

# 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 <sup>2</sup> constant X, Y, Z 1 hour							
Shock	-	< 196.1 m/s <sup>2</sup>							
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

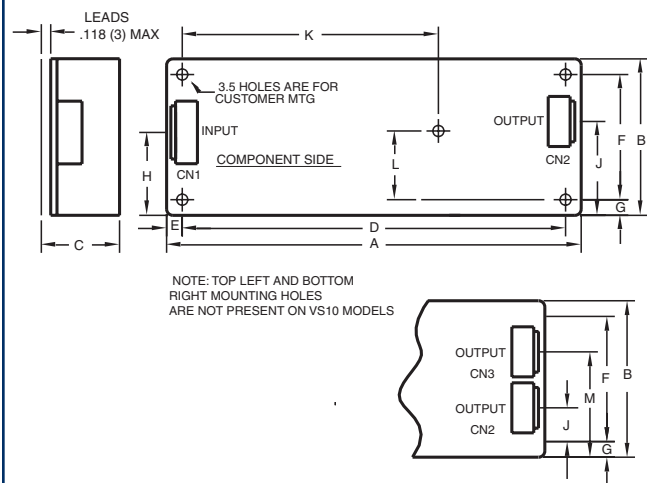
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## Output Ratings

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](http://www.lambdapower.com/products/vsb-series.htm)