Ref. Certif. No.

DE 3 - ITAV912

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

CB TEST CERTIFICATE

Product	Audio/Video, Information and Communication technology equipment DC-DC converter
Name and address of the applicant	**Vicor Corporation** 25 Frontage Road Andover MA 01810 USA
Name and address of the manufacturer	Vicor Corporation 25 Frontage Road, Andover MA 01810, USA
Name and address of the factory	Integran Inc. Iwate Factory Aza-shimokiroku 321, Senmaya, Senmaya-cho, Ichinoseki-shi, Iwate, 029-0803 JAPAN Vicor Inc. 400 Federal Street, Andover MA 01810, USA
Ratings and principal characteristics	Rated Input Voltage: 400 V DC Rated Output Voltage 95 V DC max Rated Output Power: 100 W. max Protection Class: II Degree of Protection: IPX0
Trade mark (if any)	VICOR
Customer's Testing Facility (CTF) Stage used	CTF STAGE 3
Model/type Ref.	**VI-J00 (MiniMod)** and **MegaMod / MasterMod** series
Additional information (if necessary)	Certificate DE 3 – 502225 issued 2017-01-12 is replaced by this version due to technical changes
A sample of the product was tested and found to be in conformity with	IEC 62368-1:2018
as shown in the Test Report Ref. No. which forms part of this certificate	72164059-000

This CB Test Certificate is issued by the National Certification Body

CB 021433 0626 Rev. 00

Date, 2021-05-20

(William J. Stinson)

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VI-J00 (MiniMod) DC-DC converter model matrix: VI-Jbc-de-xx

VI = Product Type
VI = (Vicor), VI =VE (Vicor RoHS), VI =IP (VJCL), VI =IE (VJCL RoHS), VI =MI (MIL COTS)

J = Constant	Jr. for half size brick dc-dc module

b Input Voltage (Vdc)

Nominal (range)	Nominal (range)	Nominal (range)
0 = 12 (10-20)	3 = 48 (42-60)	F = 165 (130-260
V = 24 (10-36)	N = 48 (36-76)	5 = 150 (100-200)
1 = 24 (21-32)	4 = 72 (55-100)	6 = 300 (200-400)
W = 24 (18-36)	T = 110 (66-160)	7 = 225 (100-375)
2 = 36 (21-56)		

c Output Voltage (Vdc)

Designator	Output VDC	Designator	Output VDC
Z	2.0	2	15.0
Y	3.3	N	18.5
0	5.0	3	24.0
X	5.2	L	28.0
W	5.5	J	36.0
V	5.8	K	40.0
T	6.5	4	48.0
R	7.5	H	52.0
M	10.0	F	72.0
1	12.0	D	85.0
P	13.8	B	95.0

d Product Grade

E = Economy	-10C to 100 °C
C = Commercial	-25C to 100 °C
I = Industrial	-40C to 100 °C
M = Military	-55C to 100 °C

e Output Power

A =	10W
Z =	25W
Y =	50W
X =	75W
W =	100W

xx Heatsink Options / Specials (optional)

F1-F7 =	FinMOD (Heatsink)
S =	SlimMOD (Flangeless Package)
TM =	TachoMOD (Non-safety related secondary component changes)
B1 =	BusMod ruggedized chassis screw / lug wiring
00-99	Customer special, unique label or testing, non-safety related changes, d and e are optional for specials

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Special Considerations – The following items are considerations that were used when evaluating these products.

The VI-J00 (MiniMod) series of DC-DC converters are designed for building-in.

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

1. **Input Voltage:** Nameplate rating is the nominal input voltage. Vicor guarantees continuous operation over the entire specified voltage range
2. **Baseplate Grounding:** A ground connection from baseplate to earth / chassis ground is required if baseplate is operator accessible
3. **Max Temperature: Keep the maximum baseplate temperature at 100°C or less measured at the center of the module or the middle mounting slot (negative pin side). Do not exceed 100°C under any condition**
4. **Over temperature: If the baseplate temperature exceeds 100°C the module may be damaged.**
5. **Output Voltage Trimming:** The module has a maximum allowable Trim of 110% of rated output voltage. Do not exceed maximum power output of the module. When trimmed down the maximum output current remains constant
6. **Secondary outputs:** 40V and below comply with ES1. Outputs above 40V are considered ES2
7. **Fusing Requirements:** See table for Input fusing

Model	Max Input Fuse Rating
VI-J7x-xx	Bussmann PC-Tron 2.5 A, 250Vac/450 Vdc
VI-J6x-xx	Bussmann PC-Tron 3A, 250 Vac/450 Vdc
VI-J5x-xx	Bussmann PC-Tron 5A, 125 Vac/400 Vdc
VI-JTx-xx	Bussmann PC-Tron 5A, 125 Vac/400 Vdc
VI-J4x-xx	Bussmann PC-Tron 5A, 125 Vac/400 Vdc
VI-J3x-xx	Bussmann PC-Tron 5A, 125 Vac/400 Vdc
VI-JNx-xX	Bussmann PC-Tron 5A, 125 Vac/400 Vdc
	Alternates - Littelfuse R251005 (5A, 125Vac/Vdc)
	Bussmann MCR5 (5A, 125Vac/Vdc)
VI-JNx-xY	Bussmann PC-Tron 3A, 125Vac/250 Vdc
	Alternate - Littelfuse R251003 (3A, 125Vac/Vdc)
VI-J2x-xx	Bussmann PC-Tron 5A, 125Vac/400Vdc
VI-JWx-xx	8A/60 or 8A / 125V
VI-J1x-xx	8A/60 or 8A / 125V
VI-JVx-xx	8A/60 or 8A / 125V
VI-J0x-xx	8A/60 or 8A / 125V

