File E135493
Project 97ME14923

May 27, 1997

REPORT

on

COMPONENT-POWER SUPPLIES

Vicor Corporation
Andover, MA

DESCRIPTION

PRODUCT COVERED:

USR, CNR: Component - Power supply modules, 2nd Generation; Maxi, Mini, and Micro, Models Viiisxxyzzzw. Refer to Ills. 1, 1A, 1B, 1C, 3 and 4, 5, 6.

GENERAL CHARACTER AND USE:

* This product is a switching type power supply incorporating semiconductor components in the primary circuit. It is provided with input and output terminals for connection to the end use equipment. The power supply has been investigated to the Standard for Information Technology Equipment-Safety-Part 1: General Requirements, **CAN/CSA C22.2 No. 60950-1 2nd Edition, Amd. 1, 2011-12-19,, UL 60950-1, 2nd Edition, 2011-12-19** and UL1012, Standard for Power Supplies.

NOMENCLATURE BREAKDOWN:

Model number coding breakdown is specified in Ills. 1, 1A, 1B, 1C, 3, and 4, 5, 6.

ELECTRICAL RATINGS:

Input - Input voltage and power are given by position 'i' in the Model number respectively, as indicated in nomenclature breakdown.

Output - Output voltage and power are given by positions x and z in Model number respectively, as indicated in nomenclature breakdown.

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

For use only in or with equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

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

*1. These components have been judged on the basis of the required spacing in the Standard for Information Technology Equipment Equipment-Safety-Part 1: General Requirements, **CAN/CSA C22.2 No. 60950-1 2nd Edition, Amd. 1, 2011-12-19, UL 60950-1, 2nd Edition, Amd. 1, 2011-12-19** and Fifth Edition of Power Supplies, UL-1012.

2. The power supply should be installed in compliance with the enclosure, mounting, spacing, casualty, and segregation requirements of the ultimate application.

3. The baseplate temperature should be measured in the end product. The 100°C temperature should not be exceeded.

4. Secondary circuits have not been investigated for secondary interconnection. Should outputs be connected in series or parallel in end-use applications, additional evaluation will be necessary for increased levels of voltage or current/power.

5. The unit should be located within an overall enclosure so that uninsulated current carrying parts are suitably enclosed.

6. The input and output terminals are not acceptable for field connections and are only intended for connection to mating connectors of internal wiring inside the end-use machine. The acceptability of these and the mating connectors relative to secureness, insulating materials, and temperature should be considered.

7. Leakage current measurements should be performed in the end use application.

8. When baseplate is accessible, ground baseplate to earth/chassis ground in end-product.

9. All units must have an external fuse provided in the end use application. See Table 1 for ratings.

10. Secondary Outputs 2V-48V comply with SELV requirements. Secondary 52V-95V are Non-SELV outputs.

Special Considerations - The following items are considerations that were used when evaluating this product.

* The equipment is:
USR/CNR, indicates investigation to the U.S. and Canadian (Bi-National) Standard for Information Technology Equipment Equipment-Safety-Part 1: General Requirements, **CAN/CSA C22.2 No. 60950-1 2nd Edition, Amd. 1, 2011-12-19, UL 60950-1, 2nd Edition, 2011-12-19**

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2nd Gen FasTrak DC-DC Converter Maxi, Mini, Micro Families external fusing

