



1 UNITED KINGDOM CONFORMITY ASSESSMENT

2 **UK TYPE EXAMINATION CERTIFICATE**

Product or Protective System Intended for use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

- 3 Type Examination Certificate No.: TÜV 22 UKEX 7103 X Issue: 00
- 4 Product: Relay Coupler Device type
IMX12-CD01-2R-2U-0/L/**
- 5 Manufacturer: Hans Turck GmbH & Co KG
- 6 Address: Witzlebenstraße 7
45472 Mülheim an der Ruhr, Germany
- 7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 TUV Rheinland UK Ltd, Approved Body number 2571, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.
- The examination and test results are recorded in the confidential report 557 / UKEx 7103.00 / 22.
- 9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018
EN IEC 60079-15:2019

EN IEC 60079-7:2015 /
A1:2018

EN 60079-11:2012

Except in respect of those requirements listed at section 18 of the schedule to this certificate.

- 10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to specific conditions of use specified in the schedule to this certificate.
- 11 This TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- 12 The marking of this product shall include the following:

	II 3 (1) G	Ex ec [ia Ga] IIC T4 Gc
	II 3 (1) G	Ex ec nC [ia Ga] IIC T4 Gc
	II 3 G (1) D	Ex ec nC [ia IIIC Da] IIC T4 Gc
	II (1) G	[Ex ia Ga] IIC
	II (1) D	[Ex ia Da] IIIC

This certificate and its schedules may only be reproduced in its entirety and without change.

TUV Rheinland UK Ltd

Dipl.-Ing. Klauspeter Graffi

Solihull, 2022-09-13

This Type Examination Certificate without signature shall not be valid. Alterations are subject to approval by
TUV Rheinland UK Ltd, 1011 Stratford Road, Shirley, Solihull, B90 4BN, Tel. +44 (0) 121 7969400
A UKAS accredited certification body, No. 8400

TÜVRheinland®
Precisely Right.

13 SCHEDULE TO UK TYPE EXAMINATION CERTIFICATE

14 CERTIFICATE NUMBER TÜV 22 UKEX 7103 X

15 Description of Product

The Relay Coupler Device type IMX12-CD01-2R-2U-0/L/**

General product information

The Relay Coupler Device type IMX12-CD01-2R-2U-0/L/** is used for switching of intrinsically safe output signal 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 up to +70 °C.

Details of change:

Instructions and data sheets in English language has been add.
 A new marking label according to UKCA has been add.

Technical Data

Input circuits

(Input 1: X14-contacts 9, 10;
 Input 2: X13-contacts 11, 12;
 Input 3: X12-contacts 13, 15)

$U = 0 \dots 30 \text{ V d. c.}, \text{ ca. } 0.3 \text{ W per channel}$
 $U_m = 253 \text{ V a. c. / d. c.}$

Intrinsically safe

Output circuits

(Output 1:
 X23-contact 6
 X24-contacts 7, 8
 Output 2:
 X22-contacts 3, 4
 X23-contact 5
 Output 3:
 X21-contacts 1, 2
 X23-contact 5)

In type of protection
 Intrinsic Safety Ex ia IIC resp. Ex ia IIIC
 Only for connection to intrinsically safe circuits;
 Sum of max. values:
 $U_i = 60 \text{ V}$
 $I_i = 2 \text{ A}$
 The effective internal capacitance and inductance is negligibly small.

Non Intrinsically safe Output circuits (zone 2)

(Output 1:
 X23-contact 6
 X24-contacts 7, 8
 Output 2:
 X22-contacts 3, 4
 X23-contact 5
 Output 3:
 X21-contacts 1, 2
 X23-contact 5)

$U = 250 \text{ V a. c.}, I = 2 \text{ A}, S = 500 \text{ VA}, \text{ AC15}$
 $U = 230 \text{ V d. c.}, I = 0.18 \text{ A}, \text{ resistive load resp.}$
 $U = 30 \text{ V d. c.}, I = 2 \text{ A}, \text{ resistive load}$
 $P = 60 \text{ W}$

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

List of used equipment and components

Device	Manufacturer	Type	Ex-Marking	Certificate no.
The Relay Coupler Device	Hans Turck GmbH & Co KG	IMX12-CD01-2R-2U-0/L/**	Ex ec [ia Ga] IIC T4 Gc Ex ec nC [ia Ga] IIC T4 Gc Ex ec nC [ia IIIC Da] IIC T4 Gc [Ex ia Ga] IIC [Ex ia Da] IIIC	Issue 2 of IECEX TUN 16.0028X

16 Test report No. (associated with this certificate issue): 557 / UKEx 7103.00 / 22

17 Specific Conditions of Use

Specific Conditions for Use (only for zone 2 applications):

- 1) According to EN 60079-7:2015, 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.

18 Essential Health and Safety Requirements (Regulations Schedule 1)

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

19 Drawings and Documents

Reg. no.	Document title:	Document no.:	Rev.:	Date:
1.	Approval documentation IMX12-CD (134 p.)	Approval documentation IMX12-CD_TÜV22UKEX7103X signed.pdf	01	30.06.2022