



# 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 TUN 18.0021

Issue No: 0

Certificate history:

Issue No. 0 (2018-11-05)

Status: **Current**

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Date of Issue: **2018-11-05**

Applicant: **Gönnheimer Elektronik GmbH**  
Dr.-Julius-Leber-Straße 2  
61433 Neustadt an der Weinstraße  
Germany

Equipment: **Input Devices type TB153.x.x.x**

Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking:  
**Ex ib IIC T4 Gb**

Approved for issue on behalf of the IECEx  
Certification Body:

Christian Roder

Position:

Head of IECEx Certification Body

Signature:  
(for printed version)

Date:

2018-11-05  
C. Roder

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:

**TÜV NORD CERT GmbH**  
Hanover Office  
Am TÜV 1, 30519 Hannover  
Germany





# IECEX Certificate of Conformity

Certificate No: IECEx TUN 18.0021 Issue No: 0  
Date of Issue: 2018-11-05 Page 2 of 3  
Manufacturer: **Gönnheimer Elektronik GmbH**  
Dr.-Julius-Leber-Straße 2  
61433 Neustadt an der Weinstraße  
Germany

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 60079-11 : 2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

*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/TUN/ExTR18.0030/00](#)

Quality Assessment Report:

[DE/TUN/QAR10.0006/08](#)



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## Schedule

### EQUIPMENT:

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

The TB153.x.x.x group of input devices consists of three different devices; a trackball, a joystick and a touchpad.

The permissible ambient temperature range is -20 °C ... +50 °C

See attachment for further details.

**SPECIFIC CONDITIONS OF USE: NO**

### Annex:

[P17-F-610\\_Attachment TB153\\_issue 00.pdf](#)

Product:

The TB153.x.x.x group of input devices consists of three different devices; a trackball, a joystick and a touchpad.

The permissible ambient temperature range is -20 °C ... +50 °C

Type Code

**Input Device TB153**

<b>Housing:</b>	
None, for panel mounting .....	.0
With housing .....	.1
<b>Type:</b>	
Trackball with 38mm ball .....	.0
Trackball with 50mm ball .....	.1
Joystick two axis .....	.4
Joystick two axis with two buttons in handle .....	.5
Joystick three axis .....	.6
Joystick three axis with two buttons in handle .....	.7
Touchpad .....	.8
<b>Interface:</b>	
USB .....	.0
PS/2 .....	.1

Electrical data

Supply and signal circuits ..... in type of protection intrinsic safety Ex ib IIC  
(Connection wires with only for connection to the USB1.x-connector of  
USB connector certified keyboard interface type KI153  
Pins 1, 2, 3) Max. values:

$$U_i = 5.8 \text{ V}$$

$$I_i = 204 \text{ mA}$$

$$P_i = 392 \text{ mW}$$

effective internal inductance: 3  $\mu$ H

effective internal capacitance: 25  $\mu$ F

Special Conditions for Safe Use / Notes for Erection:

None