55°C         |

**“Conditions of Use” for Ex Equipment, if any:**

1. The G3/4” cable gland will be installed by end user, the rest unused holes shall be blocked by screw plug which comply with the requirements of standards IEC 60079-1 and IEC 60079-31.
2. The power cable will be installed by end user, and the end user can use the cable which is specified in the user manual only.
3. The end user must install earthing wire according to user manual before use.
4. WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS.