

LAMBDA VSB/VSC/VSP Series

Single Output Low Cost, 115VAC Input

- ◆ Input transient protected
- ◆ 2 year warranty
- ◆ High quality design
- ◆ 200% Peak Power Version (VSP)

RoHS



Key Market Segments & Applications

Factory Automation	Process Control, NC-Machining, Automotive, Packaging Equipment, Materials Handling, Chemical Processing, Robots
Test & Measurement	Burn-in & Test, Automated Test, Instrumentation, Measurement, Detection
Light Industrial	Gaming, Vending, Printers

VSB/VSC Features and Benefits

Feature	Benefit
◆ 2 Year Warranty	◆ Lower Cost of Ownership
◆ Broad product range	◆ Optimization of power supply to system
◆ Peak Power capability	◆ Can drive high current start up devices

Specifications

ITEMS	MODELS	VS10C	VS15C	VS30C	VS50B VS50P	VS75B VS75P	VS100B VS100P	VS150B VS150P	
		AC Input Voltage range	-	85-132VAC (47-440Hz)					
DC Input Voltage range	VDC	110 - 175VDC							
Inrush Current (100VAC) (1)	A	25	30	25	30	30	20	20	
Temperature Coefficient	-	<0.02%/°C							
Overcurrent Protection (2)	-	~105%			VSB:~125%; VSP: >102% of Peak				
Overvoltage Protection	V	~115% Diode Clamp			~115 - 135% Manual Reset				
Hold Up Time (Typ) at 100VAC	ms	20			17				
Remote Sense	-	None							
Operating Temperature (3)	-	-10°C to +60°C, derate linearly to 70% load from 50°C to 60°C							
Storage Temperature	-	-30 to +85°C							
Humidity (non condensing)	-	Storage 10-95% RH, Operating 30-90% RH							
Cooling (4)	-	Convection							Forced
Withstand Voltage	-	Input to Ground 2kVAC (20mA), Input to Output 2kVAC (20mA), Output to Ground 500VAC (100mA) for 1 min.							
Isolation Resistance	-	>100M at 25°C & 70%RH, Output to Ground 500VDC							
Vibration (non operating)	-	10 - 55Hz (1 minute sweep), 19.6m/s ² constant X, Y, Z 1 hour							
Shock	-	< 196.1 m/s ²							
Safety Agency Approvals	-	UL60950-1, CSA60950-1, EN60950-1							
Conducted & Radiated EMI	-	FCC Class B, VCCI-B							
Recommended EMI Filter	-	MAW12R5-22	MAW1201-22	MAW1202-22	MAW1203-22	MAW1205-22			
Weight (Typ) (VSP)	g	65	80	150	200	350 (280)	420 (350)	550 (480)	
Size (WxHxD)	mm	See Outline Drawings							
Warranty	-	2 years							

Notes:

- (1) 25°C ambient (cold start)
- (2) Avoid prolonged operation in overload
- (3) VS50B24 -10°C to +60°C, derate linearly to 62% load from 40°C to 60°C, VS50P derate to 60% at 60°C
- (4) 0.7m/s forced air required, consult installation manual for derating with convection cooling

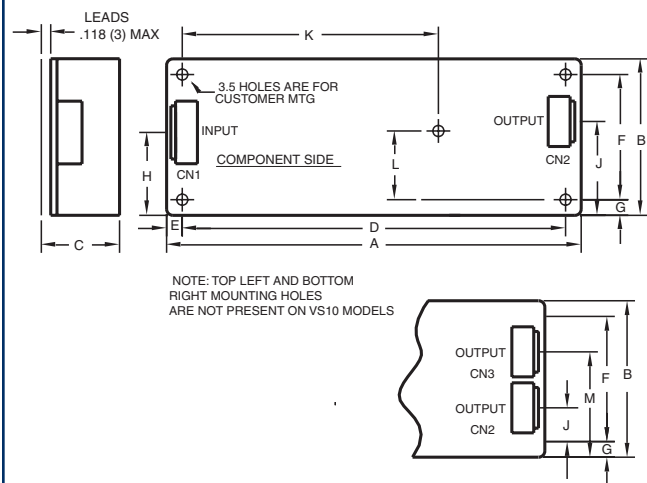
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Output Ratings

Model	Voltage	Adjust Range V	Max Curr. A	Peak Curr. A	Load Reg mV	Line Reg mV	Ripple Noise mV	Eff. %
VS10C-3	3.3V	2.97-3.63	2	-	40	20	120	62
VS15C-3	3.3V	2.97-3.63	3	-	40	20	120	62
VS30C-3	3.3V	2.97-3.63	6	-	40	20	120	69
VS50B-3	3.3V	2.97-3.63	10	12	40	20	120	73
VS75B-3	3.3V	2.97-3.63	15	18	40	20	120	72
VS100B-3	3.3V	2.97-3.63	20	24	40	20	120	72
VS150B-3	3.3V	2.97-3.63	30	36	40	20	120	72
VS10C-5	5V	4.5-5.5	2	-	40	20	120	71
VS15C-5	5V	4.5-5.5	3	-	40	20	120	72
VS30C-5	5V	4.5-5.5	6	-	40	20	120	75
VS50B-5	5V	4.5-5.5	10	12	40	20	120	78
VS75B-5	5V	4.5-5.5	15	18	40	20	120	79
VS100B-5	5V	4.5-5.5	20	24	40	20	120	79
VS150B-5	5V	4.5-5.5	30	36	40	20	120	78
VS10C-12	12V	10.8-13.2	0.9	-	96	48	150	75
VS15C-12	12V	10.8-13.2	1.3	-	96	48	150	75
VS30C-12	12V	10.8-13.2	2.5	-	96	48	150	80
VS50B-12	12V	10.8-13.2	4.3	5.16	96	48	150	79
VS75B-12	12V	10.8-13.2	6.3	7.56	96	48	150	80
VS100B-12	12V	10.8-13.2	8.5	10.2	96	48	150	80
VS150B-12	12V	10.8-13.2	12.5	15	96	48	150	80
VS10C-15	15V	13.5-16.5	0.7	-	120	60	150	75
VS15C-15	15V	13.5-16.5	1	-	120	60	150	75
VS30C-15	15V	13.5-16.5	2	-	120	60	150	81
VS50B-15	15V	13.5-16.5	3.5	4.2	120	60	150	80
VS75B-15	15V	13.5-16.5	5	6.0	120	60	150	80
VS100B-15	15V	13.5-16.5	7	8.4	120	60	150	80
VS150B-15	15V	13.5-16.5	10	12	120	60	150	80
VS10C-24	24V	21.6-26.4	0.5	-	240	96	200	78
VS15C-24	24V	21.6-26.4	0.7	-	240	96	200	78
VS30C-24	24V	21.6-26.4	1.3	-	150	96	200	82
VS50B-24	24V	21.6-26.4	2.5	3.0	150	96	200	80
VS50P-24	24V	21.6-26.4	2.5	4.2	150	96	180	83
VS75B-24	24V	21.6-26.4	3.2	3.84	150	96	200	81
VS75P-24	24V	21.6-26.4	3.2	7.0	150	96	180	83
VS100B-24	24V	21.6-26.4	4.3	5.16	150	96	200	81
VS100P-24	24V	21.6-26.4	4.3	10	150	96	180	85
VS150B-24	24V	21.6-26.4	6.3	7.56	150	96	200	80
VS150P-24	24V	21.6-26.4	6.3	12	150	96	180	86
VS30C-36	36V	32.4-39.6	0.9	-	240	144	300	80
VS75B-36	36V	32.4-39.6	2.1	2.52	240	144	300	81
VS100B-36	36V	32.4-39.6	3	3.6	240	144	300	81
VS150B-36	36V	32.4-39.6	4.2	5.04	240	144	300	80
VS30C-48	48V	43.2-52.8	0.7	-	480	192	400	80
VS75B-48	48V	43.2-52.8	1.6	1.92	300	192	400	81
VS100B-48	48V	43.2-52.8	2.2	2.64	200	192	400	81
VS150B-48	48V	43.2-52.8	3.2	3.84	300	192	400	81

Peak Current Note: For 10s maximum, 35% duty cycle, average power not to exceed maximum ratings. See installation manual.

VSB/VSC Outline Drawing



DIMENSIONS:

MODEL	A	B	C	D	E	F	G	H	J	K	L	M	WEIGHT:
VS10	3.70 (94)	1.93 (49)	.67 (17)	3.425 (87)	.138 (3.5)	1.654 (42)	.138 (3.5)	1.02 (26)	.85 (21.5)	-	-	-	.17 LBS
VS15	4.53 (115)	1.97 (50)	.67 (17)	4.252 (108)	.138 (3.5)	1.693 (43)	.138 (3.5)	1.22 (31)	1.39 (35.25)	-	-	-	.22 LBS
VS30	5.22 (132.5)	1.97 (50)	.98 (25)	4.823 (122.5)	.197 (5)	1.576 (40)	.197 (5)	1.02 (26)	1.18 (30)	-	-	-	.29 LBS
VS50	7.68 (195)	1.97 (50)	.98 (25)	7.283 (185)	.197 (5)	1.576 (40)	.197 (5)	1.10 (28)	.87 (17)	-	-	-	.44 LBS
VS75	8.74 (222.0)	1.97 (50)	1.26 (32)	8.346 (212)	.197 (5)	1.576 (40)	.197 (5)	.85 (21.5)	1.06 (27)	5.335 (135.5)	1.280 (32.5)	-	.77 LBS
VS100	8.74 (222.0)	2.44 (62)	1.26 (32)	8.346 (212)	.197 (5)	2.047 (52)	.197 (5)	.98 (25)	1.22 (31)	4.705 (119.5)	1.673 (42.5)	-	.92 LBS
VS150	8.74 (222.0)	2.95 (75)	1.42 (36)	8.346 (212)	.197 (5)	2.560 (65)	.197 (5)	1.81 (46)	.85 (21.7)	4.961 (126)	2.165 (55)	1.91 (48.5)	1.21 LBS

NOTE:

1. DIMENSIONS ARE IN INCHES EXCEPT DIMENSIONS () ARE IN MM.

Other Lambda Industrial Products

HWS 15W to 1500W Single output
 ZWS, ZWD, ZWQ 5W to 240W Universal input
 SC, SCS120 30W to 120W Single, dual & triple output
 ZP 40W to 60W Single & multiple output

For Additional Information, please visit
www.lambdapower.com/products/vsb-series.htm