



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Component intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **CSANe 20ATEX2090U** Issue: **0**

4 Component: **ISO7021 and ISO7021F Dual Channel Digital Isolators**

5 Applicant: **Texas Instruments, Inc**

6 Address: 12500 TI Blvd
MS 8701
Dallas
Texas 75243
United States of America

7 This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 CSA Group Netherlands B.V. notified body number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of a component intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN IEC 60079-0:2018 EN 60079-11:2012

10 The sign 'U' is placed after the certificate number to indicate that the product assessed is a component and may be subject to further assessment when incorporated into equipment. Any limitations of use are listed in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified component. If applicable, further requirements of this Directive apply to the manufacture and supply of this component.

12 The marking of the component shall include the following:



II 1G
Ex ia IIC Ga
Ta = -55°C to +85°C

Project Number 80036330

Signed: J A May

Title: Director of Operations

CSA Group Netherlands B.V.
Utrechtseweg 310, Building B42,
6812AR, Netherlands



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

CSANe 20ATEX2090U
Issue 0

13 DESCRIPTION OF COMPONENT

The ISO7021* is a dual channel digital isolator. This assembly is intended to be used as an isolating component between separate intrinsically safe circuits. The two-channel isolator comes in a SOIC-8 package with one forward-direction channel and one reverse direction channel. The device has default output high and low options. If the input power or signal is lost, default output is high for the ISO7021 device without the suffix F and low for the ISO7041F device with the F suffix.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
0	23 July 2020	R80036330A	The release of the prime certificate.

15 SCHEDULE OF LIMITATIONS

15.1 The components being certified comply with EN IEC 60079-0:2018 and EN 60079-11:2012. When one of these components is used in an equipment, the component is to be soldered on a PCB inside a suitable enclosure and re-evaluated as an equipment. The operating temperature ranges of these components are -55°C to +85°C. The creepage and clearance distances across the isolating component have been evaluated but the distance to other circuitry remains the responsibility of the user of the final equipment.

15.2 The assembly is an isolating component between separate intrinsically safe circuits. The assembly must be connected to suitable certified intrinsically safe circuits considering the following entity parameters:

Package Type	Ambient temperature	Component Temperature	Entity Parameters	Ui	Ii	Pi	Li	Ci
SOIC-8	-55°C to +85°C	183°C @ +85°C	Side 1	50V	300mA	1.0W	0	4pF
			Side 2	50V	300mA	1.0W	0	4pF

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

CSA Group Netherlands B.V.
Utrechtseweg 310, Building B42,
6812AR, Netherlands

Certificate Annexe

Certificate Number: CSANe 20ATEX2090U
Component: ISO7021 and ISO7021F Dual Channel
Digital Isolators
Applicant: Texas Instruments, Inc



Issue 0

Drawing	Sheets	Rev.	Date (Stamp Date)	Title
SLLA489	1 to 8	A	07-Jul-20	Construction and Marking Report for ATEX/IECEX Certification

CSA Group Netherlands B.V.
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