Ref. Certif. No.

**US-45818-UL**

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

## CB TEST CERTIFICATE

| | |
|---|---|
| Product | Isolated DC-DC Converter |
| Name and address of the applicant | Texas Instruments Inc<br>12500 TI BLVD DALLAS, TX 75243<br>United States |
| Name and address of the manufacturer | Texas Instruments Inc<br>12500 TI BLVD DALLAS, TX 75243<br>United States |
| Name and address of the factory<br>Note: *When more than one factory, please report on page 2* | Texas Instruments, Inc. - TICL<br>Clark Freeport Zone, Gil Puyat Avenue,<br>Angeles City, Pampanga, 2009<br>Philippines<br>☒ Additional Information on page 2 |
| Ratings and principal characteristics | UCC33010: rated input 3.0Vdc to 5.5Vdc, rated output 3.3Vdc or 3.7Vdc, nominal 300mA, 1.0W power. Mfr's declared working voltage 250Vrms/354Vpk.<br>☒ Additional Information on page 2 |
| Trademark / Brand (if any) | TEXAS INSTRUMENTS (See also Report Enclosure (miscellaneous) for alternate Trademark Symbol (negative) |
| Customer's Testing Facility (CTF) Stage used | |
| Model / Type Ref. | UCC33010, UCC33020, UCC33410, UCC33420<br>☒ Additional Information on page 2 |
| Additional information (if necessary may also be reported on page 2) | National Differences: EU Group Differences, CA, JP, KR, US<br>☒ Additional Information on page 2 |
| A sample of the product was tested and found to be in conformity with | IEC 60601-1:2005, IEC 60601-1:2005/AMD1:2012 |
| As shown in the Test Report Ref. No. which forms part of this Certificate | E516654-D6001-CB-1 issued on 2025-10-30 |

This CB Test Certificate is issued by the National Certification Body

☒ UL Solutions (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
☐ UL Solutions (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
☐ UL Solutions (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
☐ UL Solutions (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2025-10-30

Signature:
Mauricio Avila

Ref. Certif. No.

**US-45818-UL**

**Factory(ies):**
Texas Instruments Inc - TITL
142, Sec.1, Hsin-Nan Rd., 235
Chung Ho, New Taipei City
Taiwan

**Additional Model Detail(s):**
UCC33010, UCC33020, UCC33410, UCC33420, Provided with suffixes, in order, as follows:
- A (may be optional) representing functional spin (not safety related)
- Q (may be blank or Q) representing automotive temperature range qualification, where blank means non-automotive and Q means automotive
- RAQ representing the IC's VSON-12 packaging type
- Q1 (may be blank or Q1) representing automotive quality level, where blank means non-automotive and Q1 means qualified to AEC-Q100.

**Additional Ratings:**
UCC33010: rated input 3.0Vdc to 5.5Vdc, rated output 3.3Vdc or 3.7Vdc, nominal 300mA, 1.0W power. Mfr's declared working voltage 250Vrms/354Vpk. Output power rating vs. temperature as follows (at 5Vdc input):
-Derate linearly from 25C to 85C, with 85C rating 1000mW at 3.3Vdc output
-Derate linearly from 85C to 125C, with 125C rating 400mW at 3.3Vdc output

UCC33020, rated input 3.0Vdc to 5.5Vdc, rated output 5.0Vdc or 5.5Vdc, nominal 200mA, 1.0W power. Mfr's declared working voltage 250Vrms/354Vpk. Output power rating vs. temperature as follows (at 5Vdc input):
- Derate linearly from 25C to 55C, with 55C rating 1400mW at 5.0Vdc output
- derate linearly from 55C to 85C, with 85C rating 1000mW at 5.0Vdc output
- derate linearly from 85C to 125C, with 125C rated 400mW at 5.0Vdc output

UCC33410, rated input 4.5Vdc to 5.5Vdc, rated output 3.3Vdc or 3.7Vdc, nominal 300mA, 1.0W nominal power. Mfr's declared working voltage 250Vrms/354Vpk. Output power rating vs. temperature as follows (based on 5Vdc input):
- Derate linearly from 25C to 55C, with 55C rating 1400mW at 3.3Vdc output
- derate linearly from 55C to 85C, with 85C rating 1000mW at 3.3Vdc output
- derate linearly from 85C to 125C, with 125C rated 400mW at 3.3Vdc output

UCC33420, rated input 4.5Vdc to 5.5Vdc, rated output 5.0Vdc or 5.5Vdc, nominal 300mA, 1.5W nominal power. Mfr's declared working voltage 250Vrms/354Vpk. Output power rating vs. temperature as follows (based on 5Vdc input):
- from 25C to 55C, rated 2000mW at 5.0Vdc output
- derate linearly from 55C to 85C, with 85C rating 1500mW at 5.0Vdc output
- derate linearly from 85C to 125C, with 125C rated 500mW at 5.0Vdc output

All ICs have Ambient Temperature Rating -40C to 125C
All ICs have BASIC Isolating Rating (input to output) of 3KVrms
Automotive Grade models (with Q/Q1 suffixes) use wettable flank "WF" package construction.
Altitude max 2000m

**Additionally evaluated to:**
EN 60601-1:2006, EN 60601-1:2006/A1:2013

**Additional information (if necessary)**

☒ UL Solutions (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
☐ UL Solutions (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
☐ UL Solutions (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
☐ UL Solutions (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2025-10-30

Signature:

Mauricio Avila

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