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SPS-360P-xx Series

360W, Single Output

Active P.F.C Function



198 x 99 x 38 mm

7.8 x 3.9 x 1.5 inch



Features:

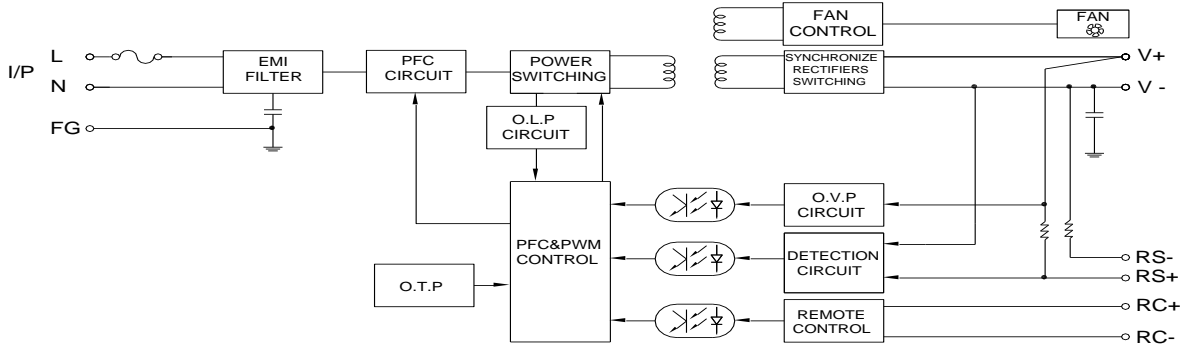
* Altitude during operation up to 16404ft (5000m)	* Remote control ON/OFF Type Optional:
* Universal AC input with active PFC circuit, P.F.>0.95	① Standard Type SPS-360P-xx
* Power ON with LED indicator	② Reverse Type SPS-360P-xxR (has MOQ required)
* Built in EMI filter, low ripple noise	* 100% full load burn-in test
* Over voltage 、over load & short circuit protection	* UL, cUL, CB, CE approved
* Over temperature protection	* 3 years warranty
* Output voltage $\pm 10\%$ adjustment	
* Output voltage remote sense	

Specification:

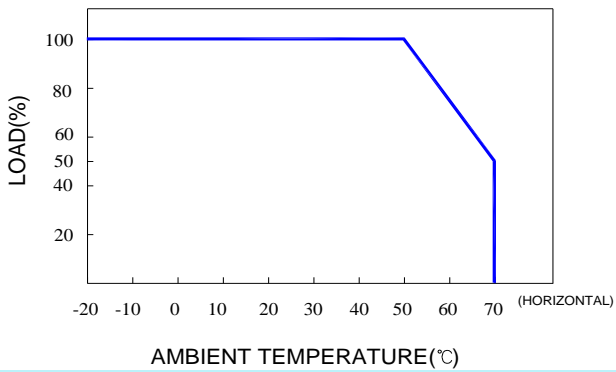
INPUT	Voltage	85V ~ 264VAC universal full range or 120V ~ 375VDC.							
	Frequency	47 ---- 63 Hz							
	Current	<4.8A @100V AC input, full load condition							
	Inrush Current(TYP.)	35A@115V , 70A@230V AC input. Cold start at 25°C ambient							
	Leakage Current	<1.5mA@264V AC input							
	Power Factor	PF > 0.95							
OUTPUT	MODEL No.	SPS-360P-05	SPS-360P-12	SPS-360P-15	SPS-360P-24	SPS-360P-27	SPS-360P-30	SPS-360P-48	
	Voltage	5V	12V	15V	24V	27V	30V	48V	
	Min Load	0A	0A	0A	0A	0A	0A	0A	
	Max Load	50A	30A	24A	15A	13.4A	12A	7.6A	
	Output Tolerance ②	$\pm 2\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	
	Ripple Noise MAX. ③	150mV	150mV	150mV	200mV	200mV	250mV	250mV	
	Efficiency (TYP.)	85%	89%	89%	89%	89%	89%	90%	
	Output MAX.	250W	360W	360W	360W	361.8W	360W	364.8W	
PROTECTION	Over Voltage	5.8V~7.0V	13.8V~16.8V	17.3V~21.0V	27.6V~33.6V	31.1V~37.8V	34.5V~42.0V	55.2V~67.2V	
		Shutdown and latch off, recover after re-start up.							
	Over Load & Short Circuit	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.							
	Over Temperature	Over 75°C ± 5 °C Shutdown and latch off, recover after re-start up							
ELEC. CHAR.	Rise time	<20mS							
	Hold up time	>12mS@230V, full load condition							
	Setup time (TYP)	<3.0S@115VAC , <1.5S@230VAC							
	Remote sensing	(RS+, RS-).							
	Remote Control	RC+/RC-: Standard Type 0~0.8V= Power On; 4~10V= Power Off ; Reverse Type 0~0.8V= Power Off; 4~10V= Power On							
ENVIRONMENT	Temperature ④	Operating: -20 ~ +70°C ; De-rating: 50 ~ 70°C: 2.5%/°C ; Storage: -40 ~ +85°C							
	Humidity	Operating: 20% ~ 90% RH (non condensing) ; Storage: 10% ~ 95% RH (non condensing)							
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 > 100M Ω /500VDC at 25°C / 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 55032					Class B	
		Radiated	EN 55032					Class B	
		Harmonic	EN 61000-3-2					Class D	
			Voltage Flicker					EN 61000-3-3	
	EMS	Test Items	Standard					Test Level	
		ESD	EN 61000-4-2					Level 3, 8KV air ; Level 2, 4KV contact	
		Radiated	EN 61000-4-3					Level 2, 3V/m	
		EFT / Burst	EN 61000-4-4					Level 2, 1KV	
		Surge	EN 61000-4-5					Level 3, 2KV/Line-Earth , 1KV/Line-Line	
Conducted		EN 61000-4-6					Level 2, 3V		
		Magnetic Field					EN 61000-4-8		
		Voltage Dips and Interruptions					EN 61000-4-11		
		>95% dip 0.5 period, 30% dip 25 periods >95% interruptions 250 periods							
OTHERS	Cooling	Forced airflow cooling with DC fan, the fan will be active when internal temperature over 40°C.							
	M.T.B.F.	144.6 K hours							
	Dimension	198 x 99 x 38 mm (L*W*H)							
	Packing	N.W.: 0.727Kg / 1pc; 18pcs / 1.38 CUFT / 1 CTN							
NOTE	①	All measurements which not mentioned are based on 230VAC 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 100~254VAC input with 10~50°C 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 The output load may be requested for decreasing as de-rating curve in spec when low input voltage is under 100VAC..							
	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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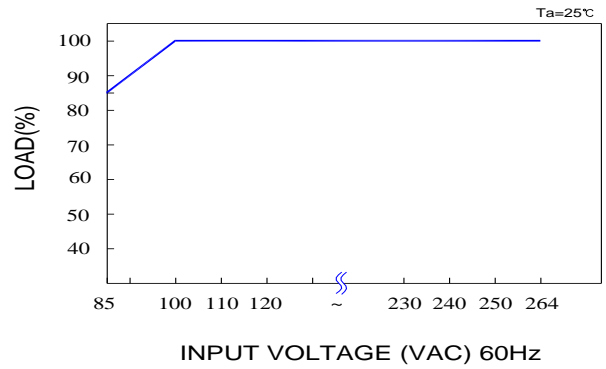
Block Diagram : PS51-1



