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

Certificate No.: IECEx TUR 18.0035X

Issue No: 0

Certificate history:
Issue No. 0 (2019-07-08)

Status: **Current**

Date of Issue: **2019-07-08**

Applicant: **Top Hi-Tech Co., Ltd.**
9F, No. 1 Zhongshan Rd.
Tucheng District
New Taipei, 23680
Taiwan

Equipment: **Explosion-proof Junction Box A1901 Series, Model THT2J**2A1901***

Optional accessory:

Type of Protection: **Increased Safety "eb", Dust Ignition Protection by Enclosure "tb"**

Marking:
Ex eb IIC T5 Gb
Ex tb IIIC T95°C Db

Approved for issue on behalf of the IECEx Certification Body: Dipl.-Ing. Yang Wang

Position: Assigned certifier

Signature:
(for printed version)

Date: 2019.07.08

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.

Certificate issued by:

TUV Rheinland Industrie Service GmbH
Am Grauen Stein
51105 Cologne
Germany

TÜVRheinland

IECEx Certificate of Conformity

Certificate No:	IECEx TUR 18.0035X	Issue No: 0
Date of Issue:	2019-07-08	Page 2 of 3
Manufacturer:	**Top Hi-Tech Co., Ltd.** 9F, No. 1 Zhongshan Rd. Tucheng District New Taipei, 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 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2017 Edition:5.1	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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/ExTR18.0035/00

Quality Assessment Report:

DE/TUR/QAR13.0016/03

IECEx Certificate of Conformity

Certificate No:	IECEx TUR 18.0035X	Issue No: 0
Date of Issue:	2019-07-08	Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The enclosure of the junction box is made by aluminium alloy. There are different types of openings on the junction box for the marketing purpose. The main body of the junction box is the same. The cable entries shall be used with certified cable glands or covered by the certified blanking elements. The specification of the cable glands provided by the manufacturer is listed below. It is the optional accessory of the product. Refer to the instructions for the detailed information. The end-user can use the certified components on the market.

Cable entry: M20, M25, NPT ½" and NPT ¾"

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Electrostatic charging hazard - Clean only with a damp cloth.
2. Only single serial connection to the next Luminaire A is allowed. The distance between Luminaire B is at least 5 meter. The junction box shall be mounted on the Luminaire B though the bottom opening. Maximum allowable rating: Luminaire A: 200W, 5A; Luminaire B: 200W.
3. The maximum surrounding air temperature between the junction box and the bottom luminaire is 78.7°C. It is measured with the maximum rating mentioned above. The cable entry and branching temperature of Luminaire B (200W) are 76.1°C and 84.5°C respectively. If the end-user would use the junction box with the lower rating of Luminaire B, the manufacturer (THT) shall verify the service temperature of the cable entry and branching point. In order to allow the end-user to adopt the regular rating power cable and cable gland.
4. The junction box has been subjected to the thermal endurance to heat at 104.5°C.
5. The internal wiring cable shall be suitable for minimum service temperature 70°C.

Annex:

DE-IECEx_TUR_18.0035X_00_Attachment_2019-07-08.pdf

Attachment to Certificate IECEx TUR 18.0035X

Device: **Explosion-proof Junction Box**
Types: THT2J2A1901* series**

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

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

General product information:

Description

This report covers the following types:

THT	2	J	N	034	2	A1901	05
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

(1) Brand name, THT = Top Hi-Tech Co., Ltd
(2) Classification of product, 2=Accessary
(3) Category of Product, J=Junction Box
(4) Designates Thread type, N=NPT, M=Metric
(5) Designates Thread size, 012=1/2″ , 020=M20, 025=M25, 034=3/4″
(6) Designates Type of shape, 2= Polygon
(7) Model name, A1901 = Model A1901 series
(8) Designates Series number, 01 =single hole, 02 =Double holes, 03 =Triple holes, 04 =Four holes, 05 =Five holes

The enclosure of the junction box is made by aluminium alloy. There are different types of openings on the junction box for the marketing purpose. The main body of the junction box is the same. The cable entries shall be used with certified cable glands or covered by the certified blanking elements. The specification of the cable glands provided by the manufacturer is listed below. It is the optional accessory of the product. Refer to the instructions for the detailed information. The end-user can use the certified components on the market.
Cable entry: M20, M25, NPT ½" and NPT ¾".

Technical Data
Electrical data
Input: Max. 320 Vac, Maximum current 8A, Solid and Fine-stranded. Series connection to the following luminaire: Max. 5A, Max. 200W, Max. 320 Vac.

Environmental data
Ambient temperature range -40°C to +55°C
Temperature class T5 for gas atmosphere, and T95°C for dust atmosphere

Notes for manufacturer and operation:

Dielectric strength test shall be executed between product power input terminal and the enclosure according to clause 7.1 of IEC 60079-7. Test voltage: 1640 V r.m.s, test duration:60s.