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UL TEST REPORT AND PROCEDURE

Standard: UL 60950-1, 2nd Edition, 2011-12-19 (Information Technology Equipment - Safety - Part 1: General Requirements) CSA C22.2 No. 60950-1-07, 2nd Edition, 2011-12 (Information Technology Equipment - Safety - Part 1: General Requirements) **Certification Type:** Component Recognition CCN: QQGQ2, QQGQ8 (Power Supplies for Information Technology Equipment Including Electrical Business Equipment) **Product:** DC/DC Isolator Model: **Digital Isolators** MI13wxL1yz and I13wxL1yz See Miscellaneous Enclosure for model matrix Rating: Reinforced Isolation: 3000 Vrms, 4242Vdc with 300Vrms, 420Vdc working voltage Rated Output Current 3.3Vdc, 5mA See Miscellaneous Enclosure for model details. VICOR CORP **Applicant Name and Address:** 25 FRONTAGE RD ANDOVER MA 01810-5499 **UNITED STATES**

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared by: Gerard Soprych Reviewed by: Daniel Pirozzi

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Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

- A. Authorization The Authorization page may include additional Factory Identification Code markings.
- B. Generic Inspection Instructions -
 - Part AC details important information which may be applicable to products covered by this Procedure.
 Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
 - ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
 - iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

The digital isolators are designed for building-in and provide reinforced insulation.

Model Differences

See Miscellaneous Enclosure for model nomenclature

Technical Considerations

- Equipment mobility : for building-in
- Connection to the mains : not directly connected to the mains
- Operating condition : continuous
- Access location : for building-in
- Over voltage category (OVC) : OVC II
- Mains supply tolerance (%) or absolute mains supply values: No direct connection
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V): -
- Class of equipment : for building-in (reinforced insulation provided)
- Considered current rating of protective device as part of the building installation (A): N/A
- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m): 2000
- Altitude of test laboratory (m): 150
- Mass of equipment (kg): 0.000517
- The maximum temperature of the Digital Isolator is 125°C

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Engineering Conditions of Acceptability

For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC. When installed in an end-product, consideration must be given to the following:

- The following Production-Line tests are conducted for this product: Electric Strength
- The end-product Electric Strength Test is to be based upon a maximum working voltage of: Input to Output: 300 Vrms, 420 Vpk
- The following secondary output circuits are SELV: All
- The investigated Pollution Degree is: 2
- The following end-product enclosures are required: Mechanical, Fire, Electrical
- The digital Isolators provide Reinforced Isolation.

Additional Information

N/A

Markings and instructions

Marking or Instruction Details
Marking of Instruction Details
Listee's or Recognized company's name, Trade Name, Trademark or File Number
Model Number

Special Instructions to UL Representative

N/A

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Digital Isolators Model Matrix:

MI13wxL1yz and I13wxL1yz

Isolator Type

I1	Digital Isolator
MI1	Mil-COTs Digital Isolator

w = number of channels

1	1 channel
2	2 channel
3	3 channel

x = product grade

T	Telecom -40 – 125°C
M	Military -65 – 125 °C

Package Size

L1	10x10 LGA	
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y = Revision

Any alphanumeric character, non-safety related

z = Customer Reference

Any alphanumeric character, non-safety related

Example Model Numbers:

I13TL1A0 MI13ML1A0