



# MEAN WELL

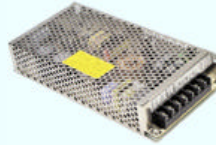
## SWITCHING POWER SUPPLY

### ISO-9001 CERTIFIED MANUFACTURER

# S-100

## SERIES

- .LOW COST, HIGH RELIABILITY
- .105°C OUTPUT CAPACITOR
- .INTERNATIONAL AC INPUT RANGE
- .HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- .SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- .SHORT CIRCUIT, OVERLOAD PROTECTED
- .COMPACT SIZE, LIGHT WEIGHT
- .100% FULL LOAD BURN-IN TEST
- .BUILT IN EMI FILTER, LOW RIPPLE NOISE



MODEL	S-100-3	S-100-5	S-100-7.5	S-100-12	S-100-15	S-100-24	S-100-27	S-100-48
SPECIFICATION								
DC OUTPUT VOLTAGE	3V	5V	7.5V	12V	15V	24V	27V	48V
OUTPUT V. TOLERANCE	±2%	±2%	±1%	±1%	±1%	±1%	±1%	±1%
OUTPUT RATED CURRENT	20A	20A	13.6A	8.5A	6.7A	4.5A	3.7A	2A
OUTPUT CURRENT RANGE	0-20A	0-20A	0-13.6A	0-8.5A	0-6.7A	0-4.5A	0-3.7A	0-2A
RIPPLE & NOISE	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p
LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%
LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%
DC OUTPUT POWER	60W	100W	102W	102W	100.5W	108W	99.9W	96W
EFFICIENCY	70%	78%	80%	81%	81%	84%	84%	84%
DC VOLTAGE ADJ.	2.85-3.3V	4.75-5.5V	6.75-8.25V	10.8-13.2V	13.5-16.5V	21.6-26.4V	26-32V	43.2-52.8V
INPUT VOLTAGE RANGE	85~132VAC / 180~264VAC SELECTED BY SWITCH 47~63Hz; 255~370VDC							
AC CURRENT	2.4A/115V 1.2A/230V							
INRUSH CURRENT	COLD START 30A/115V 60A/230V							
LEAKAGE CURRENT	<1mA/240VAC							
OVERLOAD PROTECTION	105~150%		150~200%	105~150%				
	TYPE:OUTPUT SHUTDOWN RESET:RECYCLE AC ON / OFF							
OVER VOLTAGE PROTECTION	-----							
OVER TEMP. PROTECTION	-----							
TEMP. COEFFICIENT	±0.03% / °C (0~50°C)							
SETUP, RISE, HOLD UP TIME	200ms, 50ms, 20ms							
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES							
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:500VDC / 100M Ohms							
WORKING TEMP., HUMIDITY	-10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH							
STORAGE TEMP., HUMIDITY	-20°C~+85°C, 10%~95% RH							
DIMENSION	199*98*38mm CASE:902							
WEIGHT	0.65Kgs							
SAFETY STANDARDS	MEET UL1012 REQUIREMENT (NOT APPLY FOR THE MARK)							
EMC STANDARDS	MEET FCC PART15 J CONDUCTION CLASS B							

- NOTE :
- 1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.
  - 2.TOLERANCE INCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
  - 3.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
  - 4.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
  - 5.LOAD REGULATION IS MEASURED FROM 0% TO 100% RATED LOAD.

JUN.09.98

[NEXT \(MECHANICAL INFO\)](#)



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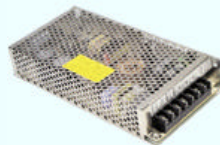
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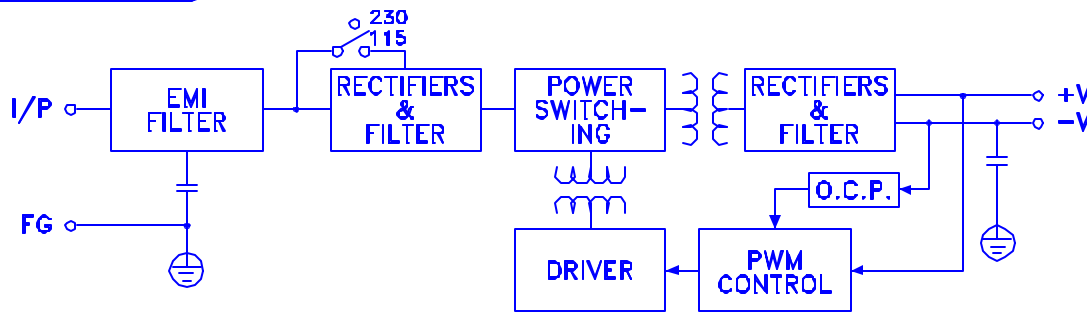


