



Ref. Certif. No.

DE 3 - ITAV1896

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	Vicor Inc. 400 Federal Street, Andover MA 01810, USA
Ratings and principal characteristics	Rated Input Voltage: 410 VDC Rated Output Voltage: 51.0 VDC Rated Output Current: 26 A Rated Output Power: 1200 W Degree of Protection: IPX0
Trademark / Brand (if any)	VICOR
Customer's Testing Facility (CTF) Stage used	CTF STAGE 3
Model/type Ref.	BCM380P475T1K2A30 BCM6123TD1E5126T01 (Type: HV Panel Mold BCM)
Additional information (if necessary)	Certificate DE 3 – 502399 issued 2017-05-17 is replaced by this version due to technical changes
A sample of the product was tested and found to be in conformity with as shown in the Test Report Ref. No. which forms part of this certificate	IEC 62368-1:2018 72196434-000

Page 1 of 4
This CB Test Certificate is issued by the National Certification Body

CB 021433 0677 Rev. 00
Date, 2024-02-01

(William J. Stinson)

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany



Product Service

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VICHIP High Voltage Panel Mold BCM

Model Matrix: BCMbbbcdddeffxyz

Example: BCM380P475T1K2A30

BCM = Constant

BCM Family (Buss Converter Module)	
BCM	Standard version
MBCM	MIL-COTS version

bbb = 380

Nominal Input Voltage (Input Voltage Range) Vdc			
270	270 (200-330)	384	384 (260-410)
380	380 (260-410)	400	400 (260-410)

c = P

Package Type and Lead designator	
P	Panel Mold Through-hole
N or L	No Leads or Leadless (for VIA Applications)

ddd = 475

Output Voltage Designator, Nominal Vout = Designator / 10			
120	12.0Vdc	475	47.5Vdc
240	24.0Vdc	500	50.0Vdc
338	33.8Vdc		

e = T

Temperature Grade (Operating internal temperature range)					
T	-40 to 125°C	M	-55 to 125°C	C	-20 to 125°C
Maximum internal temperature, controlled by maintaining the Maximum defined Case Temperature. See derating curves.					

fff = 1K2

Output Power Designator, Non-inclusive list of examples below.			
800	800W	1K5	1500W
1K4	1400W	1K8	1750W
1K2	1200W		
See attached de-rating curves for corresponding maximum output current			

x = A

Revision (non-safety related)	
x	Any alphanumeric character

y = 3

Package Size Designator	
C	23 x 61 mm
3	61 x 23 mm

z = 0

Functionality (non-safety related), any alphanumeric character, non-inclusive list of examples	
0	Analog Control Interface
1	Digital Control Interface
R	Reversible Operation



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VICHIP High Voltage Panel Mold BCM

Alternate Model Matrix: BCM6123bccdwwxyzz

Example: BCM6123TD1E5126T01

BCM = Constant

Product Function	
BCM	Bus Converter Module

6123 = Constant

Package Size Designator (mm)	
6123	61 x 23 or 23 x 61

b = T

Lead Designator	
N or L	No Leads or Leadless
T	Through-Hole

cc = D1

Input Voltage (Vin range)	
C3	330Vdc (200-330V)
D0	400Vdc (200-400V)
D1	410Vdc (200-410V)

d = E

Range Ratio (Vin high / Vin low)	
E	1.61
G	1.95
H	2.14

ww = 51

Output Voltage max (Nominal)					
13	13V (12.0V)	41	41V (33.8V)	51	51V (47.5V)
26	26V (24.0V)	50	50V (33.8V)		

xx = 26

Output Current							
17	17.5 A	30	30.0 A	35	35.0 A	68	68.0 A
26	25.7 A	32	32.0 A	62/63	62.5 A	A2/A3	125 A

See attached de-rating curves for corresponding maximum output power
 Through hole pins on ends MNL = 35A / 1750W
 Through hole pins on side MNL = 125V / 1500W

y = T

Temperature Grade (Operating internal temperature range)		
C	Commercial	-20 to 125°C
T	Industrial	-40 to 125°C
M / S	MIL-COTS	-55 to 125°C
E	Economy	0 to 125°C

Maximum internal temperature, controlled by maintaining the Maximum defined Case Temperature. See derating curves.

zz = 01

Options (non-safety related), Any alphanumeric combination, non-inclusive list of examples below	
00	Analog Control Interface
01	Digital Control Interface
0R	Analog Control Interface with Reversible Operation
0P	Digital Control Interface with Reversible Operation

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

License Conditions: The HV Panel Mold BCM series of DC-DC converters are designed for building-in.

1. See de-rating curves for maximum output power, case temperature, and input voltage
2. The output is separated from the input by reinforced insulation
3. Output voltages less than 42.4Vdc derived may be considered ES1
4. Output voltages greater than 42.4Vdc may be considered ES2 due to repetitive pulse re-start attempts during fault conditions (hiccup mode)
5. The BCMs require an external fuse in the end use application. Eaton PC-Tron rated 5A, Littelfuse 487 series rated 10A, or a Littelfuse 505 series rated 10A
6. All models must be mounted on minimum V-1 flame rated board



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