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 BVS 19.0060**	Page 1 of 3	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2019-11-14		
Applicant:	**Hans Turck GmbH & Co. KG** Witzlebenstr. 7 45472 Mülheim/Ruhr **Germany**		
Equipment:	**Ethernet-Gateway type GEN-3G**		
Optional accessory:			
Type of Protection:	**Intrinsic Safety "i", Increased Safety "e"**		
Marking:	Ex ec ib [ib Gb] IIC T4 Gc		

Approved for issue on behalf of the IECEx Certification Body: **Dr Franz Eickhoff**

Position: **Deputy Head of Certification Body**

Signature: (for printed version)

Date:

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:

DEKRA Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
On the safe side.

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Certificate No.: **IECEx BVS 19.0060**

Date of issue: 2019-11-14 Issue No: 0

Manufacturer: **Hans Turck GmbH & Co. KG**
Witzlebenstr. 7
45472 Mülheim/Ruhr
Germany

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

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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/BVS/ExTR19.0063/00

Quality Assessment Report:

DE/PTB/QAR06.0013/05

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

General product information:

The equipment is intended as a plug-in module for use in the Turck I/O system excom® in non-hazardous areas and for Zone 2. As a gateway, the device represents the interfaces between the internal communication lines of the I/O system excom® and the external Ethernet bus (Profinet, EtherNetIP or Modbus / TCP). The Ethernet interfaces with the corresponding circuit parts are designed in ignition protection type ec and the other circuit parts in ignition protection type ib. The GEN-3G plug-in module is designed exclusively for use in the MT module carrier.... (IECEx PTB 13.0040U). The module carrier MT... with its associated excom power supply units and I/O modules is used in a housing according to IEC 60079-0 and the protection class at least IP54 for use in Zone 2.

Parameters:

See Annex

SPECIFIC CONDITIONS OF USE: NO

Annex:

BVS_19_0060_Turck_Annex.pdf

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Annex

Parameters:

AC-supply circuit
Terminals J1, 15/16

Type of protection intrinsically safe Ex ib IIC
Only for connection to the intrinsically safe circuit according to PTB 00 ATEX 2194 U
Maximum values:
U = 20 V AC (amplitude)
f = 300 kHz....314 kHz
C_i = negligible
L_i = negligible

The intrinsically safe AC supply circuit is galvanically safe from earth and to at a peak value of the nominal voltage of 50 V from all other intrinsically safe circuits. For the Ethernet circuit, the safe isolation is designed for 300 V.

Signal circuit (CAN BUS)
Terminals CAN BUS A: J1, 9/10
Terminals CAN BUS B: J1, 11/12

Type of protection Ex ib IIC
system-internal circuit
without external connection options

Adress coding, power supply monitoring
Terminals J2, 4 to 16

Type of protection Ex ib IIC
system-internal circuit
without external connection options

Internal Gateway communication
Terminals J1, 1 to 6

Type of protection Ex ib IIC
system-internal circuit
without external connection options

Service interface
Terminals J2, 1 to 3

Type of protection Ex ib IIC
system-internal circuit
without external connection options

Reserve (Spare)
Terminals J2, 17/18

Type of protection Ex ib IIC
system-internal circuit
without external connection options

Ethernet interface
RJ45 connectors: ETH1, ETH2

Type of protection Ex ec IIC
Rated voltage U = 3.3 V
Maximum Voltage U_m = 30 V

The Ethernet interfaces are galvanically safe from earth and all other intrinsically safe circuits to an RMS value of the nominal voltage of 300 V.