



America

# CERTIFICATE

No. U8V 15 08 21433 447

**Holder of Certificate:** Vicor Corporation

25 Frontage Road  
Andover MA 01810  
USA

**Production Facility(ies):** 67768

**Certification Mark:**



C US

**Product:** DC converter  
VI Brick Intermediate Bus Converter (DC-DC Converter)

**Model(s):** IB050Q096T70N1-00,  
¼ Brick Intermediate Bus Converter (IBC)  
(see certificate attachment for additional model information, ratings and license conditions.)

**Parameters:**

Rated Input Voltage:	48 V DC
Rated Output Voltage:	9.6 V DC
Rated Output Power:	82 A or 850W Max

**Tested according to:** CAN/CSA C22.2 No.60950-1:2007/A1:2011  
UL 60950-1:2007/R:2011-12  
EN 60950-1:2006/A2:2013

The product was voluntarily tested according to the relevant safety requirements noted above. It can be marked with the certification mark above. The mark must not be altered in anyway. This product certification system operated by TÜV SÜD America Inc. most closely resembles system 3 as defined in ISO/IEC Guide 67. Certification is based on the TÜV SÜD "Testing and Certification Regulations". TÜV SÜD America Inc. is an OSHA recognized NRTL and a Standards Council of Canada accredited certification body.

**Test report no.:** 72107826-000

**Date,** 2015-08-20

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## Attachment to Certificate U8V 15 08 21433 447



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VI Brick Intermediate Bus Converter Quarter brick Model Matrix: IBaaaQfffGwwxy-zz

Example: IB050Q096T70N1-00

<b>IB = Constant</b>	Intermediate Bus
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<b>aaa = Nominal Input Voltage (range, may be narrowed)</b>	
048	48 Vdc (38-55)
050	48 Vdc (36-60)
054	48 Vdc (36-60)

<b>Q = Constant</b>	Quarter Brick Package
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<b>fff = Output Voltage Designator</b>	
096	9.6Vdc
120	12.0Vdc

<b>G = Product Grade</b>	
T =	-40°C to 125°C

<b>ww = Output Current / Power Designator</b>			
9.6Vdc Output		12Vdc Output	
64	64A or 650W	53	53A or 650W
70	70A or 750W	60	60A or 600W
73	73A or 710W		
80	80A or 850W		
82	82A or 810W		

<b>x = Enable / Disable Port (non-safety related) referenced to (-) In</b>	
N =	Negative bias
P =	Positive bias

<b>y = Pin Style (non-safety related)</b>
Any alphanumeric character

<b>zz = Revision / Option Designator (non-safety related)</b>
Any alphanumeric character

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## Customer Special Models:

Customer Special Model Numbers	Equivalent Standard Model Numbers
IBC055Q01-zz	IB050Q096T64N1-zz
IBC060Q01-zz	IB050Q096T73N1-zz
IBC065Q01-zz	IB050Q096T80N1-zz
IBC070Q01-zz	IB050Q096T82N1-zz
IBC080Q01-zz	IB050Q096T80N1-zz
Customer special model numbers also use the zz non-safety related alphanumeric revision designator.	

**Conditions of Acceptability** – When installed in the end use equipment, the following are among considerations to be made:

- 1. Input Voltage:** Both a nominal input voltage and an input voltage range are specified. Operation over the entire range was evaluated. The output voltage is a fixed turns ratio of the input voltage.
- 2. Max Output:** The IBC has both a maximum current and a maximum power rating. The end use application shall not exceed the lower limit of either maximum power or maximum current.
- 3.** The input is intended to be supplied from a SELV, TNV-2, or other non-hazardous secondary circuit.
- 4. Max Temperature:** The maximum allowable PCB temperature is 130°C under normal operation and should be evaluated in the end use product.
- 5. Fusing Requirements:** The IBCs were evaluated with an external fast acting fuse. Littelfuse Nano2 rated 30A or less, BEL Fuse SSQ Series rated 15A or less, or SOC Fuse 25CF Series rated 18A or less.
- 6.** The output is considered SELV.
- 7.** The IBCs provide 2250Vdc of isolation from input to output and from input to baseplate.
- 8.** The output is separated from the input by Basic Insulation.
- 9.** The outputs are above 240VA and are considered hazardous energy.

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