Package Size	Input Voltage	Output Voltage	Output Power	Required Fuse	Alternate Fuse
Maxi (A)	375	2	160	BUSS PC-Tron 5A	-----
Maxi (A)	375	3.3	264	BUSS PC-Tron 5A	-----
Maxi (A)	375	5, 6.5, 8	400	BUSS PC-Tron 5A	-----
Maxi (A)	375	12, 15, 24, 28, 32, 36, 48, 54	600	BUSS PC-Tron 5A	-----
Mini (B)	375	2	100	BUSS PC-Tron 5A	-----
Mini (B)	375	3.3	150	BUSS PC-Tron 5A	-----
Mini (B)	375	5, 6.5, 8	200	BUSS PC-Tron 5A	-----
Mini (B)	375	12, 15, 24, 28, 32, 36, 48, 54	300	BUSS PC-Tron 5A	-----
Micro (C)	375	2	50	BUSS PC-Tron 3A	-----
Micro (C)	375	3.3	75	BUSS PC-Tron 3A	-----
Micro (C)	375	5, 6.5, 8	100	BUSS PC-Tron 3A	-----
Micro (C)	375	12, 15, 24, 28, 32, 36, 48, 54	150	BUSS PC-Tron 3A	-----
Maxi (A)	300	2	160	BUSS PC-Tron 5A	-----
Maxi (A)	300	3.3	264	BUSS PC-Tron 5A	-----
Maxi (A)	300	5, 6.5, 8	400	BUSS PC-Tron 5A	-----
Maxi (A)	300	12, 15, 24, 28, 32, 36, 48, 54	500	BUSS PC-Tron 5A	-----
Mini (B)	300	2	100	BUSS PC-Tron 5A	-----
Mini (B)	300	3.3	150	BUSS PC-Tron 5A	-----
Mini (B)	300	5, 6.5, 8	200	BUSS PC-Tron 5A	-----
Mini (B)	300	12, 15, 24, 28, 32, 36, 48, 54	250	BUSS PC-Tron 5A	-----
Micro (C)	300	2	50	BUSS PC-Tron 3A	-----
Micro (C)	300	3.3	75	BUSS PC-Tron 3A	-----
Micro (C)	300	5 ,6.5, 8	100	BUSS PC-Tron 3A	-----
Micro (C)	300	12, 15, 24, 28, 32, 36, 48, 54	150	BUSS PC-Tron 3A	-----
Maxi (A)	150	3.3	264	BUSS ABC-8	Littelfuse 505 10A
Maxi (A)	150	5, 6.5	400	BUSS ABC-8	Littelfuse 505 10A
Maxi (A)	150	8, 12, 15, 24, 28, 32, 36, 48, 54	500	BUSS ABC-8	Littelfuse 505 10A
Mini (B)	150	3.3	150	BUSS PC-Tron 5A	-----
Mini (B)	150	5, 6.5, 8	200	BUSS PC-Tron 5A	-----
Mini (B)	150	12, 15, 24, 28, 32, 36, 48, 54	250	BUSS PC-Tron 5A	-----
Micro (C)	150	3.3	75	BUSS PC-Tron 3A	-----
Micro (C)	150	5, 6.5, 8	100	BUSS PC-Tron 3A	-----
Micro (C)	150	12, 15, 24, 28, 32, 36, 48, 54	150	BUSS PC-Tron 3A	-----
Maxi (A)	110	3.3	200	BUSS ABC-8	Littelfuse 505 10A
Maxi (A)	110	5, 6.5, 8	300	BUSS ABC-8	Littelfuse 505 10A
Maxi (A)	110	12, 15, 24, 28, 32, 36, 48, 54	400	BUSS ABC-8	Littelfuse 505 10A
Mini (B)	110	3.3	100	BUSS PC-Tron 5A	-----
Mini (B)	110	5, 6.5, 8	150	BUSS PC-Tron 5A	-----
Mini (B)	110	12, 15, 24, 28, 32, 36, 48, 54	200	BUSS PC-Tron 5A	-----
Micro (C)	110	3.3	50	BUSS PC-Tron 3A	-----
Micro (C)	110	5, 6.5, 8	75	BUSS PC-Tron 3A	-----
Micro (C)	110	12, 15, 24, 28, 32, 36, 48, 54	100	BUSS PC-Tron 3A	-----

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2nd Gen FasTrak DC-DC Converter Maxi, Mini, Micro Families external fusing

