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SPS-G018-xx Series

Single Output

Green mode function



62 x 50.8 x 28 mm

2.44 x 2.0 x 1.10 inch



Features:

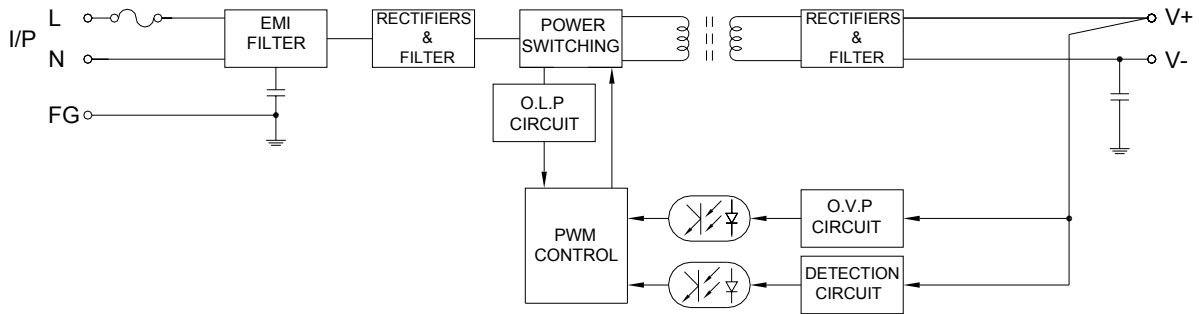
- * Green mode design, no load < 0.15W
- * Small size, high efficiency
- * Over voltage protection : Limiting voltage mode
- * Over load & short circuit protection : Hiccup mode
- * Output voltage $\pm 10\%$ adjustment
- * 100% full load burn-in test
- * $-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$ Operating temperature
- * UL, cUL, CB, CE approved
- * 3 years warranty

Specification:

INPUT	Voltage	85V ~ 264VAC universal full range or 120V ~ 375VDC.				
	Frequency	47 ----- 63 Hz				
	Current	<0.5A@100V AC input, full load condition				
	Inrush Current (TYP.)	30A@115V , 50A@230V AC input, Cold start at 25℃ ambient				
	Leakage Current	<0.5mA@264V AC input				
OUTPUT	MODEL No.	SPS-G018-3.3	SPS-G018-05	SPS-G018-12	SPS-G018-15	SPS-G018-24
	Voltage	3.3V	5V	12V	15V	24V
	Min Load	0A	0A	0A	0A	0A
	Max Load	3A	3A	1.5A	1.2A	0.75A
	Output Tolerance ②	± 3%	± 2%	± 1%	± 1%	± 1%
	Ripple Noise MAX. ③	80mV	80mV	120mV	150mV	200mV
	Efficiency (TYP.)	73%	78%	83%	84%	85%
	Output MAX.	10W	15W	18W	18W	18W
PROTECTION	Over Voltage	3.8~4.6V	5.8~7.0V	13.8~16.8V	17.3~21.0V	27.6~33.6V
		Limiting voltage latch or Shutdown and latch off, recover after re-start up				
	Over Load & Short Circuit	When power supply over 105% max load or short circuit acted, power supply will go into hiccup mode and recover automatically after the fault is removed.				
ELEC. CHAR.	Rise time	<50mS				
	Hold up time	>60mS@230V, full load condition				
	Setup time	<1 Sec@100 ~ 240V AC				
ENVIRONMEN T	Green mode function	Power consumption at no load < 0.15W at 230VAC input				
	Temperature ④	Operating: -20 ~ +70℃ ; De-rating: 50 ~ 70℃: 2.5%/℃ ; Storage: -40 ~ +85℃				
	Humidity	Operating: 20% ~ 90% RH (non condensing) ; Storage: 10% ~ 95% RH (non condensing)				
	Altitude	6562 ft (≈ 2000 m) operating				
SAFETY	Withstand voltage	I/P-O/P:3KVAC, I/P-FG:1.8KVAC, O/P-FG:0.5KVAC, 1minute				
	Isolation resistance	I/P-O/P, I/P-FG, O/P-FG > 100MΩ/500VDC at 25℃/ 70% RH				
	Safety standard	UL 62368-1, 2 nd Edition, 2014-12-01, CAN/CSA C22.2 No.62368-1-14, 2 nd Edition, 2014-12, IEC 62368-1:2014				
EMC	EMI	Test Items	Standard		Test Level	
		Conducted	EN / BS EN 55032		Class B	
		Radiated	EN / BS EN 55032		Class B	
		Harmonic	EN / BS EN 61000-3-2		Class A	
		Voltage Flicker	EN / BS EN 61000-3-3		---	
	EMS	Test Items	Standard		Test Level	
		ESD	EN / BS EN 61000-4-2		Level 3, 8KV air ; Level 2, 4KV contact	
		Radiated	EN / BS EN IEC 61000-4-3		Level 2	
		EFT / Burst	EN / BS EN 61000-4-4		Level 2	
		Surge	EN / BS EN 61000-4-5		Level 3, 1KV/Line-Line , 2KV/Line-Earth	
		Conducted	EN / BS EN 61000-4-6		Level 2	
		Magnetic Field	EN / BS EN 61000-4-8		Level 2	
	Voltage Dips and Interruptions	EN / BS EN IEC 61000-4-11		>95% dip 0.5 period, 30% dip 25 periods >95% interruptions 250 periods		
OTHERS	Cooling	Natural cooling.				
	M.T.B.F.	626.3K hours				
	Dimension	62 x 50.8 x 28 mm (L*W*H)				
	Packing	N.W.: 0.13 Kg / 1pc; 100pcs/ 0.85 CUFT / 1 CTN				
NOTE	① All measurements which not mentioned are based on 230VAC input, output Max at ambient 25℃ / 70%RH					
	② Output tolerance included set up voltage, line regulation and load regulation.					
	③ Ripple & noise are measured at 100~254VAC input with 10~50℃ condition and 20MHz of bandwidth by using a 10" ~ 15" twisted pair-wire terminated 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.					

