



Ref. Certif. No.

DE 3 - 54256

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

SYSTEME CEI D'ACCEPTATION MUTUELLE DE CERTIFICATS D'ESSAIS DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

## CB TEST CERTIFICATE CERTIFICAT D'ESSAI OC

Product  
Produit

DC converter  
DC - DC Converter

Name and address of the applicant  
Nom et adresse du demandeur

Vicor Corporation  
25 Frontage Road  
Andover, MA 01810, USA

Name and address of the manufacturer  
Nom et adresse du fabricant

Vicor Corporation, 25 Frontage Road, Andover, MA 01810, USA

Name and address of the factory  
Nom et adresse de l'usine

Vicor Corporation, 25 Frontage Road, Andover, MA 01810, USA

Rating and principal characteristics  
Valeurs nominales et caractéristiques principales

Rated Input Voltage: 375 V DC max  
Rated Output Voltage: 54 V DC max  
Rated Power: 600 W max

See attachment for additional models and ratings.

Trade mark (if any)  
Marque de fabrique (si elle existe)

Vicor

Model/type Ref.  
Ref. de type

2nd Gen Fas Trak Model Viiiisxyzzzw  
See attachment for model nomenclature.

Additional information (if necessary)  
Information complémentaire (si nécessaire)

SMT Procedure

A sample of the product was tested and found to be in conformity with  
Un échantillon de ce produit a été essayé et a été considéré conforme à la

IEC 60950-1:2001

as shown in the Test Report Ref. No. which form part of this certificate  
comme indiqué dans le Rapport d'essais numéro de référence qui constitue une partie de ce certificat

TÜV SÜD Product Service  
090-506511-000

This CB Test Certificate is issued by the National Certification Body  
Ce Certificat d'essai OC est établi par l'Organisme National de Certification

Date, 2006-03-10  
CB 06 03 21433 105

Joseph Janelunas

TÜV SÜD Product Service GmbH · Certification Body · Ridlerstrasse 65 · D-80339 München



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**Viiiisxyzzw**
**24V 2<sup>nd</sup> Gen FasTrak DC-DC Modules; Maxi, Mini, Micro Families**

iii = Input (2 or 3 characters)	s = A, B or C Package Size	xx = Output Voltage (1 to 3 characters)							
Voltage (Range)		2	3V3	5	12	15	24	28	48
		<b>zzz = Output Power (May be up to Three Characters)</b>							
24 (18-36)	Maxi (A)	160	264	400	400	400	400	400	400
24 (18-36)	Mini (B)	100	132	200	200	200	200	200	200
24 (18-36)	Micro (C)	50	75,50	100,50	100,50	100,50	100,50	100,50	100,50

y = **Product Grade:**

C = Commercial -20C to 100C    M = Military -55C to 100C    T or H = Industrial -40C to 100C

w = **Functionality:** (up to 5 Characters, BP = Baseplate)

BFT, BSFT = RoHS / Short pins / slotted BP  
 B1FT, BS1FT = RoHS / Short pins / FinMOD  
 B2FT, BS2FT = RoHS / Short pins / threaded BP  
 B3FT, BS3FT = RoHS / Short pins / thru-hole BP  
 B4FT, BS4FT = RoHS / Short pins / SlimMOD

BLGT, BNGT = RoHS / Long pins / slotted BP  
 BL1GT, BN1GT = RoHS / Long pins / FinMOD  
 BL2GT, BN2GT = RoHS / Long pins / threaded BP  
 BL3GT, BN3GT = RoHS / Long pins / thru-hole BP  
 BL4GT, BN4GT = RoHS / Long pins / SlimMOD

T = (Optional) Thermiscreen

**Example:** Viiiisxyzzw = V24C2C50BL2G

Input Voltage	Package Size	Output Voltage	Product Grade	Output Power	Functionality
iii = 24	s = C	xx = 2	y = C	zzz = 50	w = BL2G

Note: Viiiisxyzzw maybe replace by VI-axxxxx per customer request    or VE-bxxxxx for RoHS Compliance

**Specials:**

**VI-axxxxx**

(Maxi)    a = 9 representing Maxi series

(Mini)    b = 8 representing Mini series

(Micro)    c = 7 representing Micro series

x = 0-9 Denotes a unique customer number that represents a module that falls within the electrical parameters (Voltage, Current, Power) of the parent family module.