Package Size	Input Voltage	Output Voltage	Output Power	Required Fuse	Alternate Fuse
Maxi (A)	72	3.3	264	BUSS ABC-12	Littelfuse 505 12A
Maxi (A)	72	5, 6.5, 8	300	BUSS ABC-12	Littelfuse 505 12A
Maxi (A)	72	12, 15, 24, 28, 32, 36, 48, 54	400	BUSS ABC-12	Littelfuse 505 12A
Mini (B)	72	3.3,5, 6.5, 8	150	BUSS ABC-8	Littelfuse 505 10A
Mini (B)	72	12, 15, 24, 28, 32, 36, 48, 54	250	BUSS ABC-8	Littelfuse 505 10A
Micro (C)	72	3.3	75	BUSS PC-Tron 5A	-----
Micro (C)	72	5, 6.5, 8	100	BUSS PC-Tron 5A	-----
Micro (C)	72	12, 15, 24, 28, 32, 36, 48, 54	150	BUSS PC-Tron 5A	-----
Maxi (A)	48	3.3	264	BUSS ABC-10	Littelfuse 505 10A
Maxi (A)	48	5, 6.5, 8	400	BUSS ABC-15	Littelfuse 505 16A
Maxi (A)	48	12, 15, 24, 28, 32, 36, 48, 54	500	BUSS ABC-20	Littelfuse 505 20A
Mini (B)	48	2	100	BUSS PC-Tron 5A	
Mini (B)	48	3.3	150	BUSS ABC-8	Littelfuse 505 10A
Mini (B)	48	5, 6.5, 8	200	BUSS ABC-10	Littelfuse 505 10A
Mini (B)	48	12, 15, 24, 28, 32, 36, 48, 54	250	BUSS ABC-10	Littelfuse 505 10A
Mini (B)	48	12, 15, 24, 28, 32, 36, 48, 54	300	BUSS ABC-12	Littelfuse 505 12A
Micro (C)	48	2	50	BUSS PC-Tron 5A	-----
Micro (C)	48	3.3	75	BUSS PC-Tron 5A	-----
Micro (C)	48	5, 6.5	100	BUSS PC-Tron 5A	-----
Micro (C)	48	8	100	BUSS ABC-8	Littelfuse 505 10A
Micro (C)	48	12, 15, 24, 28, 32, 36, 48, 54	150	BUSS ABC-8	Littelfuse 505 10A
Maxi (A)	28	3.3	150	BUSS ABC-25	Littelfuse 505 25A
Maxi (A)	28	5	175	BUSS ABC-25	Littelfuse 505 25A
Maxi (A)	28	6.5, 8, 12, 15, 24, 28, 32, 36, 48, 54	200	BUSS ABC-30	Littelfuse 505 30A
Mini (B)	28	3.3, 5, 6.5, 8	75	BUSS ABC-15	Littelfuse 505 16A
Mini (B)	28	12	125	BUSS ABC-20	Littelfuse 505 20A
Mini (B)	28	15, 24, 28, 32, 36, 48, 54	150	BUSS ABC-25	Littelfuse 505 25A
Micro (C)	28	3.3, 5, 6.5, 8	50	BUSS ABC-8	Littelfuse 505 10A
Micro (C)	28	12, 15, 24, 28, 32, 36, 48, 54	100	BUSS ABC-15	Littelfuse 505 16A

2nd Gen FasTrak DC-DC Converter Maxi, Mini, Micro Families external fusing

Package Size	Input Voltage	Output Voltage	Output Power	Required Fuse	Alternate Fuse
Maxi (A)	24	3.3	264	BUSS ABC-25	Littelfuse 505 25A
Maxi (A)	24	5, 6.5, 8, 12, 15, 24, 28, 32, 36, 48,54	400	BUSS ABC-30	Littelfuse 505 30A
Maxi (A)	24	5, 6.5, 8, 12, 15, 24, 28, 32, 36, 48,54	500	BUSS AGC-40	-----
Mini (B)	24	3.3	150	BUSS ABC-15	Littelfuse 505 16A
Mini (B)	24	5, 6.5, 8, 12, 15, 24, 28, 32, 36, 48, 54	200	BUSS ABC-15	Littelfuse 505 16A
Mini (B)	24	5, 6.5, 8, 12, 15, 24, 28, 32, 36, 48, 54	250	BUSS ABC-20	Littelfuse 505 20A
Micro (C)	24	3.3	100	BUSS ABC-8	Littelfuse 505 10A
Micro (C)	24	5, 6.5, 8, 12, 15, 24, 28, 32, 36, 48, 54	100	BUSS ABC-10	Littelfuse 505 10A
Micro (C)	24	5, 6.5, 8, 12, 15, 24, 28, 32, 36, 48, 54	150	BUSS ABC-12	Littelfuse 505 12A

