



Your Power House
VP ELECTRONIQUE

EC-0136

VPN-100B/C/D-xx Series

100W, Single Output

24V / 48V / 96V DC Input



159 x 95 x 38 mm
6.26 x 3.74 x 1.50 inch



Features:

* Power ON with LED indicator	* Over voltage, over load & short circuit protection
* Input and output isolation	* Output voltage $\pm 10\%$ adjustment
* Non min. load requirement	* 100% full load burn-in test
* Input polarity reverse protection	* According to the LVD Directive 2014/35/EU
* Input under voltage protection	* 3 years warranty
* Natural Cooling	

Specification:

INPUT	Model NO.	VPN-100B-xx Ser.	VPN-100C-xx Ser.	VPN-100D-xx Ser.	
	Voltage		18 ~ 36V DC (Typical 24V)	36 ~ 72V DC (Typical 48V)	72 ~ 144V DC (Typical 96V)
Current		<8A @ 18V DC	<4A @ 36V DC	<2A @ 72V DC	
Protection		Fuse , 10A/250V	Fuse , 6A/250V	Fuse , 3A/250V	
OUTPUT	Voltage	5V	12V	24V	48V
	Min Load	0A	0A	0A	0A
	Max Load	18A	8.4A	4.2A	2.1A
	Output Tolerance ②	$\pm 2\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
	Ripple Noise MAX. ③	70mV	120mV	200mV	240mV
	Efficiency (TYP.)				
	VPN-100B	82%	87%	87%	88%
	VPN-100C,D	86%	91%	90%	91%
	Output MAX.	90W	101W	101W	101W
PROTECTION	Over Voltage	5.8~7.0V	13.8~16.8V	27.6~33.6V	55.2~67.2V
	Shutdown and latch off, recover after re-start up.				
	OverLoad & ShortCircuit	When power supply over 105%~ 150% max load or short circuit acted, power supply will be constant current limiting and recover automatically after the fault is removed.			
	Input Voltage	VPN-100B	Under voltage shut down: < 16.0V		
	VPN-100C	Under voltage shut down: < 32.0V			
	VPN-100D	Under voltage shut down: < 66.0V			
ELEC. CHAR.	Rise time	< 50mS			
ENVIRONMENT	Temperature ④	Operating: -20 ~ 70°C ; Storage: -40 ~ +85°C VPN-100B-xx : De-rating: 45 ~ 70°C : 2.5%/°C ; VPN-100C/D-xx : De-rating: 50 ~ 70°C : 2.5%/°C			
	Humidity	Operating: 20% ~ 90% RH (non condensing); Storage: 10% ~ 95% RH (non condensing)			
SAFETY	Withstand voltage	I/P-O/P:4.0KVDC, I/P-FG:2.5KVDC, O/P-FG:0.7KVDC, 1minute			
	Isolation resistance	I/P-O/P, I/P-FG, O/P-FG > 100M Ω /500VDC at 25°C / 70% RH			
	Safety standard	IEC 62368-1:2014 (Second Edition) and/or EN 62368-1:2014+A11:2017			
EMC	EMI	EN 55032 CLASS B 、 FCC CFR 47 PART 15 CLASS B 、 CNS 13438 CLASS B.			
	EMS	EN 55024 : EN 61000-4-2,3,4,5,6,8 ; ENV 50204			
OTHERS	Cooling	Natural Cooling.			
	M.T.B.F.	238.7K hours			
	Dimension	159 x 95 x 38 mm (L*W*H)			
	Packing	N.W.: 0.426Kg / 1pc(SDN-100B&C) / N.W.: 0.416Kg / 1pc(SDN-100D); 30pcs/ 1.20 CUFT / 1 CTN			
NOTE	① All measurements which not mentioned are based on 24V/48V/96VDC input, output Max at ambient 25°C / 70%RH				
	② Output tolerance included set up voltage, line regulation and load regulation.				
	③ Ripple & noise are measured at 21~36V / 42~72V / 82~144VDC input with 10~50°C condition and 20MHz of bandwidth by terminated using a 10" ~15" twisted pair-wire with a 0.1uF & a 47uF parallel capacitor.				
	④ The operating temperature shall follow the de-rating curve in spec				
	⑤ The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.				
	⑥ The ambient temperature should be de-rating by 5°C/1000m, when operating altitude higher than 2000m (6500 ft)				