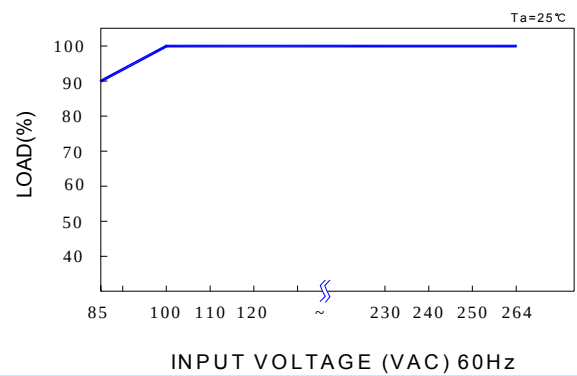
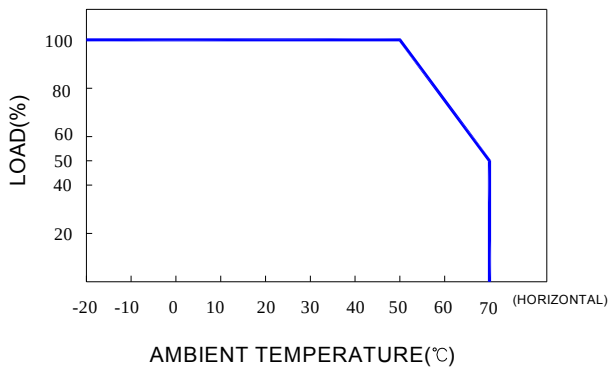
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Block Diagram : US2-1



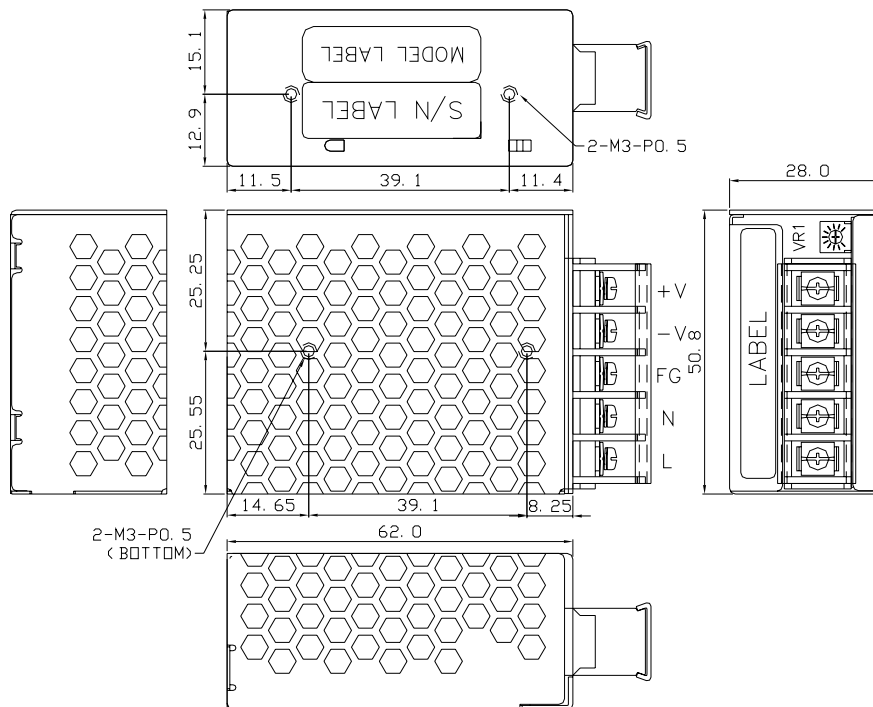
De-rating Curve :

Output De-rating Vs Input Voltage :



Dimension:

(Unit: mm)



Terminal Pin. No Assignment: 5P/7.62mm w/plastic cover

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4	DC OUTPUT -V
2	AC/N	5	DC OUTPUT +V
3	FG		