Viiisxxyzzzw V24 series
2nd Gen FasTrak DC-DC Converter Maxi, Mini, Micro Families

Sample model number: V24A12C400B

V = Standard, S = Synchronous

iii = Vin Nominal (Range)	**s = Size** A, B, C	**xx = Output Voltage** (Alpha-numeric combination up to 3 characters, V is used as the decimal separator)												
		-----	3V3	5	6V5	8	12	15	24	28	32	36	48	54
		zzz = Output Power in Watts (Max) (Alpha-numeric combination up to 3 characters)												
24 Vdc (18-36)	A = Maxi	-----	300	500	500	500	500	500	500	500	500	500	500	500
24 Vdc (18-36)	B = Mini	-----	150	200	200	200	250	250	250	250	250	250	250	250
24 Vdc (18-36)	C = Micro	-----	100	125	125	150	150	150	150	150	150	150	150	150

y= Product Grade	
E = Economy –10C to 100C	C = Commercial -20C to 100C
M = Military -55C to 100C	T or H = Industrial -40C to 100C

w = Functionality: Bxyz
(alphanumeric combination up to 4 characters, non-safety related, non-inclusive list of examples below)

	x = Pin Style	y = Baseplate	z = T
B = constant, defines Fastrak	Blank = Short Solder	Blank = Slotted	T = Thermscreen
	L = Long Solder	2 = Threaded	
	S = Short Modumate	3 = Thru hole	
	N = Long Modumate		
	F = Short RoHS		
	G = Long RoHS		
	K = Extra Long RoHS		

Note: **Viiisxxyzzzw** may be replaced by **VI-bxxxxxw** per customer special request

Customer Specials = VI-bxxxxxw

VI = Constant VE = RoHS version
b = Size 7 = Micro, 8 = Mini, 9 = Maxi
xxxxx = 0 - 9 Denotes a unique customer number that represents a module that falls within the electrical parameters of the parent family module, (Voltage, Current, Power, Fusing.)
w = Functionality: Bxyz

Examples:
VE-7xxxxxw, Micro module with Vin = 24 Vdc (18-36), Vout = 54V Max, and Max Pout = 150W
VE-8xxxxxw, Mini module with Vin = 24 Vdc (18-36), Vout = 54V Max, and Max Pout = 250W
VE-9xxxxxw, Maxi module with Vin = 24 Vdc (18-36), Vout = 54V Max, and Max Pout = 500W

Viiisxxyzzzw V28 series

2nd Gen FasTrak DC-DC Converter Maxi, Mini, Micro Families

Sample model number: V28A12C200B

V = Standard, S = Synchronous

iii = Vin Nominal (Range)	**s = Size** A, B, C	**xx = Output Voltage** (Alpha-numeric combination up to 3 characters, V is used as the decimal separator)												
		-----	3V3	5	6V5	8	12	15	24	28	32	36	48	54
		zzz = Output Power in Watts (Max) (Alpha-numeric combination up to 3 characters)												
28 Vdc (9-36)	A = Maxi	-----	150	200	200	200	200	200	200	200	200	200	200	200
28 Vdc (9-36)	B = Mini	-----	50	75	75	75	150	150	150	150	150	150	150	150
28 Vdc (9-36)	C = Micro	-----	50	50	60	75	100	100	100	100	100	100	100	100

y= Product Grade	
E = Economy –10C to 100C	C = Commercial -20C to 100C
M = Military -55C to 100C	T or H = Industrial -40C to 100C

w = Functionality: Bxyz
(alphanumeric combination up to 4 characters, non-safety related, non-inclusive list of examples below)

	x = Pin Style	y = Baseplate	z = T
B = constant, defines Fastrak	Blank = Short Solder	Blank = Slotted	T = Thermscreen
	L = Long Solder	2 = Threaded	
	S = Short Modumate	3 = Thru hole	
	N = Long Modumate		
	F = Short RoHS		
	G = Long RoHS		
	K = Extra Long RoHS		

