



No. U10 021433 0665 Rev. 00

Holder of Certificate:

Vicor Corporation

25 Frontage Road Andover MA 01810 USA

Certification Mark:



Product:

Audio/Video, Information and Communication technology equipment DC-DC converter

Tested according to:

CSA C22.2 No. 62368-1:2014 UL 62368-1:2014

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. The certificate holder shall not transfer this certificate to third parties. 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". For Canadian standards TÜV SÜD America Inc. is accredited by the Standards Council of Canada to ISO/IEC 17065.

Test report no.:

72151621-100

Date, 2022-11-21

Willing Strong

(William J. Stinson)



No. U10 021433 0665 Rev. 00

Model(s):

DCM3623 / DCM2322 Railway Series

DCMaaaaTcccwwxxyzz

aaaa = 3623 or 2323 ccc = A5K, A5N, 72S or 50T ww = 04, 06, 13, 15, 17, 26, 31, or 53 xx = 35, 40, 50, 60, 80, A0, A2, B4 or C0 y = C, T or M zz = Any two alphanumeric combination except 00 and 01

Brand Name(s):

VICHIP or VICOR

Parameters:

Rated Output Voltage: Rated Output Power:

Rated Input Voltage:

30 VDC, 43VDC, 100 VDC or 110VDC (DCM2322) 100VDC or 110 VDC (DCM3623) 3.3, 5.0, 12.0, 13.8 15.0, 24, 28, or 48 VDC 120 W max (DCM2322) 300 W max (DCM3623)

Model Matrix:

DCM 3623 / 2322 Railway Series Model Matrix: DCM3623Tcccwwxxyzz or DCM2322Tcccwwxxyzz

Example: DCM3623TA5N53B4T00

DCM = Constant			
Product Type	9		
DCM	DC-DC Converter Module		

aaaa = 3623 or 2322

Package Size (mm)			
2322	23 x 22		
3623	36 x 23		

T = Constant

Lead Designator		
Т	Through-Hole	

CERTIFICATE No. U10 021433 0665 Rev. 00

ccc = A5N

Input Voltage			
	Nominal (Range)		
A5K	110V (60-154)		
A5N	100V (43-154)		
72S	43V (14-72)		
50T	30V (9-50)		
DCM3623 models only use A5K and A5N ranges			
DCM2322 models use all ranges			

ww = 53

Output Voltage					
	Nominal		Nominal		
04	3.3V	17	15.0V		
06	5.0V	26	24.0V		
13	12.0V	31	28.0V		
15 13.8V 53 48.0V					
Nominal Trim range = +10% / -15% of Nominal					

xx = B4

Output Power					
35	35W	60	60W	A2	120W
40	40W	80	80W	B4	240W
50	50W	A0	100W	C0	300W
120W max for 2322 package size					
300W max for 3623 package size					

y = T

y 1		
Temperature	Grade	
(Operating ir	iternal temperature range)	
С	-20 to 125°C	
Т	-40 to 125°C	
M -55 to 125°C		
Note: The operating internal temperature is controlled by maintaining the case temperature specified on the de-rating curves		

zz = 00

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

CERTIFICATE No. U10 021433 0665 Rev. 00

License Conditions:

Special Considerations – The following items are considerations that were used when evaluating these products. The DCM2322 and DCM3623 Railway 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 for each package size and voltage rating
- 2. The Input is considered to be a non-MAINS ES1 or ES3 with a maximum Transient Voltage of 1500V and separated from MAINS by double or reinforced insulation
- 3. Models with a Vin range below ES3 levels were evaluated for ES3 insulation/isolation requirements
- 4. Nominal Output voltages ranging from 3.3V to 28.0V are be considered ES1
- 5. A Nominal Output voltage of 48.0V is considered ES2 due to a single fault condition that causes the output overvoltage protection to activate
- 6. The Output is separated from the Input by a Reinforced Safeguard
- 7. The DCMs must be mounted on minimum V-1 flame rated printed wiring board
- 8. The need for insulation/safeguard between an ES2 output and user accessible circuits to be evaluated in the end-product
- 9. The DCMs were evaluated with the following fuses

Package Size	Nominal Vin	Required Fuse (Max value)	
2322	30	Littelfuse 487 series rated 10A or EATON ABC series rated 10A	
2322	43	Vout ≤ 5V, Littelfuse 487 series rated 8A or EATON ABC series rated 8A Vout > 5V Littelfuse 487 series rated 12.5A or EATON ABC series rated 12A	
2322	100	EATON PC-Tron series rated 5A	
3623	100	Vout ≤ 5V, EATON PC-Tron rated 5A Vout > 5V, Littelfuse 487 series rated 8A	
3623	110	Littelfuse 487 series rated 8A	





No. B 021433 0666 Rev. 00

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25 Frontage Road Andover MA 01810 USA

Certification Mark:



Product:

Audio/Video, Information and Communication technology equipment DC-DC converter

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.:

72151621-100

Valid until:

2027-11-10

Date, 2022-11-22

Willington

(William J. Stinson)



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Model(s):

DCM3623 / DCM2322 Railway Series

DCMaaaaTcccwwxxyzz

aaaa = 3623 or 2323 ccc = A5K, A5N, 72S or 50T ww = 04, 06, 13, 15, 17, 26, 31, or 53 xx = 35, 40, 50, 60, 80, A0, A2, B4 or C0 y = C, T or M zz = Any two alphanumeric combination except 00 and 01

Bra	nd	Na	me
Diu	IIM.	114	

VICHIP or VICOR

Parameters:	Rated Input Voltage:	30 VDC, 43VDC, 100 VDC or 110VDC (DCM2322)
	Batad Output Valtage:	100VDC or 110 VDC (DCM3623)
	Rated Output Power:	120 W max (DCM2322)
		300 W max (DCM3623)

Model Matrix:

DCM 3623 / 2322 Railway Series Model Matrix: DCM3623Tcccwwxxyzz or DCM2322Tcccwwxxyzz

Example: DCM3623TA5N53B4T00

DCM = Constant
Product Type
DCM DC-DC Converter Module

aaaa = 3623 or 2322

Package Size (mm)		
2322	23 x 22	
3623	36 x 23	

T = Constant

Lead Designator				
Т	Through-Hole			

ccc = A5N

Input Voltage		
	Nominal (Range)	
A5K	110V (60-154)	
A5N	100V (43-154)	
72S	43V (14-72)	
50T	50T 30V (9-50)	
DCM3623 models only use A5K and A5N ranges		
DCM2322 models use all ranges		

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ww = 53

Output Voltage			
	Nominal		Nominal
04	3.3V	17	15.0V
06	5.0V	26	24.0V
13	12.0V	31	28.0V
15	13.8V	53	48.0V
Nominal Trim range = +10% / -15% of Nominal			

<u>xx = B4</u>

Output Power					
35	35W	60	60W	A2	120W
40	40W	80	80W	B4	240W
50	50W	A0	100W	C0	300W
120W max for 2322 package size					
300W max for 3623 package size					

y = T

Note: The operating internal temperature is controlled by maintaining the case temperature specified on the de-rating curves		

<u>zz = 00</u>

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

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2322	100	EATON PC-Tron series rated 5A
3623	100	Vout ≤ 5V, EATON PC-Tron rated 5A Vout > 5V, Littelfuse 487 series rated 8A
3623	110	Littelfuse 487 series rated 8A

Tested according to: EN 62368-1:2014/A11:2017