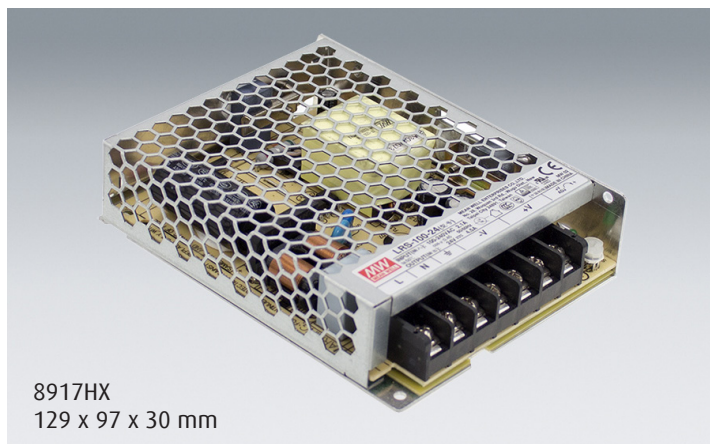


# LRS-100 Series

## 100W Single Output Switching Power Supply



8917HX  
129 x 97 x 30 mm

### Features

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- No load power consumption <0.3W
- Miniature size and 1U low profile
- Operating altitude up to 5000 meters
- Withstand 300VAC surge input for 5 seconds
- High operating temperature up to 70°C
- Withstand 5G vibration test
- High Efficiency, long life and high reliability
- 3 years warranty



### Specification

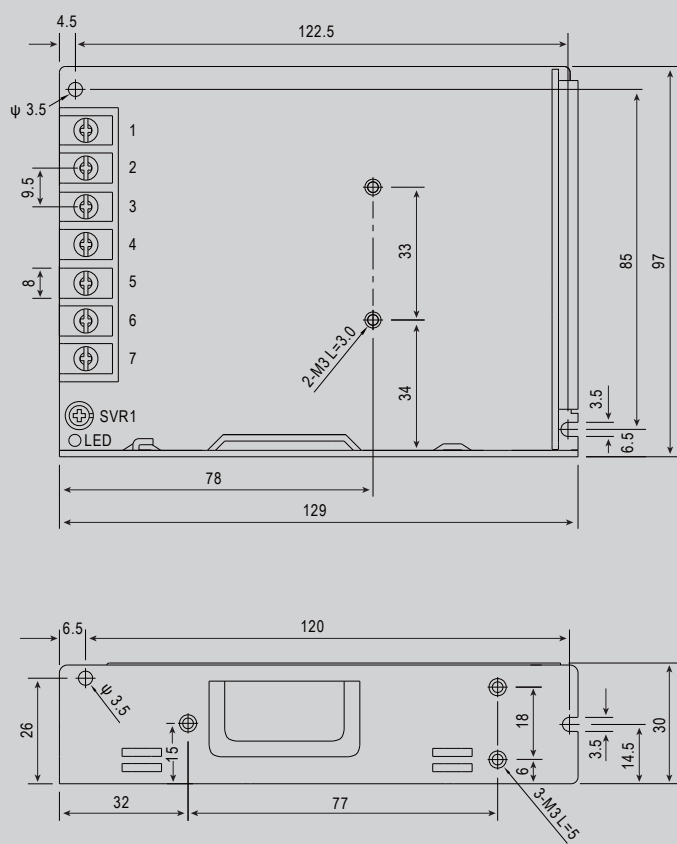
INPUT	Voltage	85V ~ 264VAC		120 ~ 373VDC				
	Frequency	47 ~ 63 Hz						
	Efficiency	84.5%	86%	88%	88.5%	90%	90.5%	91%
	AC Current	1.9A /115VAC	1.2A/230VAC					
	Inrush Current (Typ.)	Cold Start 50A/230VAC						
	Leakage	<0.75mA/240VAC						
OUTPUT	MODEL No.	LRS-100-3.3	LRS-100-5	LRS-100-12	LRS-100-15	LRS-100-24	LRS-100-36	LRS-100-48
	Voltage	3.3V	5V	12V	15V	24V	36V	48V
	Rated Current	20A	18A	8.5A	7A	4.5A	2.8A	2.3A
	Current Range	0~20A	0~18A	0~8.5A	0~7A	0~4.5A	0~2.8A	0~2.3A
	Rated Power	66W	90W	102W	105W	108W	100.8W	110.4W
	Ripple Noise MAX.	100mVp-p	100mVp-p	120mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p
	Voltage Adj. Range	2.97~3.6V	4.5~5.5V	10.2~13.8V	13.5~18V	21.6~28.8V	32.4~39.6V	43.2~52.8V
	Voltage Tolerance	± 3.0%	± 2.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%
	Line Regulation	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%
	Load Regulation	± 2.0%	± 1.0%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%
	Setup Rise Time	500ms, 30ms/230VAC    500ms, 30ms/115VAC at full load						
	Hold Up Time	55ms/230VAC    10ms/115 at full load						
PROTECTION	Overload	110~150% rated output power Protection Type: Hiccup mode, recovers automatically after fault condition is removed						
	Over Voltage	3.8~4.45V	5.75~6.75V	13.8~16.2V	18.75~21.75V	28.8~33.6V	41.4~48.6V	55.2~64.8V
		Protection Type: Shut down o/p voltage, re-power on to recover						
ENVIRONMENT	Working Temp.	-30 ~ +70°C (Refer to “Derating Curve”)						
	Working Humidity	20 ~ 90% RH non-condensing						
	Storage Temp., Humidity	-40 ~ +85°C, 10~95%RH						
	Temp. Co-efficient	±0.03%/°C (0~50°C)						
	Vibration	10~500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes						
SAFETY & EMC	Safety Standards	UL60950-1, TUV EN60950-1, EN60335-1, EN61558-1/-2-16, CCC GB4943 approved						
	Withstand Voltage	I/P-O/P:3.75KVAC	I/P-FG:2KVAC	O/P-FG:1.25KVAC				
	Isolation Resistance	I/P-OP, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70%RH						
	EMC Emission	Compliance to EN55022 (CISPR22), GB9254 Class B, EN55014, EN61000-3-2,-3						
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61000-6-2 (EN50082-2), heavy industry level, criteria A						
OTHERS	M.T.B.F.	720.6K hrs min.    MIL-HDBK-217F (25°C)						
	Packaging	0.34Kg; 40pcs/14.6Kg/0.92CUFT						