De-rating Curve : E3

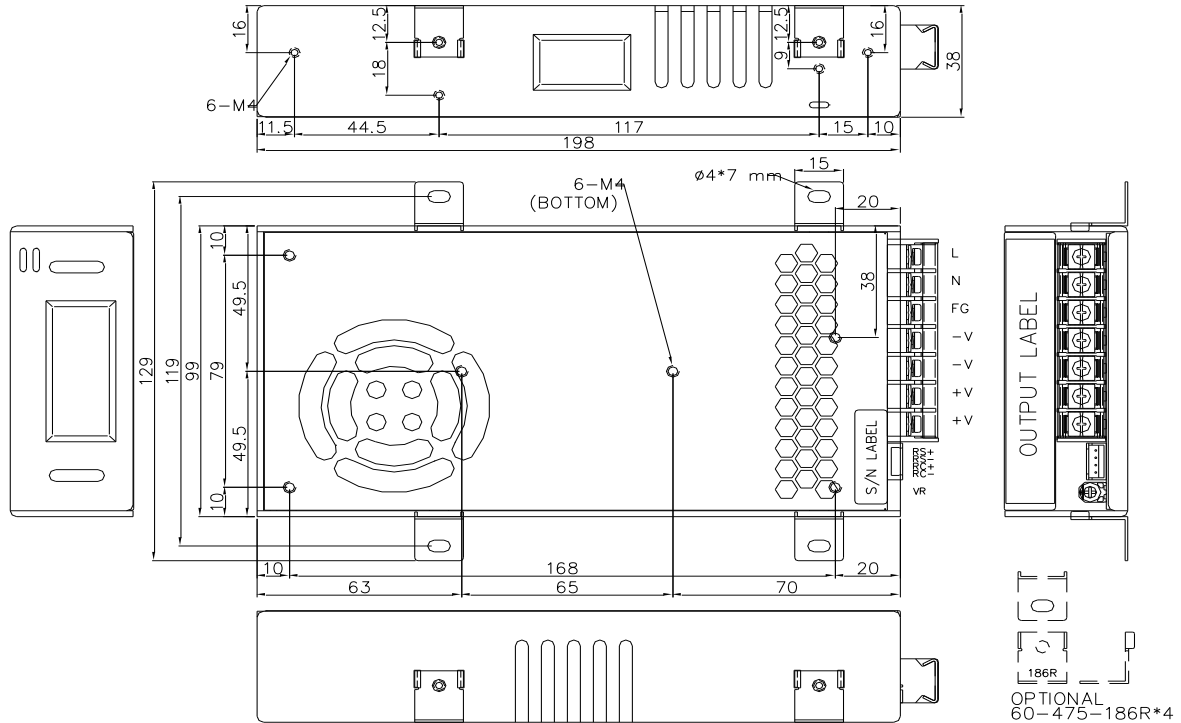


Output De-rating Vs Input Voltage : M2



Dimension:

(Unit: mm)



NOTES:

TERMINAL BLOCK: 7P, PITCH 9.5mm WITH PC COVER.

MODEL No.	1	2	3	4	5	6	7
SPS-360P-xx	L	N	FG	-V	-V	+V	+V

SPS-360P-xx Series

Remote sense & Remote control ON/OFF:

- ❶ Remote control ON/OFF becomes available by applying voltage in CON2
- ❷ Standard Type and Reverse Type shows the specification of remote control ON/OFF function
- ❸ Fig 1 slows the example to connect remote control ON/OFF function

Standard Type (SPS-360P-xx) : Specification of remote control ON/OFF

Connection Method		Fig 1	Between RC+ and RC-
SW Logic	Power ON	SW Open	0~0.8V
	Power OFF	SW Close	4~10V

Reverse Type (SPS-360P-xxR) : Specification of remote control ON/OFF

Connection Method		Fig 1	Between RC+ and RC-
SW Logic	Power OFF	SW Open	0~0.8V
	Power ON	SW Close	4~10V

Fig 1 Examples of connecting remote control ON/OFF