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DC-DC Configurable MegaMod Jr. / MasterMod Jr. Model Matrix: VI-aJbccc-deee-xx

VI = Product Type
VI = (Vicor), VI = VE (Vicor RoHS), VI = MI (MIL COTS)

a Product Configuration

Configuration	No. of modules / outputs	Pout max
L =	1 module, single output	100W
P =	2 modules, dual output	200W
R =	3 modules, triple output	300W

J = Constant	Jr. for half size dc-dc modules

b Input Voltage (Vdc)

Nominal (range)	Nominal (range)	Nominal (range)
0 = 12 (10-20)	3 = 48 (42-60)	F = 165 (130-260
V = 24 (10-36)	N = 48 (36-76)	5 = 150 (100-200)
1 = 24 (21-32)	4 = 72 (55-100)	6 = 300 (200-400)
W = 24 (18-36)	T = 110 (66-160)	7 = 225 (100-375)
2 = 36 (21-56)		

ccc Output Voltage (Vdc) 1 to 3 separate outputs

Designator	Output VDC	Designator	Output VDC
Z	2.0	2	15.0
Y	3.3	N	18.5
0	5.0	3	24.0
X	5.2	L	28.0
W	5.5	J	36.0
V	5.8	K	40.0
T	6.5	4	48.0
R	7.5	H	52.0
M	10.0	F	72.0
1	12.0	D	85.0
P	13.8	B	95.0

d Product Grade

E = Economy	-10C to 100 °C
C = Commercial	-25C to 100 °C
I = Industrial	-40C to 100 °C
M = Military	-55C to 100 °C

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eee Output Power max (* = R for 3 modules, P for 2 modules, L for 1 module)

Mega/Master Jr. Series No.	Max Pout Assembly	Max Pout Module
VI-*J7xxx-xxxx	225W	75W
VI-*J6xxx-xxxx	300W	100W
VI-*J5xxx-xxxx	300W	100W
VI-*JTxxx-xxxx	300W	100W
VI-*J4xxx-xxxx	300W	100W
VI-*JNxxx-xxxx	300W	100W
VI-*J3xxx-xxxx	300W	100W
VI-*J2xxx-xxxx	225W	75W
VI-*JWxxx-xxxx	300W	100W
VI-*J1xxx-xxxx	300W	100W
VI-*JVxxx-xxxx	150W	50W
VI-*J0xxx-xxxx	225W	75W

xx Options / Specials

00-99	Customer special, unique label or testing, non-safety related changes, d and e are optional for specials

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MegaMod Jr. / MasterMod Jr. Series DC-DC Configurable
MODULE SAFETY INSTRUCTION SHEET

1. **Input Voltage:** Nameplate rating is the nominal input voltage. Vicor guarantees continuous operation over the entire specified voltage range.
2. **Baseplate Grounding:** A ground connection from baseplate to earth / chassis ground is required if baseplate is operator accessible
3. **Max Temperature: Keep the maximum baseplate temperature at 100°C or less measured at the center of the module or the middle mounting slot (negative pin side). Do not exceed 100°C under any condition.**
4. **Over temperature: If the baseplate temperature exceeds 100°C the module may be damaged.**
5. **Output Voltage Trimming:** The module has a maximum allowable Trim of 110% of rated output voltage. Do not exceed maximum power output of the module. When trimmed down the maximum output current remains constant.
6. **Secondary outputs:** 40V and below comply with ES1. Outputs above 40V are considered ES2
7. **Fusing Requirements:** See table for Input fusing

Nominal Input Voltage (Range)	Max P-out (Pout/module)	MasterMod Jr. Series No.	Input Fuse (Max) 3 module Config: RJ	Input Fuse (Max) 2 module Config: PJ	Input Fuse (Max) 1 module Config; LJ
150Vdc (100-375)	225W (75W)	VI-xJ**7**xxx-xxxx	PC-Tron 3A	PC-Tron 3A	PC-Tron 2.5A
300Vdc (200-400)	300W (100W)	VI-xJ**6**xxx-xxxx	PC-Tron 3A	PC-Tron 3A	PC-Tron 3A
150Vdc (100-200)	300W (100W)	VI-xJ**5**xxx-xxxx	PC-Tron 5A	PC-Tron 5A	PC-Tron 5A
110Vdc (66-160)	300W (100W)	VI-xJ**T**xxx-xxxx	8A, 125V	PC-Tron 5A	PC-Tron 5A
72Vdc (55-100)	300W (100W)	VI-xJ**4**xxx-xxxx	10A, 125V	8A, 125V	PC-Tron 5A
48Vdc (36-76)	300W (100W)	VI-xJ**N**xxx-xxxx	10A, 125V	8A, 125V	PC-Tron 5A
48Vdc (42-60)	300W (100W)	VI-xJ**3**xxx-xxxx	10A, 125V	8A, 125V	PC-Tron 5A
36Vdc (21-56)	225W (75W)	VI-xJ**2**xxx-xxxx	10A, 125V	8A, 125V	PC-Tron 5A
24Vdc (18-36)	300W (100W)	VI-xJ**W**xxx-xxxx	20A, 125V	12A, 125V	8A, 125V
24Vdc (21-32)	300W (100W)	VI-xJ**1**xxx-xxxx	20A, 125V	12A, 125V	8A, 125V
24Vdc (10-36)	150W (50W)	VI-xJ**V**xxx-xxxx	20A, 125V	10A, 125V	8A, 125V
12Vdc (10-20)	225W (75W)	VI-xJ**0**xxx-xxxx	20A, 125V	15A, 125V	8A, 125V

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