When a = 9 it represents a Maxi Series module. The combination "9xxxxx" represents a Maxi series module with 24Vdc In; 2-48Vdc Out, 400Watts Max.

When b = 8 it represents a Mini Series module. The combination "8xxxxx" represents a Mini series module with 24Vdc In; 2-48Vdc Out, 200Watts Max.

When a = 7 it represents a Micro Series module. The combination "7xxxxx" represents a Micro series module with 24Vdc In; 2-48Vdc Out, 100Watts Max

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**Viiiixxyzzzw**

**48V 2<sup>nd</sup> Gen FasTrak DC-DC Modules; Maxi, Mini, Micro Families**

iii = Input (2 or 3 characters)	s = A, B or C Package Size	xx = Output Voltage (1 to 3 characters)							
Voltage (Range)		2	3V3	5	12	15	24	28	48
		zzz = Output Power (up to 3 characters)							
48 (36-75)	Maxi (A)	160	264	400	500	500	500	500	500
48 (36-75)	Mini (B)	100	150	200	250	250	250	250	250
48 (36-75)	Micro (C)	50	75	100,75,50	150	150	150	150	150

y = Product Grade:

C = Commercial -20C to 100C M = Military -55C to 100C T or H = Industrial -40C to 100C

w = Functionality: (up to 5 characters, BP = Baseplate)

BFT, BSFT = RoHS / Short pins / slotted BP

B1FT, BS1FT = RoHS / Short pins / FinMOD

B2FT, BS2FT = RoHS / Short pins / threaded BP

B3FT, BS3FT = RoHS / Short pins / thru-hole BP

B4FT, BS4FT = RoHS / Short pins / SlimMOD

BLGT, BNGT = RoHS / Long pins / slotted BP

BL1GT, BN1GT = RoHS / Long pins / FinMOD

BL2GT, BN2GT = RoHS / Long pins / threaded BP

BL3GT, BN3GT = RoHS / Long pins / thru-hole BP

BL4GT, BN4GT = RoHS / Long pins / SlimMOD

T = (Optional) Thermoscreen

**Example:** Viiiixxyzzzw = V48B12C250BLAGT

Input	Package	Output	Product	Output	Functionality
Voltage	Size	Voltage	Grade	Power	
iii = 48	s = B	xx = 12	y = C	zzz = 250	w = BLAGT

Note: Viiiixxyzzzw maybe replace by VI-bxxxxx per customer request or VE-bxxxxx for RoHS Compliance.

**Specials:** VI-bxxxxx

(Maxi) a = 9 representing Maxi series

(Mini) b = 8 representing Mini series

(Micro) c = 7 representing Micro series

x = 0-9 Denotes a unique customer number that represents a module that falls within the electrical parameters (Voltage, Current, Power) of the parent family module.

When b = 9 it represents a Maxi Series module. The combination "9xxxxx" represents a Maxi series module with 48Vdc In; 2-48Vdc Out, 500Watts Max.

When b = 8 it represents a Mini Series module. The combination "8xxxxx" represents a Mini series module with 48Vdc In; 2-48Vdc Out, 250Watts Max.

When b = 7 it represents a Micro Series module. The combination "7xxxxx" represents a Micro series module with 48Vdc In; 2-48Vdc Out, 150Watts Max.

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### Viiisxyzzw

#### 300V 2<sup>nd</sup> Gen FasTrak DC-DC Modules; Maxi, Mini, Micro Families

iii = Input (3 characters) Voltage (Range)	s = A, B or C package size	xx = Output Voltage (up to 3 characters)							
		2	3V3	5	12	15	24	28	48
		zzz = Output Power (May be up to Three Characters)							
300 (180-375)	Maxi (A)	160	264	400	500	500	500	500	500
300 (180-375)	Mini (B)	100	150	200	250	250	250	250	250
300 (180-375)	Micro (C)	50	75,50	100,50	150,75	150,75	150,75	150,75	150,75

y = Product Grade:

C = Commercial -20C to 100C M = Military -55C to 100C T or H = Industrial -40C to 100C

w = Functionality: (up to 5 characters, BP = Baseplate)