1. All parameters not specially mentioned are measured at 230VAC input, rated load and 25°C 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.
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.
6. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time.
7. The ambient temperature derating of 5°C/1000m is needed for operating altitude greater than 2000m (6500ft).
8. 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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."

LRS-100 Series

100W Single Output Switching Power Supply

Mechanical Specification



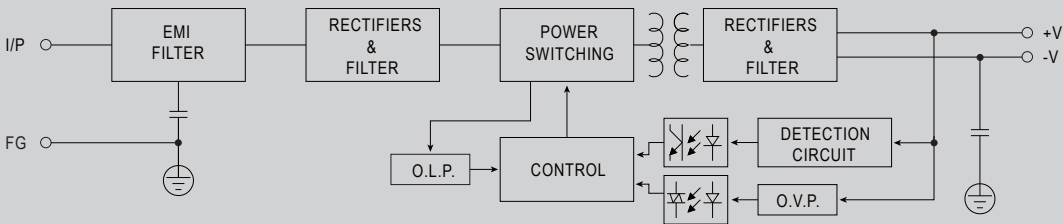
Case No.238A    Unit:mm

Terminal Pin No. Assignment

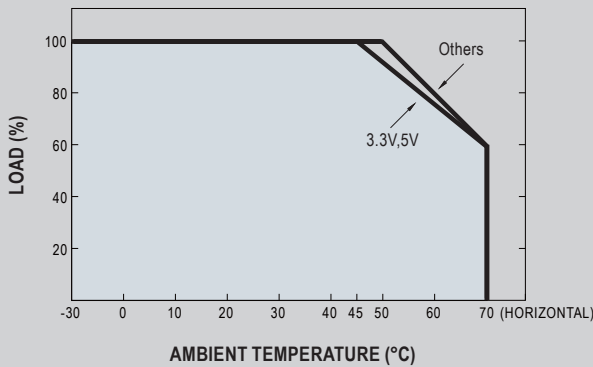
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,5	DC OUTPUT -V
2	AC/N	6,7	DC OUTPUT +V
3	FG $\perp$		

Block Diagram

fosc : 65KHz



Derating Curve



Static Characteristics