Note: **Viiisxxyzzzw** may be replaced by **VI-bxxxxxw** per customer special request

Customer Specials = VI-bxxxxxw

VI = Constant VE = RoHS version
b = Size 7 = Micro, 8 = Mini, 9 = Maxi
xxxxx = 0 - 9 Denotes a unique customer number that represents a module that falls within the electrical parameters of the parent family module, (Voltage, Current, Power, Fusing.)
w = Functionality: Bxyz

Examples:
VE-7xxxxxw, Micro module with Vin = 28 Vdc (9-36), Vout = 54V Max, and Max Pout = 100W
VE-8xxxxxw, Mini module with Vin = 28 Vdc (9-36), Vout = 54V Max, and Max Pout = 150W
VE-9xxxxxw, Maxi module with Vin = 28 Vdc (9-36), Vout = 54V Max, and Max Pout = 200W

Viiisxxyzzzw V48 series
2nd Gen FasTrak DC-DC Converter Maxi, Mini, Micro Families

Sample model number: V48A12C500B

V = Standard, S = Synchronous

iii = Vin Nominal (Range)	**s = Size** A, B, C	**xx = Output Voltage** (Alpha-numeric combination up to 3 characters, V is used as the decimal separator)												
		2	3V3	5	6V5	8	12	15	24	28	32	36	48	54
		zzz = Output Power in Watts (Max) (Alpha-numeric combination up to 3 characters)												
48 Vdc (36-75)	A = Maxi	-----	264	400	400	500	500	500	500	500	500	500	500	500
48 Vdc (36-75)	B = Mini	100	150	200	200	200	300	300	300	300	300	300	300	300
48 Vdc (36-75)	C = Micro	50	75	100	100	150	150	150	150	150	150	150	150	150

y= Product Grade	
E = Economy –10C to 100C	C = Commercial -20C to 100C
M = Military -55C to 100C	T or H = Industrial -40C to 100C

w = Functionality: Bxyz
(alphanumeric combination up to 4 characters, non-safety related, non-inclusive list of examples below)

	x = Pin Style	y = Baseplate	z = T
B = constant, defines Fastrak	Blank = Short Solder	Blank = Slotted	T = Thermscreen
	L = Long Solder	2 = Threaded	
	S = Short Modumate	3 = Thru hole	
	N = Long Modumate		
	F = Short RoHS		
	G = Long RoHS		
	K = Extra Long RoHS		

Note: **Viiisxxyzzzw** may be replaced by **VI-bxxxxxw** per customer special request

Customer Specials = VI-bxxxxxw

VI = Constant VE = RoHS version
b = Size 7 = Micro, 8 = Mini, 9 = Maxi
xxxxx = 0 - 9 Denotes a unique customer number that represents a module that falls within the electrical parameters of the parent family module, (Voltage, Current, Power, Fusing.)
w = Functionality: Bxyz

Examples:
VE-7xxxxxw, Micro module with Vin = 48 Vdc (36-75), Vout = 54V Max, and Max Pout = 150W
VE-8xxxxxw, Mini module with Vin = 48 Vdc (36-75), Vout = 54V Max, and Max Pout = 250W
VE-9xxxxxw, Maxi module with Vin = 48 Vdc (36-75), Vout = 54V Max, and Max Pout = 500W

