



Product Service

CERTIFICATE

No. U8V 06 11 21433 124

Holder of Certificate: **Vicor Corporation**

25 Frontage Road
Andover, MA 01810
USA

Production Facility(ies): 21433

Certification Mark:



Product: **DC converter**
DC - DC Converter

Model(s): **P045F048T32AL**
See attachment for model nomenclature.

Parameters:

Rated Input Voltage:	45 V DC
Rated Output Voltage:	48 V DC
Rated Output Power:	320 W Max.

Tested according to: CAN/CSA-C22.2 No. 60950-1-03
UL 60950-1:2003
EN 60950-1:2001

The product was voluntarily tested according to the relevant safety requirements and mentioned properties. It can be marked with the certification mark shown above. The certification mark must not be altered in any way. See also notes overleaf.

Test report no.: 090-604878-000

Date, 2006-11-21

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VI CHIP NOMENCLATURE BREAKDOWN AND ELECTRICAL RATINGS:

Sample Model Designation: P045F048T32AL

P 045 F 048 T 32 AL
 I II III IV V VI VII

I. VIC Chip Family – P

VIC Family	
B	BCM
V	VTM
P	PRM

II. Input Voltage Selector – 045

Input Voltage Selector			
012	12 Vdc	040	40 Vdc
024	24 Vdc	045	45 Vdc
032	32 Vdc	048	48 Vdc
036	36 Vdc		

III. Package Designator – F

Package Size	In Board BGA	On Board J-Lead	SUV Mount J-Lead	Vertical Mount	Through Hole
Full VIC	K	F	A	V	T
Half VIC	M	H	C	W	T
Qtr VIC	T	Q	-	X	T

IV. Output Voltage Designator – 048

Output Voltage Designator			
010	1.0 Vdc	048	48.0 Vdc
015	1.5 Vdc	060	6.0 Vdc
020	2.0 Vdc	080	8.0 Vdc
024	24 Vdc	096	09.6 Vdc
030	3.0 Vdc	120	12.0 Vdc
033	3.3 Vdc	160	16.0 Vdc
036	36 Vdc	240	24.0 Vdc
040	4.0 Vdc	320	32.0 Vdc
045	45 Vdc	480	48.0 Vdc





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V. Product Grade – T

Product Grade	
T	-40 to 125C
M	-55 to 125C

VI. Output Power (BCM/PRM) or Output Current (VTM) - 32

BCM / PRM Output Power Designator				VTM Output Current Power Designator			
12	120 W	32	320 W	006	6 A	050	50 A
14	140 W			009	9 A	060	60 A
17	170 W			012	12 A	070	70 A
20	200 W			015	15 A	080	80 A
21	210 W			025	25 A	100	100 A
24	240 W			030	30 A		
30	300 W			040	40 A		

VII. Feedback Style (PRM only) - AL

PRM Feedback Style Designator	
AL	Adaptive Loop
IF	Isolated Feedback

License Conditions:

1. The input to the VI Chips is intended to be supplied from a TNV-2 or other secondary circuit
2. The PRM IF, VTM, and BCM provide 2250 Vdc of isolation from input to output
3. The output of the PRM IF, VTM, and BCM are considered SELV
4. The PRM AL is non-isolating. The output of PRM AL is only SELV when the input is SELV
5. The output of a PRM AL / VTM combination is considered SELV. Isolation provided by the VTM
6. The maximum recommended case temperature of the VI Chip package is 100°C
7. If the internal semiconductor junction temperature exceeds 125°C the module may be damaged
8. Each BCM or PRM / VTM combination should be protected by a Littelfuse Nano²Fuse

Fusing Requirements:

Input Voltage / Output Power	BCM	VTM	PRM
24Vdcin / 120W	N/A	N/A	10A / 125V
40Vdcin / 200W	N/A	7A / 125V	N/A
45Vdcin / 170W	N/A	N/A	7A / 125V
48Vdcin / 120W	N/A	N/A	10A / 125V
48Vdcin / 150W	N/A	7A / 125V	N/A
48Vdcin / 160W	N/A	7A / 125V	N/A
48Vdcin / 200W	6.3A / 125V	6.3A / 125V	N/A
48Vdcin / 210W	7A / 125V	7A / 125V	N/A
48Vdcin / 240W	7A / 125V	7A / 125V	10A / 125V
48Vdcin / 300W	10A / 125V	10A / 125V	N/A
48Vdcin / 320W	N/A	N/A	10A / 125V

[Signature]