MODEL	S-100-10	S-100-18
SPECIFICATION		
DC OUTPUT VOLTAGE	10V	18V
OUTPUT V. TOLERANCE	±1%	±1%
OUTPUT RATED CURRENT	10A	5.6A
OUTPUT CURRENT RANGE	0-10A	0-5.6A
RIPPLE & NOISE	100mVp-p	100mVp-p
LINE REGULATION	±0.3%	±0.3%
LOAD REGULATION	±0.3%	±0.3%
DC OUTPUT POWER	100W	100.8W
EFFICIENCY	80%	82%
DC VOLTAGE ADJ.	9-11V	16.2-19.8V
INPUT VOLTAGE RANGE	85~132VAC / 180~264VAC SELECTED BY SWITCH 47~63Hz; 255~370VDC	
AC CURRENT	2.4A/115V 1.2A/230V	
INRUSH CURRENT	COLD START 30A/115V 60A/230V	
LEAKAGE CURRENT	<1mA/240VAC	
OVERLOAD PROTECTION	105~150% TYPE:OUTPUT SHUTDOWN RESET:RECYCLE AC ON / OFF	
OVER VOLTAGE PROTECTION	-----	
OVER TEMP. PROTECTION	-----	
TEMP. COEFFICIENT	±0.03% / °C (0~50°C)	
SETUP, RISE, HOLD UP TIME	200ms, 50ms, 20ms	
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES	
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:500VDC / 100M Ohms	
WORKING TEMP., HUMIDITY	-10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH	
STORAGE TEMP., HUMIDITY	-20°C~+85°C, 10%~95% RH	
DIMENSION	199*98*38mm CASE:902	
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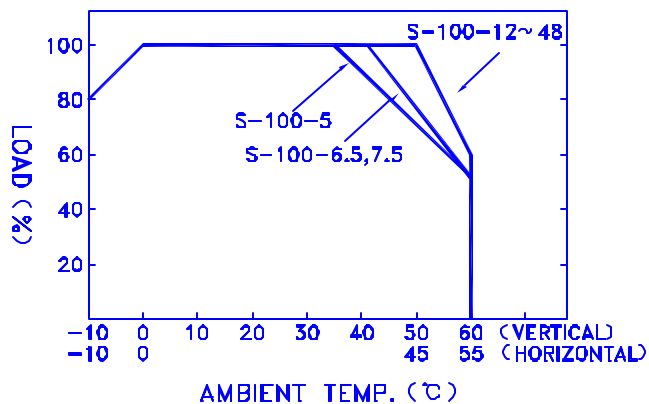
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## BLOCK DIAGRAM

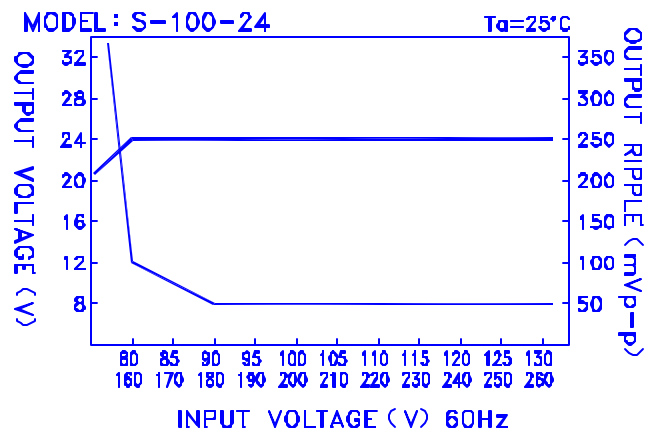


fosc : 25KHz

## OUTPUT DERATING



## STATIC CHARACTERISTICS



## DIMENSION (mm)

☒ CASE : 902

☒ TERMINAL PIN NO. ASSIGNMENT

- ☒ PIN 1,2 : AC INPUT
- ☒ PIN 3 : FG  $\oplus$
- ☒ PIN 4,5 : DC OUTPUT -V
- ☒ PIN 6,7 : DC OUTPUT +V

