



America

CERTIFICATE

No. U8V 021433 0608 Rev. 00

Holder of Certificate: **Vicor Corporation**
 25 Frontage Road
 Andover MA 01810
 USA

Certification Mark:



Product: Audio/Video, Information and Communication technology equipment
 High Voltage Panel Mold DCM DC to DC Converter

This product was voluntarily tested to the relevant safety requirements referenced on this certificate. It can be marked with the certification mark above. The mark must not be altered in any way. This product certification system operated by TÜV SÜD America Inc. most closely resembles system 3 as defined in ISO/IEC 17067. 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.: 72159835-000

Date, 2020-08-27

(William J. Stinson)



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Model(s): DCM290P138T600A41
Type: VICHIP DCM4623 Series

Brand Name: VICHIP

Tested according to: CAN/CSA C22.2 No. 62368-1:2019
UL 62368-1:2019
EN 62368-1:2014/A11:2017

Production Facility(ies): 067768

Parameters: (Model: DCM290P138T600A41)
Rated Input Voltage: 290 V DC
Rated Output Voltage: 13.8 V DC
Rated Output Power: 600 W max

License Conditions:

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

The DCM4623 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. Maximum output power and case temperature. See attached thermal curves for maximum operating conditions
2. Max Output: The DCM has an MNL of 600W as a standalone device or up to 690W when used in an array
3. The Input is considered to be ES3. Operation over the entire input voltage range was evaluated
4. Output voltages less than or equal to 42.4V can be considered ES1. Output voltages greater than 42.4V may be considered ES2 due to hiccup mode during single fault conditions
5. The output is separated from the input by a Reinforced Safeguard
6. The DCMs must be mounted on minimum V-1 flame rated printed wiring board
7. The DCMs were evaluated with the following fuses EATON PC-Tron series fuse rated 5A or Littelfuse 487 series rated 8A max



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Alternate DCM4623 Model Matrix: DCM4623cddewwxyzz

Example: DCM4623TD2B53E0M00

DCM = Constant

Product Function	
DCM	DC-DC Converter Module

4623 = Constant

Package Size (mm)	
4623	46 x 23

c = T

Lead Designator			
T	Through-Hole	L / N	Leadless

dd = D2

Maximum Input Voltage = 1 st character + 2 nd character (see table below, not to exceed 420V)							
1 st character				2 nd character			
A	100V	0	0 V	4	40 V	8	80 V
B	200V	1	10 V	5	50 V	9	90 V
C	300V	2	20 V	6	60 V		
D	400V	3	30 V	7	70 V		
Examples: D2 = 420V (400V+20V), B1 = 210 (200V+10V), A2 = 120V (100V+20V)							

e = G

Range Ratio (Vin high / Vin low, defines low line)							
A	1.10	G	1.95	N	3.45	U	6.12
B	1.21	H	2.14	P	3.80	V	6.73
C	1.33	J	2.36	Q	4.18	W	7.40
D	1.46	K	2.59	R	4.60	X	8.14
E	1.61	L	2.85	S	5.05	Y	8.95
F	1.77	M	3.14	T	5.60	Z	9.85

ww = 53

Maximum Output Voltage including trim (any 2 digits up to 60), non-inclusive list of examples			
04	4Vdc (3.3V nominal +10% trim)	26	26Vdc (24V nominal +10% trim)
06	6Vdc (5V nominal +10% trim)	31	31Vdc (28V nominal +10% trim)
13	13Vdc (12V nominal +10% trim)	53	53Vdc (48V nominal +10% trim)
17	17Vdc (15V nominal + 10 trim)		

xx = E0

Maximum Output Power = 1 st character + 2 nd character (see table below, not to exceed 600W)					
1 st character			2 nd character		
A	100 W	0	0 W	5	50 W
B	200 W	1	10 W	6	60 W
C	300 W	2	20 W	7	70 W
D	400 W	3	30 W	8	80 W
E	500 W	4	40 W	9	90 W
F	600 W				
Examples: F0 = 600W (600W+0W), D0 = 400W (400W+0W), B5 = 250W (200W+50W), A5 = 150W (100W+50W)					

y = M

Product Grade	
C	-20 to 100°C
T	-40 to 100°C
M	-55 to 100°C

zz = 00

Options (non-safety related), any alphanumeric combination, non-inclusive list of examples below	
00	Analog Communication
01	Digital Communication