BFT, BSFT = RoHS / Short pins / slotted BP

B1FT, BS1FT = RoHS / Short pins / FinMOD

B2FT, BS2FT = RoHS / Short pins / threaded BP

B3FT, BS3FT = RoHS / Short pins / thru-hole BP

B4FT, BS4FT = RoHS / Short pins / SlimMOD

T = (Optional) Thermiscreen

BLGT, BNGT = RoHS / Long pins / slotted BP

BL1GT, BN1GT = RoHS / Long pins / FinMOD

BL2GT, BN2GT = RoHS / Long pins / threaded BP

BL3GT, BN3GT = RoHS / Long pins / thru-hole BP

BL4GT, BN4GT = RoHS / Long pins / SlimMOD

Example: Viiisxyzzw = V300C3V3C75BLGT

Input Voltage	Package Size	Output Voltage	Product Grade	Output Power	Functionality
V 300	C	3V3	C	75	BLGT

Note: Viiisxyzzw maybe replace by VI-bxxxxx per customer request or VE-bxxxxx for RoHS Compliance

Specials: VI-bxxxxx

(Maxi) a = 9 representing Maxi series

(Mini) b = 8 representing Mini series

(Micro) c = 7 representing Micro series

x = 0-9 Denotes a unique customer number that represents a module that falls within the electrical parameters (Voltage, Current, Power) of the parent family module.

When b = 9 it represents a Maxi Series module. The combination "9xxxxx" represents a Maxi series module with 300Vdc In; 2-48Vdc Out, 500Watts Max.

When b = 8 it represents a Mini Series module. The combination "8xxxxx" represents a Mini series module with 300Vdc In; 2-48Vdc Out, 250Watts Max.

When b = 7 it represents a Micro Series module. The combination "7xxxxx" represents a Micro series module with 300Vdc In; 2-48Vdc Out, 150Watts Max.



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**Viiisxxyzzzw**

**375V 2<sup>nd</sup> Gen FasTrak DC-DC Modules; Maxi, Mini, Micro Families**

iii = Input (3 characters)	s = A, B or C	xx = Output Voltage (May be up to Three Characters)									
Voltage (Range)		2	3V3	5	12	15	24	28	36	48	54
		zzz = Output Power (May be up to Three Characters)									
375 (250-425)	Maxi (A)	160	264	400	600	600	600	600	600	600	600
375 (250-425)	Mini (B)	100	150	200	300	300	300	300		300	
375 (250-425)	Micro (C)	50	75	100	150	150	150	150		150	

y = Product Grade:

C = Commercial -20C to 100C M = Military -55C to 100C T or H = Industrial -40C to 100C

w = Functionality: (up to 5 characters)

BFT, BSFT = RoHS / Short pins / slotted BP

B1FT, BS1FT = RoHS / Short pins / FinMOD

B2FT, BS2FT = RoHS / Short pins / threaded BP

B3FT, BS3FT = RoHS / Short pins / thru-hole BP

B4FT, BS4FT = RoHS / Short pins / StimMOD

T = (Optional) Thermoscreen

Example: Viiisxxyzzzw = V375B48C600BLT

BLGT, BNGT = RoHS / Long pins / slotted BP

BL1GT, BN1GT = RoHS / Long pins / FinMOD

BL2GT, BN2GT = RoHS / Long pins / threaded BP

BL3GT, BN3GT = RoHS / Long pins / thru-hole BP

BL4GT, BN4GT = RoHS / Long pins / SlimMOD

Input Voltage	Package Size	Output Voltage	Product Grade	Output Power	Functionality
375	B	48	C	600	BLT

Note: Viiisxxyzzzw maybe replace by VI-bxxxxx per customer request or VE-bxxxxx for RoHS Compliance

Specials: VI-bxxxxx

(Maxi) a = 9 representing Maxi series

(Mini) b = 8 representing Mini series

(Micro) c = 7 representing Micro series

x = 0-9 Denotes a unique customer number that represents a module that falls within the electrical parameters (Voltage, Current, Power) of the parent family module.

When b = 9 it represents a Maxi Series module. The combination "9xxxxx" represents a Maxi series module with 375Vdc In; 2-48Vdc Out, 600Watts Max.

When b = 8 it represents a Mini Series module. The combination "8xxxxx" represents a Mini series module with 375Vdc In; 2-48Vdc Out, 300Watts Max.

When b = 7 it represents a Micro Series module. The combination "7xxxxx" represents a Micro series module with 375Vdc In; 2-48Vdc Out, 150Watts Max.