Viiisxxyzzzw V72 series

2nd Gen FasTrak DC-DC Converter Maxi, Mini, Micro Families

Sample model number: V72A12C400B

V = Standard, S = Synchronous

iii = Vin Nominal (Range)	**s = Size** A, B, C	**xx = Output Voltage** (Alpha-numeric combination up to 3 characters, V is used as the decimal separator)												
		-----	3V3	5	6V5	8	12	15	24	28	32	36	48	54
		zzz = Output Power in Watts (Max) (Alpha-numeric combination up to 3 characters)												
72 Vdc (43-110)	A = Maxi	-----	264	300	300	300	400	400	400	400	400	400	400	400
72 Vdc (43-110)	B = Mini	-----	100	150	150	150	250	250	250	250	250	250	250	250
72 Vdc (43-110)	C = Micro	-----	75	100	100	100	130	150	150	150	150	150	150	150

y= Product Grade	
E = Economy –10C to 100C	C = Commercial -20C to 100C
M = Military -55C to 100C	T or H = Industrial -40C to 100C

w = Functionality: Bxyz
(alphanumeric combination up to 4 characters, non-safety related, non-inclusive list of examples below)

	x = Pin Style	y = Baseplate	z = T
B = constant, defines Fastrak	Blank = Short Solder	Blank = Slotted	T = Thermscreen
	L = Long Solder	2 = Threaded	
	S = Short Modumate	3 = Thru hole	
	N = Long Modumate		
	F = Short RoHS		
	G = Long RoHS		
	K = Extra Long RoHS		

Note: **Viiisxxyzzzw** may be replaced by **VI-bxxxxxw** per customer special request

Customer Specials = VI-bxxxxxw

VI = Constant VE = RoHS version
b = Size 7 = Micro, 8 = Mini, 9 = Maxi
xxxxx = 0 - 9 Denotes a unique customer number that represents a module that falls within the electrical parameters of the parent family module, (Voltage, Current, Power, Fusing.)
w = Functionality: Bxyz

Examples:
VE-7xxxxxw, Micro module with Vin = 72 Vdc (43-110), Vout = 54V Max, and Max Pout = 150W
VE-8xxxxxw, Mini module with Vin = 72 Vdc (43-110), Vout = 54V Max, and Max Pout = 250W
VE-9xxxxxw, Maxi module with Vin = 72 Vdc (43-110), Vout = 54V Max, and Max Pout = 400W

Viiisxxyzzzw V110 series

2nd Gen FasTrak DC-DC Converter Maxi, Mini, Micro Families

Sample model number: V110A12C400B

V = Standard, S = Synchronous

iii = Vin Nominal (Range)	**s = Size** A, B, C	**xx = Output Voltage** (Alpha-numeric combination up to 3 characters, V is used as the decimal separator)												
		-----	3V3	5	6V5	8	12	15	24	28	32	36	48	54
		zzz = Output Power in Watts (Max) (Alpha-numeric combination up to 3 characters)												
110 Vdc (66-154)	A = Maxi	-----	200	300	300	300	400	400	400	400	400	400	400	400
110 Vdc (66-154)	B = Mini	-----	100	150	150	150	200	200	200	200	200	200	200	200
110 Vdc (66-154)	C = Micro	-----	50	75	75	75	100	100	100	100	100	100	100	100

y= Product Grade	
E = Economy –10C to 100C	C = Commercial -20C to 100C
M = Military -55C to 100C	T or H = Industrial -40C to 100C

w = Functionality: Bxyz
(alphanumeric combination up to 4 characters, non-safety related, non-inclusive list of examples below)

	x = Pin Style	y = Baseplate	z = T
B = constant, defines Fastrak	Blank = Short Solder	Blank = Slotted	T = Thermscreen
	L = Long Solder	2 = Threaded	
	S = Short Modumate	3 = Thru hole	
	N = Long Modumate		
	F = Short RoHS		
	G = Long RoHS		
	K = Extra Long RoHS		

Note: **Viiisxxyzzzw** may be replaced by **VI-bxxxxxw** per customer special request

Customer Specials = VI-bxxxxxw

VI = Constant VE = RoHS version
b = Size 7 = Micro, 8 = Mini, 9 = Maxi
xxxxx = 0 - 9 Denotes a unique customer number that represents a module that falls within the electrical parameters of the parent family module, (Voltage, Current, Power, Fusing.)
w = Functionality: Bxyz

