



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

Certificate No.: **IECEX TIIS 21.0003X** Page 1 of 4 [Certificate history:](#)  
Status: **Current** Issue No: 0  
Date of Issue: 2022-07-28  
Applicant: **TOP HI-TECH CO., LTD.**  
9 Floor, No. 1, Zhongshan Road, Tucheng District,  
New Taipei City 23680  
**Taiwan**  
Equipment: **Explosion-proof Junction Box**  
Optional accessory:  
Type of Protection: **Increased Safety "eb" and Protection by enclosure "tb"**  
Marking: Ex eb IIC T6 Gb / Ex tb IIIC T80°C Db  
Tamb : -40°C to +55°C

Approved for issue on behalf of the IECEx  
Certification Body:

**Minari Kogane**

Position:

**Certification Manager**

Signature:  
(for printed version)

Date:  
(for printed version)

2022.07.28

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](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**Technology Institution of Industrial Safety**  
**16-26 Hirosedai 2**  
**Sayama-city**  
**Saitama prefecture**  
**Japan**





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Certificate No.: **IECEX TIIS 21.0003X**

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Manufacturer: **Top Hi-Tech Co., Ltd.**  
9F, No. 1, Zhongshan Rd.  
Tucheng District  
New Taipei City, 236  
**Taiwan**

Manufacturing locations: **Top Hi-Tech Co., Ltd.**  
9F, No. 1, Zhongshan Rd.  
Tucheng District  
New Taipei City, 236  
**Taiwan**

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 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

[IEC 60079-7:2015](#) Explosive atmospheres – Part 7: Equipment protection by increased safety "e"  
Edition:5.0

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:

[JP/TIIS/ExTR21.0007/00](#)

Quality Assessment Report:

[DE/TUR/QAR13.0016/04](#)



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## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The equipment is a general purpose junction box, model THT-2J1919 \*\*\*\*\* 00.

Connections are made with Ex component terminal blocks (IECEX PTB 05.0033U) or CE-type closeend connectors in accordance with "Specific Conditions of Use".

Rated Current: See the Annex to this certificate.

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

1. The length of each conductors within the enclosure shall be not more than 130 mm.
2. Conductors shall not be bundled in the enclosure.
3. In case that connections are made with CE-type close-end connectors, the following conditions shall be satisfied.
  - Close-end connectors shall be used within their rated voltage.
  - Close-end connectors shall have the temperature rating equal or more than 105°C.
  - Close-end connectors shall be type-tested and routine-tested in accordance with their industrial standards.
  - Dimensions "E" shall be equal or more than the following length. (Dimensions "E": See the Annex to this certificate)

CTI of insulation	CTI ≥ 600	400 ≤ CTI < 600	175 ≤ CTI < 400
Working voltage ≤125V	2.5 mm	3.2 mm	4.0 mm
Working voltage ≤250V	5.0 mm	6.3 mm	8.0 mm
Working voltage ≤300V	6.3 mm	8.0 mm	10.0 mm
Working voltage ≤500V	12 mm	16 mm	20 mm

4. For model THT-2J1919C\*, additional clamping of the cable shall be installed to ensure that pulling is not transmitted to the terminations.
5. To avoid electrostatic charging hazard, use damp cloth when cleaning.
6. When using as the equipment with Type of Protection "t", entry with G thread shall be fitted by Ex threaded adaptor by the manufacturer or closed by blanking element included in this certificate.



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## Equipment (continued):

Type designations:

THT	-	2J	1919	C	4	G	034	00
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)

(1) Brand name

THT = TOP HI-TECH CO., LTD

(2) Category of product

2J = Explosion proof Junction Box

(3) Model name

1919 = A1919

(4) Top cover type

C = Top cover with opening

D = Top cover without opening

(5) Quantity of Terminal

0 = without terminal blocks

1 = 1 pcs

2 = 2 pcs

3 = 3 pcs

4 = 4 pcs

(6) Thread type

G = G(PF)

N = NPT

M = Metric

(7) Thread size

016=M16

020=M20

025=M25

034=3/4"

012=1/2"

(8) Series number

00 = Series 00

## Annex:

[Annex\\_IECEX\\_IECEX TIIS 21.0003X-issue0\\_1.pdf](#)

# Technology Institution of Industrial Safety

16-26 Hirosedai 2, sayama-city, Saitama prefecture, Japan



Annex to IECEx TIIS 21.0003X issue No. 0

Date: 2022/07/07

This document is an annex to IECEx CoC (IECEx TIIS 21.0003X issue No. 0).

## General product information:

Rated Current:

Cross-sectional Area	Number of Conductors	Maximum Current (Terminal Block)	Maximum Current (Close-end Connector)
AWG10	4	19.5 A	16.5 A
	8	16.5 A	15.0 A
AWG12	4	16.5 A	15.0 A
	8	13.5 A	12.0 A
AWG14	4	16.5 A	13.5 A
	8	13.5 A	12.0 A
AWG16	4	12.0 A	10.5 A
	8	9.0 A	9.0 A
AWG18	4	7.5 A	6.0 A
	8	6.0 A	6.0 A
AWG20	4	6.0 A	4.5 A
	8	4.5 A	4.5 A

In addition to the above limitation, the maximum current shall be limited by the maximum current calculated for each cable.

Conditions for calculation are

Ambient Temperature: +63.4°C

Temperature of Conductor: +80°C

## SPECIFIC CONDITIONS OF USE:

Dimensions "E" is shown below.