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**2<sup>nd</sup> Gen FasTrak external fusing**

<u>Package Size</u>	<u>Input Voltage</u>	<u>Output Voltage</u>	<u>Output Power</u>	<u>Required Fuse</u>
Maxi (A)	375	2	160	BUSS PC TRON 5A
Maxi (A)	375	3.3	264	BUSS PC TRON 5A
Maxi (A)	375	5	400	BUSS PC TRON 5A
Maxi (A)	375	12,15,24,28,48	600	BUSS PC TRON 5A
Mini (B)	375	2	100	BUSS PC TRON 5A
Mini (B)	375	3.3	150	BUSS PC TRON 5A
Mini (B)	375	5	200	BUSS PC TRON 5A
Mini (B)	375	12,15,24,28,48	300	BUSS PC TRON 5A
Micro (C)	375	2	50	BUSS PC TRON 3A
Micro (C)	375	3.3	75	BUSS PC TRON 3A
Micro (C)	375	5	100	BUSS PC TRON 3A
Micro (C)	375	12,15,24,28,48	150	BUSS PC TRON 3A
Maxi (A)	300	2	160	BUSS PC TRON 5A
Maxi (A)	300	3.3	264	BUSS PC TRON 5A
Maxi (A)	300	5	400	BUSS PC TRON 5A
Maxi (A)	300	12,15,24,28,48	500	BUSS PC TRON 5A
Mini (B)	300	2	100	BUSS PC TRON 5A
Mini (B)	300	3.3	150	BUSS PC TRON 5A
Mini (B)	300	5	200	BUSS PC TRON 5A
Mini (B)	300	12,15,24,28,48	250	BUSS PC TRON 5A
Micro (C)	300	2	50	BUSS PC TRON 3A
Micro (C)	300	3.3	75	BUSS PC TRON 3A
Micro (C)	300	5	100	BUSS PC TRON 3A
Micro (C)	300	12,15,24,28,48	150	BUSS PC TRON 3A
Maxi (A)	48	2	160	BUSS ABC-10
Maxi (A)	48	3.3	264	BUSS ABC-10
Maxi (A)	48	5	400	BUSS ABC-15
Maxi (A)	48	12,15,24,28,48	500	BUSS ABC-20
Mini (B)	48	2	100	BUSS ABC-8
Mini (B)	48	3.3	150	BUSS ABC-8
Mini (B)	48	5	200	BUSS ABC-10
Mini (B)	48	12,15,24,28,48	250	BUSS ABC-10
Micro (C)	48	2	50	BUSS PC TRON 5A
Micro (C)	48	3.3	75	BUSS PC TRON 5A
Micro (C)	48	5	100	BUSS ABC-8
Micro (C)	48	12,15,24,28,48	150	BUSS ABC-8
Maxi (A)	24	2	160	BUSS ABC-15
Maxi (A)	24	3.3	264	BUSS ABC-25
Maxi (A)	24	5,12,15,24,28,48	400	BUSS ABC-30
Mini (B)	24	2	100	BUSS ABC-10
Mini (B)	24	3.3	150	BUSS ABC-15
Mini (B)	24	5,12,15,24,28,48	200	BUSS ABC-15
Micro (C)	24	2	50	BUSS ABC-8
Micro (C)	24	3.3	75	BUSS ABC-8
Micro (C)	24	5,12,15,24,28,48	100	BUSS ABC-10

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### License Conditions:

1. **INPUT VOLTAGE:** Nameplate rating is a Nominal Input Voltage. Vicor guarantees continuous operation per specification.
2. **BASEPLATE GROUNDING:** When baseplate is accessible, ground baseplate to earth/chassis ground.
3. **MAXIMUM BASEPLATE TEMPERATURE:** Keep temperature of baseplate to 100°C or less, measured at the center of the baseplate. Check temperature at maximum load and worst case ambient temperature.
4. **TRIMMING:** Trim module to maximum of +110% of rated output voltage. Do not exceed maximum power output of the module. When module is trimmed down, maximum current remains constant.
5. **OVERTEMPERATURE SHUTDOWN:** If internal temperature of the module exceeds 105°C, the module may shut down. Cool down module and recycle input power to re-enable module.
6. **FUSING REQUIREMENTS:** To meet safety requirements, each module must be fused. Refer to Vicor's Application Manual for Information on proper selection of fuses.
7. Refer to Vicor's Application Manual for Information on proper use of modules.
8. The DC-DC modules with output of 61-95V are not SELV according to EN 60950.



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