Examples:
VE-7xxxxxw, Micro module with Vin = 110 Vdc (66-154), Vout = 54V Max, and Max Pout = 100W
VE-8xxxxxw, Mini module with Vin = 110 Vdc (66-154), Vout = 54V Max, and Max Pout = 200W
VE-9xxxxxw, Maxi module with Vin = 110 Vdc (66-154), Vout = 54V Max, and Max Pout = 400W

Viiisxxyzzzw V150 series

2nd Gen FasTrak DC-DC Converter Maxi, Mini, Micro Families

Sample model number: V150A12C500B

V = Standard, S = Synchronous

iii = Vin Nominal (Range)	**s = Size** A, B, C	**xx = Output Voltage** (Alpha-numeric combination up to 3 characters, V is used as the decimal separator)												
		-----	3V3	5	6V5	8	12	15	24	28	32	36	48	54
		zzz = Output Power in Watts (Max) (Alpha-numeric combination up to 3 characters)												
150 Vdc (100-200)	A = Maxi	-----	264	400	400	400	500	500	500	500	500	500	500	500
150 Vdc (100-200)	B = Mini	-----	150	200	200	200	250	250	250	250	250	250	250	250
150 Vdc (100-200)	C = Micro	-----	75	100	100	100	150	150	150	150	150	150	150	150

y= Product Grade	
E = Economy –10C to 100C	C = Commercial -20C to 100C
M = Military -55C to 100C	T or H = Industrial -40C to 100C

w = Functionality: Bxyz
(alphanumeric combination up to 4 characters, non-safety related, non-inclusive list of examples below)

	x = Pin Style	y = Baseplate	z = T
B = constant, defines Fastrak	Blank = Short Solder	Blank = Slotted	T = Thermscreen
	L = Long Solder	2 = Threaded	
	S = Short Modumate	3 = Thru hole	
	N = Long Modumate		
	F = Short RoHS		
	G = Long RoHS		
	K = Extra Long RoHS		

Note: **Viiisxxyzzzw** may be replaced by **VI-bxxxxxw** per customer special request

Customer Specials = VI-bxxxxxw

VI = Constant VE = RoHS version
b = Size 7 = Micro, 8 = Mini, 9 = Maxi
xxxxx = 0 - 9 Denotes a unique customer number that represents a module that falls within the electrical parameters of the parent family module, (Voltage, Current, Power, Fusing.)
w = Functionality: Bxyz

Examples:
VE-7xxxxxw, Micro module with Vin = 150 Vdc (100-200), Vout = 54V Max, and Max Pout = 150W
VE-8xxxxxw, Mini module with Vin = 150 Vdc (100-200), Vout = 54V Max, and Max Pout = 250W
VE-9xxxxxw, Maxi module with Vin = 150 Vdc (100-200), Vout = 54V Max, and Max Pout = 500W

Viiisxxyzzzw V300 series
2nd Gen FasTrak DC-DC Converter Maxi, Mini, Micro Families

Sample model number: V300A12C500B

V = Standard, S = Synchronous

iii = Vin Nominal (Range)	**s = Size** A, B, C	**xx = Output Voltage** (Alpha-numeric combination up to 3 characters, V is used as the decimal separator)												
		2	3V3	5	6V5	8	12	15	24	28	32	36	48	54
		zzz = Output Power in Watts (Max) (Alpha-numeric combination up to 3 characters)												
300 Vdc (180-375)	A = Maxi	160	264	400	400	400	500	500	500	500	500	500	500	500
300 Vdc (180-375)	B = Mini	100	150	200	200	200	250	250	250	250	250	250	250	250
300 Vdc (180-375)	C = Micro	50	75	100	100	100	150	150	150	150	150	150	150	150

y= Product Grade	
E = Economy –10C to 100C	C = Commercial -20C to 100C
M = Military -55C to 100C	T or H = Industrial -40C to 100C

w = Functionality: Bxyz
(alphanumeric combination up to 4 characters, non-safety related, non-inclusive list of examples below)

	x = Pin Style	y = Baseplate	z = T
B = constant, defines Fastrak	Blank = Short Solder	Blank = Slotted	T = Thermscreen
	L = Long Solder	2 = Threaded	
	S = Short Modumate	3 = Thru hole	
	N = Long Modumate		
	F = Short RoHS		
	G = Long RoHS		
	K = Extra Long RoHS		

