

10W to 150W Single Output, 115VAC Input

Features

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



Key Market Segments & Applications



Specifications

		VS10C		VS15C		VS30C		VS50B VS50P		VS75B VS75P		VS100B VS100P		VS150B VS150P	
Model															
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	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		-	RSEL-20R5W	RSEL-2001W			RSEL-2002W/RSEL-2003W			RSEL-2006W					
Weight (Typ) (VSP)		g	65	80	150	200	350 (280)			420 (350)		550 (480)			
Size (WxHxD)		mm	See Outline Drawings												
Warranty		yrs	Two 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

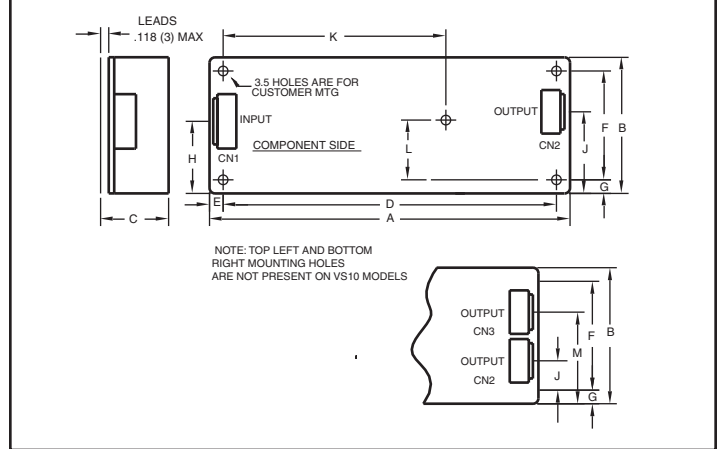
(4) 0.7m/s forced air required, consult installation manual for derating with convection cooling

Model Selector

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



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)	.67 (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 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
us.tdk-lambda.com/lp/products/vsb-series.htm