Rev 0.4

09-2020



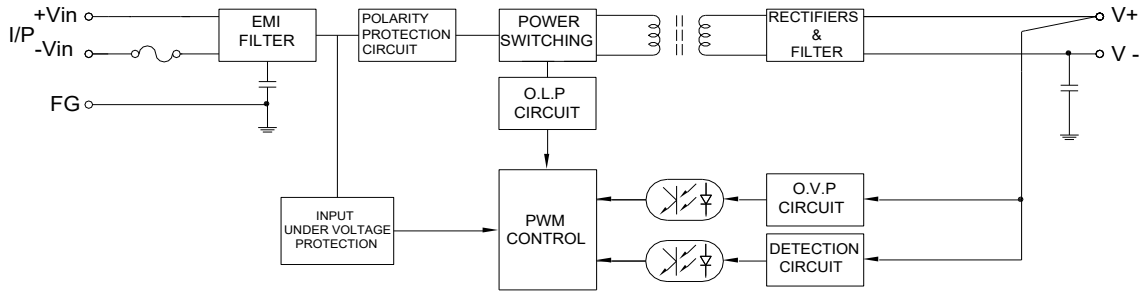
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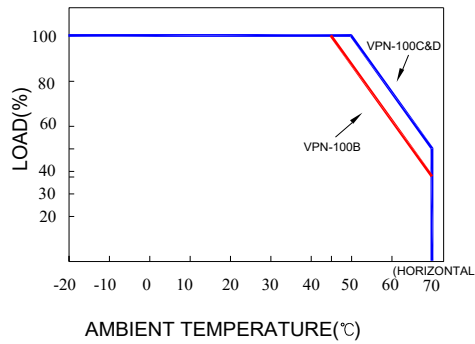
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Block Diagram : DS51

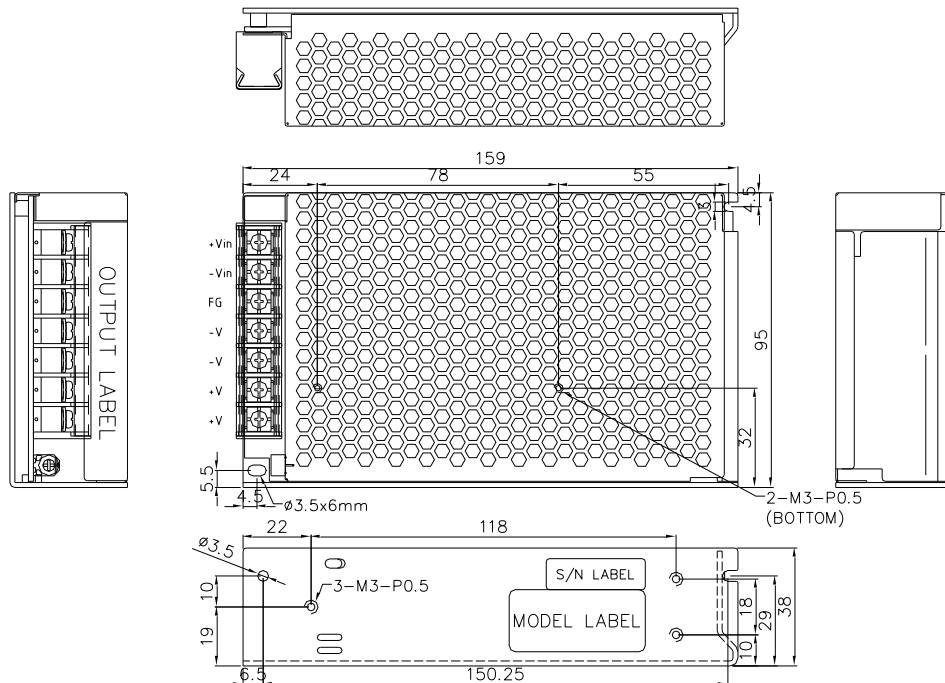


De-rating Curve : E2-4



Dimension:

(Unit: mm)



NOTES:

TERMINAL BLOCK: 7P, PITCH 9.5mm with pc cover

MODEL No.	1	2	3	4	5	6	7
VPN-100B/C/D-xx	+Vin	-Vin	FG	-V	-V	+V	+V

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