Note: **Viiisxxyzzzw** may be replaced by **VI-bxxxxxw** per customer special request

Customer Specials = VI-bxxxxxw

VI = Constant VE = RoHS version
b = Size 7 = Micro, 8 = Mini, 9 = Maxi
xxxxx = 0 - 9 Denotes a unique customer number that represents a module that falls within the electrical parameters of the parent family module, (Voltage, Current, Power, Fusing.)
w = Functionality: Bxyz

Examples:
VE-7xxxxxw, Micro module with Vin = 300 Vdc (180-375), Vout = 54V Max, and Max Pout = 150W
VE-8xxxxxw, Mini module with Vin = 300 Vdc (180-375), Vout = 54V Max, and Max Pout = 250W
VE-9xxxxxw, Maxi module with Vin = 300 Vdc (180-375), Vout = 54V Max, and Max Pout = 500W

Viiisxxyzzzw V375 series
2nd Gen FasTrak DC-DC Converter Maxi, Mini, Micro Families

Sample model number: V375A12C600B

V = Standard, S = Synchronous

iii = Vin Nominal (Range)	**s = Size** A, B, C	**xx = Output Voltage** (Alpha-numeric combination up to 3 characters, V is used as the decimal separator)												
		2	3V3	5	6V5	8	12	15	24	28	32	36	48	54
		zzz = Output Power in Watts (Max) (Alpha-numeric combination up to 3 characters)												
375 Vdc (250-425)	A = Maxi	160	264	400	400	400	600	600	600	600	600	600	600	600
375 Vdc (250-425)	B = Mini	100	150	200	200	200	300	300	300	300	300	300	300	300
375 Vdc (250-425)	C = Micro	50	75	100	100	100	150	150	150	150	150	150	150	150

y= Product Grade	
E = Economy –10C to 100C	C = Commercial -20C to 100C
M = Military -55C to 100C	T or H = Industrial -40C to 100C

w = Functionality: Bxyz
(alphanumeric combination up to 4 characters, non-safety related, non-inclusive list of examples below)

	x = Pin Style	y = Baseplate	z = T
B = constant, defines Fastrak	Blank = Short Solder	Blank = Slotted	T = Thermscreen
	L = Long Solder	2 = Threaded	
	S = Short Modumate	3 = Thru hole	
	N = Long Modumate		
	F = Short RoHS		
	G = Long RoHS		
	K = Extra Long RoHS		

Note: **Viiisxxyzzzw** may be replaced by **VI-bxxxxxw** per customer special request

Customer Specials = VI-bxxxxxw

VI = Constant VE = RoHS version
b = Size 7 = Micro, 8 = Mini, 9 = Maxi
xxxxx = 0 - 9 Denotes a unique customer number that represents a module that falls within the electrical parameters of the parent family module, (Voltage, Current, Power, Fusing.)
w = Functionality: Bxyz

Examples:
VE-7xxxxxw, Micro module with Vin = 375 Vdc (250-425), Vout = 54V Max, and Max Pout = 150W
VE-8xxxxxw, Mini module with Vin = 375 Vdc (250-425), Vout = 54V Max, and Max Pout = 300W
VE-9xxxxxw, Maxi module with Vin = 375 Vdc (250-425), Vout = 54V Max, and Max Pout =600W

Customer Special Exceptions: Denotes a unique customer number that represents a module that extends the electrical parameters of the parent family module, (Voltage, Current, Power, Fusing.)

VE-920094B, Maxi module, Vin = 375 Vdc (280-400), Vout = 24V, Pout =672W, Fuse = Buss PC-Tron 5A
VE-920171B, Maxi module, Vin = 375 Vdc (250-440), Vout = 24V, Pout =600W, Fuse = Buss PC-Tron 5A, Littelfuse 505, 10A