



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 TUN 16.0028X issue No.:0 Certificate history:

Status: **Current**

Date of Issue: **2016-09-29** Page 1 of 3

Applicant: **Hans Turck GmbH & Co. KG**
Witzlebenstraße 7
45472 Mülheim
Germany

Equipment: **Relay Coupler Device type IMX12-CD01-2R-2U-0/L****
Optional accessory:

Type of Protection: **Intrinsic safety, type of protection "n", increased safety**

Marking: [Ex ia Ga] IIC, [Ex ia Da] IIIC;
Ex ec [ia Ga] IIC T4 Gc; Ex ec [ia IIIC Da] IIC T4 Gc;
Ex ec nC IIC T4 Gc and see annexe for further details

Approved for issue on behalf of the IECEx
Certification Body:

Andreas Meyer

Position:

Head of Certification Body

Signature:
(for printed version)

Date:

2016-09-29

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

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





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Manufacturer:

Hans Turck GmbH & Co. KG
Witzlebenstraße 7
45472 Mülheim
Germany

Additional Manufacturing location(s):

**Werner TURCK GmbH &
Co. KG**
Goethestraße 7
58553 Halver
Germany

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 electrical 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 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-15 : 2010 Edition: 4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-7 : 2015 Edition: 5.0	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/TUN/ExTR16.0035/00](#)

Quality Assessment Report:

[DE/PTB/QAR06.0012/03](#)

[DE/PTB/QAR06.0013/04](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Relay Coupler Device type IMX12-CD01-2R-2U-0/L/** is used for switching of intrinsically safe output signal circuits on the field side by relay-contacts as well as for the safe galvanic separation between the intrinsically safe output circuits and the non intrinsically safe input circuits.

In case of installation in zone 2, also non intrinsically safe signal circuits may be connected to the relay output signal circuits. The simultaneous connection of intrinsically safe and non intrinsically safe circuits is not allowed.

The permissible ambient temperature range is -25°C ... 70°C.

For further details see Annexe.

CONDITIONS OF CERTIFICATION: YES as shown below:

Only for zone 2 applications:

1. According to IEC 60079-7, section 4.10.1, the following is valid for this apparatus:

The apparatus has to be mounted in a housing tested according to IEC 60079-0, that meets the requirements of degree of protection IP54.

The apparatus may be installed in an area of not more than pollution degree 2.

2. The connecting and disconnecting of energized non intrinsically safe circuits is only permitted, if no explosion hazardous atmosphere is available.

The Relay Coupler Device type IMX12-CD01-2R-2U-0/L/** is used for switching of intrinsically safe output signal circuits on the field side by relay-contacts as well as for the safe galvanic separation between the intrinsically safe output circuits and the non intrinsically safe input circuits.

In case of installation in zone 2, also non intrinsically safe signal circuits may be connected to the relay output signal circuits. The simultaneous connection of intrinsically safe and non intrinsically safe circuits is not allowed.

The permissible ambient temperature range is -25 °C ... 70 °C.

Additional permissible alternative marking:

[Ex ia] IIC
[Ex ia] IIIC
Ex ec [ia] IIC T4
Ex ec [ia IIIC] IIC T4
Ex ec nCc IIC T4

Electrical Data

Input circuits U = 0 ... 30 V d. c., ca. 0.3 W per channel
(Input 1: X14-contacts 9, 10; U_m = 253 V a. c. / d. c.
Input 2: X13-contacts 11, 12;
Input 3: X12-contacts 13, 14)

Intrinsically safe output circuits:

Output circuits in type of protection
(Output 1: Intrinsic Safety Ex ia IIC resp. Ex ia IIIC
X23-contact 6 Only for connection to intrinsically safe circuits;
X24-contacts 7, 8) sum of max. values:
Output 2: U_i = 60 V
X22-contacts 3, 4 I_i = 2 A
X23-contact 5) The effective internal capacitances and inductances are
Output 3: negligibly small.
X21-contacts 1, 2
X23-contact 5)

For safety reasons, the output circuits are interconnected.

The rules for interconnection of intrinsically safe circuits have to be observed.

Non intrinsically safe output circuits (zone 2):

Output circuits U = 250 V a. c., I = 2 A, S = 500 VA, AC15
(Output 1: U = 230 V d. c., I = 0.18 A, resistive load resp.
X23-contacts 6 U = 30 V d. c., I = 2 A, resistive load
X24-contacts 7, 8 P = 60 W
Output 2:
X22-contacts 3, 4
X23-contact 5
Output 3:
X21-contacts 1, 2
X23-contact 5)

The intrinsically safe circuits are safely galvanically separated from the non intrinsically safe circuits up to the peak value of the voltage of 375 V.

"Special conditions for safe use" (only for zone 2 applications)

1. According to IEC 60079-7, section 4.10.1, the following is valid for this apparatus:
The apparatus has to be mounted in a housing tested according to IEC 60079-0, that meets the requirements of degree of protection IP54.
The apparatus may be installed in an area of not more than pollution degree 2.
2. The connecting and disconnecting of energized non intrinsically safe circuits is only permitted, if no explosion hazardous atmosphere is available.