## TOTAL POWER INT'L

60W Single Output Switching Power Supply

S-60 series



## Features:

- Universal AC input/Full range
- Protections:Short circuit/Over load/Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 50KHz
- 2 years warranty

## **SPECIFICATION**

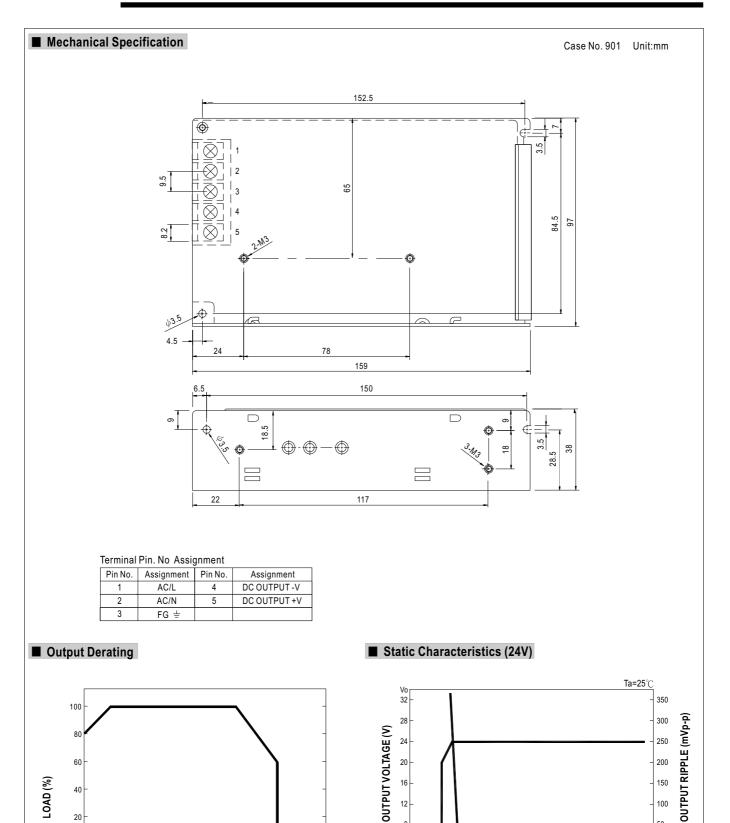


MODEL		S-60-5	S-60-12	S-60-15	S-60-24
ОИТРИТ	DC VOLTAGE	5V	12V	15V	24V
	RATED CURRENT	12A	5A	4A	2.5A
	CURRENT RANGE	0 ~ 12A	0 ~ 5A	0 ~ 4A	0~2.5A
	RATED POWER	60W	60W	60W	60W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	120mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	4.75 ~ 5.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±0.5%	±0.5%	±0.5%
	SETUP, RISE, HOLD TIME	300ms, 50ms, 80ms / 230VAC 800ms, 50ms, 10ms / 115VAC at full load			
INPUT	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY(Typ.)	73%	76%	77%	79%
	AC CURRENT	2A/115VAC 1A/230VAC			
	INRUSH CURRENT(max.)	COLD START 30A/115VAC 60A/230VAC			
	LEAKAGE CURRENT	<3.5mA / 240VAC			
PROTECTION	OVER LOAD	105 ~ 150% rated output power			
		Protection type : Hiccup mode, r	ecovers automatically after fault	condition is removed.	
	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25	27.6 ~ 32.4V
		Protection type : Hiccup mode, r	ecovers automatically after fault	condition is removed.	
ENVIRONMENT	WORKING TEMP.	-10 ~ +60 $^{\circ}$ C (Refer to output load derating curve)			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0~50℃)			
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
	SAFETY STANDARDS	UL1012, UL1950, TUV EN60950 Approved			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC			
SAFETY &	ISOLATION RESISTANCE I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC				
EMC	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B			
(Note 4)	HARMONIC CURRENT	Compliance to EN61000-3-2,-3			
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A			
OTHERS	MTBF	316.2K hrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	159*97*38mm (L*W*H)			
	PACKING	0.51Kg; 24pcs/13.1Kg/0.7CUFT			
NOTE	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> </ol>				

50

100 120 140 160 180 200 220 240 260

INPUT VOLTAGE (V) 60Hz



12

80

(VERTICAL) (HORIZONTAL)

20

-10 -10

AMBIENT TEMPERATURE (°C)