



100W Single Output Switching Power Supply

S-100 series



■ Features :

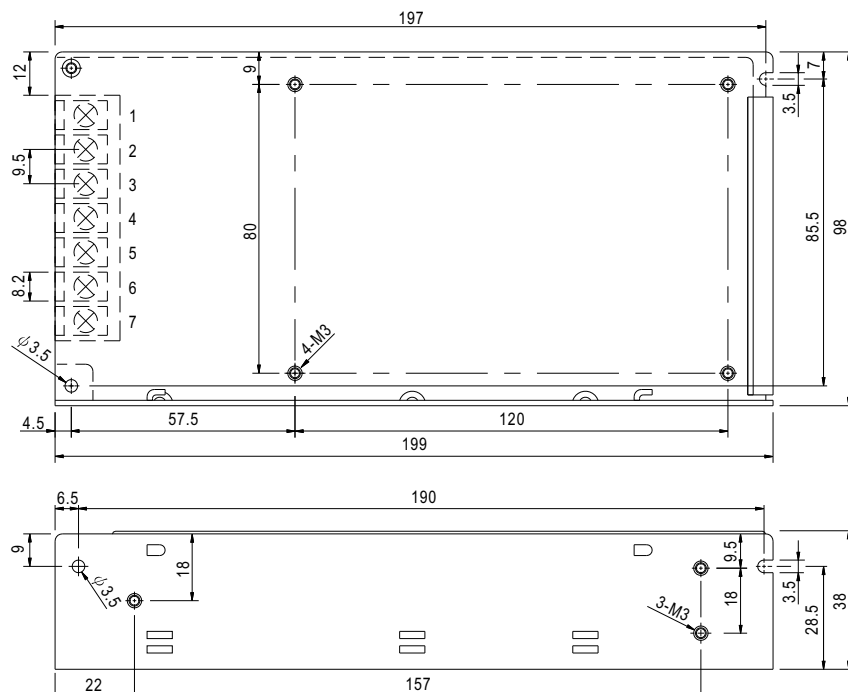
- AC input range selectable by switch
- Protections: Short circuit / Overload
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 25KHz
- Low cost
- High reliability
- 1 year warranty

SPECIFICATION

MODEL		S-100-3	S-100-5	S-100-7.5	S-100-10	S-100-12	S-100-15	S-100-18	S-100-24	S-100-27	S-100-36	S-100-48	
OUTPUT	DC VOLTAGE	3V	5V	7.5V	10V	12V	15V	18V	24V	27V	36V	48V	
	RATED CURRENT	20A	20A	13.6A	10A	8.5A	6.7A	5.6A	4.5A	3.7A	2.7A	2A	
	CURRENT RANGE	0 ~ 20A	0 ~ 20A	0 ~ 13.6A	0 ~ 10A	0 ~ 8.5A	0 ~ 6.7A	0 ~ 5.6A	0 ~ 4.5A	0 ~ 3.7A	0 ~ 2.7A	0 ~ 2A	
	RATED POWER	60W	100W	102W	100W	102W	100.5W	100.8W	108W	99.9W	97.2W	96W	
	RIPPLE & NOISE (max.) Note.2	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	
	VOLTAGE ADJ. RANGE	2.85 ~ 3.3V	4.75 ~ 5.5V	6.75 ~ 8.25V	9 ~ 11V	10.8 ~ 13.2V	13.5 ~ 16.5V	16.2 ~ 19.8V	21.6 ~ 26.4V	26 ~ 32V	32.4 ~ 39.6V	43.2 ~ 52.8V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.3%	±0.3%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%	±0.2%	
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.3%	±0.3%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%	±0.2%	
	SETUP, RISE TIME	200ms, 80ms at full load											
HOLD UP TIME (Typ.)	24ms at full load												
INPUT	VOLTAGE RANGE	85 ~ 132VAC/180 ~ 264VAC selected by switch 255 ~ 370VDC											
	FREQUENCY RANGE	47 ~ 63Hz											
	EFFICIENCY (Typ.)	70%	78%	80%	80%	81%	81%	82%	84%	84%	84%	84%	
	AC CURRENT (Typ.)	1.9A/115VAC 0.96A/230VAC											
	INRUSH CURRENT (Typ.)	COLD START 27A/115VAC 54A/230VAC											
	LEAKAGE CURRENT	<1mA / 240VAC											
PROTECTION	OVERLOAD	105 ~ 150% rated output power (130 ~ 180% of rated output power for S-100-5, S-100-36 ; 150 ~ 200% of rated output power for S-100-7.5) Protection type : Shut down o/p voltage, re-power on to recover											
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to output load derating curve)											
	WORKING HUMIDITY	20 ~ 90% RH non-condensing											
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH											
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)											
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes											
SAFETY & EMC	SAFETY STANDARDS	Design refer to UL1012											
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC											
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC											
	EMI CONDUCTION & RADIATION	Design refer to FCC Part15 J Conduction Class B											
OTHERS	MTBF	322.4K hrs min. MIL-HDBK-217F (25℃)											
	DIMENSION	199*98*38mm (L*W*H)											
	PACKING	0.62Kg; 20pcs/13.6Kg/0.8CUFT											
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation.												

Mechanical Specification

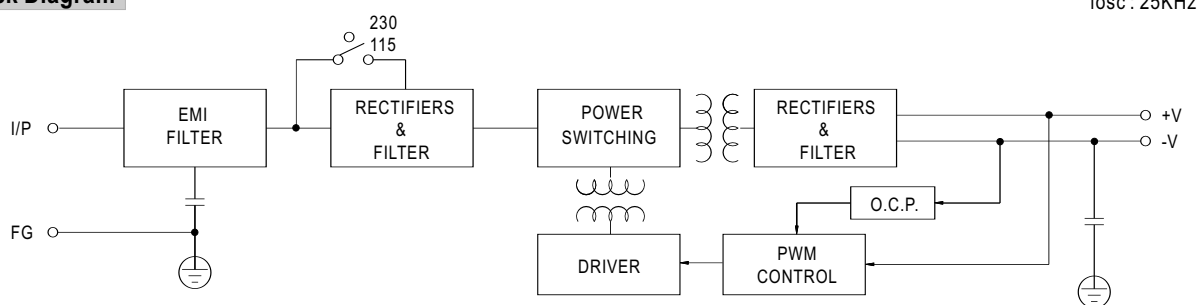
Case No. 902 Unit:mm



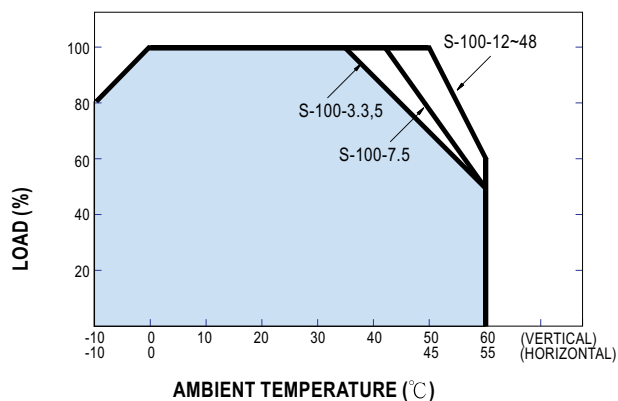
Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,5	DC OUTPUT -V
2	AC/N	6,7	DC OUTPUT +V
3	FG $\perp$		

Block Diagram



Derating Curve



Static Characteristics (24V)

