



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX TUR 20.0023X** Page 1 of 3 [Certificate history](#)

Status: **Current** Issue No: 0

Date of Issue: 2020-05-29

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

Equipment: **LED Luminaires, Model L1815 Series**

Optional accessory:

Type of Protection: **Equipment protection by flameproof enclosures "d" and Equipment dust ignition protection by enclosure "t"**

Marking: **Ex db IIC T6...T5 Gb**
Ex tb IIIC T80°C...T100°C Db

Approved for issue on behalf of the IECEx
Certification Body:

Dipl.-Ing. Yang Wang

Position:

Assigned Certifier

Signature:
(for printed version)

Wang Yang

Date:

2020.05.29

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 www.iecex.com or use of this QR Code.



Certificate issued by:

TUV Rheinland Industrie Service GmbH
Am Grauen Stein
51105 Cologne
Germany





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Manufacturer: **TOP HI-TECH CO., LTD**
9F, No. 1, Zhongshan Road
Tucheng Dist.
New Taipei City, 23680
Chinese Taipei

Additional
manufacturing
locations:

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

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 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/ExTR20.0023/00](#)

Quality Assessment Report:

[DE/TUR/QAR13.0016/03](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Model L1815 series of luminaires is suitable for use in hazardous location classified as Zone 1 and Zone 21. This luminaire consists of two interconnecting "db"/"tb" chambers: one is the power box cover for wiring connection to cable gland, the other one is the LED array 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.

SPECIFIC CONDITIONS OF USE: YES as shown below:

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

Annex:

[DE-IECEx_TUR_20.0023X_00_Attachment_2020-05-29.pdf](#)



Attachment to Certificate
IECEX TUR 20.0023X
Revision 0

Attachment to Certificate IECEX TUR 20.0023X

Device: LED Luminaires
Model L1815 Series

Manufacturer: TOP HI-TECH CO., LTD.

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

General product information:

Description

The Model L1815 series of luminaires is suitable for use in hazardous location classified as Zone 1 and Zone 21. This luminaire consists of two interconnecting "db"/"tb" chambers: one is the power box cover for wiring connection to cable gland, the other one is the LED array 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.

The assessment is also based on the US/UL/ExTR20.0014/00 issued by UL LLC. The lab test data would be used as a part of technical documents during the assessment.

Model designation:

Cat.	THT	E	1815	A	C	K	C	H	E5
No.	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 lighting fixtures
- 3 – Model name, 1815 = Model L1815 series
- 4 – Designates type of Driver, A = A type driver (100-277 Vac); B = B type driver (100-277 Vac)
- 5 – Designates type of Power Box Cover, C = Power Box Cover with opening
- 6 – Designates type of LED module, K = SMD type
- 7 – Designates CCT of LED, C = Cool white; W = Warm white
- 8 – Designates voltage, H = 100-277 Vac
- 9 – Designates wattage of LED lighting, E5 = 55 W (for A type driver and B type driver only)

Cat.	THT	E	1815	C	C	K	C	H	E5
No.	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 lighting fixtures
- 3 – Model name, 1815 = Model L1815 series
- 4 – Designates type of Driver, C = C type driver (100-277 Vac; 200- 480 Vac)
- 5 – Designates type of Power Box Cover, C = Power Box Cover with opening
- 6 – Designates type of LED module, K = SMD type
- 7 – Designates CCT of LED, C = Cool white; W = Warm white
- 8 – Designates voltage, H = 100-277 Vac; J = 200-480 Vac (for C type driver with 200-480 Vac only)
- 9 – Designates wattage of LED lighting, L0 = 120 W (for C type driver only);
P0 = 150 W (for C type driver only)



Attachment to Certificate
IECEX TUR 20.0023X
Revision 0

Models covered are as follows:

Model	Ambient Temperature range	Gas Temperature Code	Dust Temperature Rating
THTE1815ACK*HE5	0°C to +40°C	T6	T80°C
THTE1815BCK*HE5	0°C to +40°C	T6	T80°C
THTE1815CCK*HL0	-20°C to +40°C	T5	T100°C
THTE1815CCK*HP0	-20°C to +40°C	T5	T100°C
THTE1815CCK*JL0	-20°C to +40°C	T5	T100°C
THTE1815CCK*JP0	-20°C to +40°C	T5	T100°C

Electrical data

THTE1815ACK*HE5 – 100-277 Vac, 50/60 Hz, 55 W

THTE1815BCK*HE5 – 100-277 Vac, 50/60 Hz, 55 W

THTE1815CCK*HP0 – 100-277 Vac, 50/60 Hz, 150 W

THTE1815CCK*HL0 – 100-277 Vac, 50/60 Hz, 120 W

THTE1815CCK*JP0 – 200-480 Vac, 50/60 Hz, 150 W

THTE1815CCK*JL0 – 200-480 Vac, 50/60 Hz, 120 W

Environmental data

0°C ≤ Ta ≤ +40°C for

Models THTE1815ACK*HE5 and THTE1815BCK*HE5

-20°C ≤ Ta ≤ +40°C for

Models THTE1815CCK*HL0, THTE1815CCK*HP0, THTE1815CCK*HL0 and THTE1815CCK*JP0

IP rating: IP67

Routine test at manufacturer:

Routine overpressure tests in accordance with IEC 60079-1:2014 shall be conducted on all units in accordance with clause 16.1.2, at a pressure of 0.869 MPa (126 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.