



MEAN WELL

SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

LPS-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, OVER VOLTAGE PROTECTED
- .COMPACT SIZE, LIGHT WEIGHT
- .100% FULL LOAD BURN-IN TEST
- .BUILT IN EMI FILTER, LOW RIPPLE NOISE

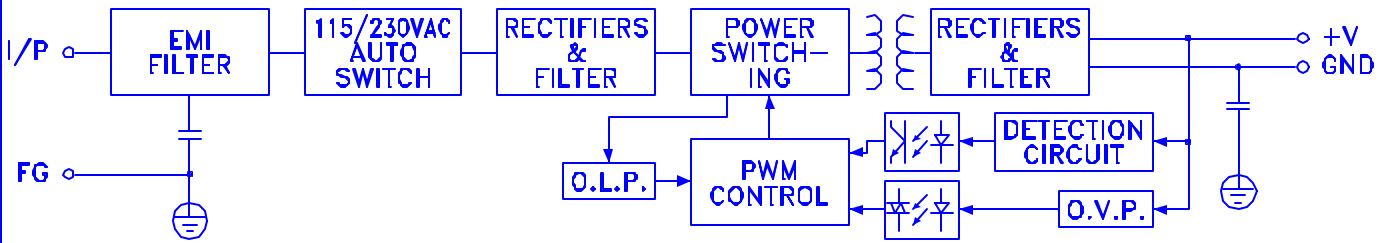


MODEL	LPS-100-3.3	LPS-100-5	LPS-100-7.5	LPS-100-12	LPS-100-13.5	LPS-100-15	LPS-100-24	LPS-100-27	LPS-100-48
DC OUTPUT VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V
OUTPUT V. TOLERANCE	±3%	±3%	±2%	±2%	±2%	±2%	±1%	±1%	±1%
OUTPUT RATED CURRENT	20A	20A	13.3A	8.4A	7.5A	6.7A	4.2A	3.8A	2.1A
OUTPUT CURRENT	0-20A	0-20A	0-13.3A	0-8.4A	0-7.5A	0-6.7A	0-4.2A (6.0A 10s)	0-3.8A	0-2.1A
RIPPLE & NOISE (p-p)	150mV	100mV	100mV	100mV	100mV	100mV	150mV	150mV	200mV
LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
LOAD REGULATION	±2%	±2%	±1.5%	±1.5%	±1.5%	±1.5%	±0.5%	±0.5%	±0.5%
RATED OUTPUT POWER	66W	100W	99.75W	100.8W	101.25W	100.5W	100.8W (144W 10s)	102.6W	100.8W
EFFICIENCY	69%	77%	77%	79%	79%	80%	80%	81%	81%
DC VOLTAGE ADJ.	3-3.6V	4.5-5.7V	6-9V	10-13.2V	12-15V	13.5-18V	20-26.4V	26-32V	41-56V
INPUT VOLTAGE RANGE	88~132VAC / 176~264VAC AUTO SWITCH 47~63Hz; 248~370VDC								
AC CURRENT	2.3A/115V 1.5A/230V								
INRUSH CURRENT	COLD START 30A/115V 60A/230V								
LEAKAGE CURRENT	<1 mA/240VAC								
OVERLOAD PROTECTION	105~140%(+24V:ABOVE 6.5A) TYPE:PULSING HICCUP SHUTDOWN RESET:AUTO RECOVERY								
OVER VOLTAGE PROTECTION	3.8-4.45V	5.75-6.75V	9.4-10.9V	13.8-16.2V	15.5-18.2V	18-21V	27.6-32.4V	33.7-39.2V	57.6-67.2V
TEMP. COEFFICIENT	±0.05% / °C (0~50°C)								
SETUP, RISE, HOLD UP TIME	800ms, 50ms, 20ms/230VAC 1.2s, 50ms, 20ms/115VAC								
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES								
WITHSTAND VOLTAGE	I/P-O/P:3KVAC 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	222*62*35mm (L*W*H) PCB ONLY								
WEIGHT	0.37Kgs								
SAFETY STANDARDS	UL1950, TUV EN60950 APPROVED								
EMC STANDARDS	CISPR22 (EN55022) CLASS B, IEC1000-2,3,4 VERIFICATION								

- 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.SHORT OR OVERLOAD CONDITION CONTINUES MORE THAN 10 SECONDS, IT WILL DAMAGE THE COMPONENTS INSIDE THE POWER SUPPLY.
 - 6.IF THE INPUT RANGE 85V-89V,THE OUTPUT LOAD IS CHANGED FROM 0A-RATED LOAD,THERE WILL BE REDUCED 20V FOR 1 SECOND (LPS-100-24).
 - 7.MOUNTING HOLES M1 AND M2 SHOULD BE GROUNDED FOR EMI PURPOSES.

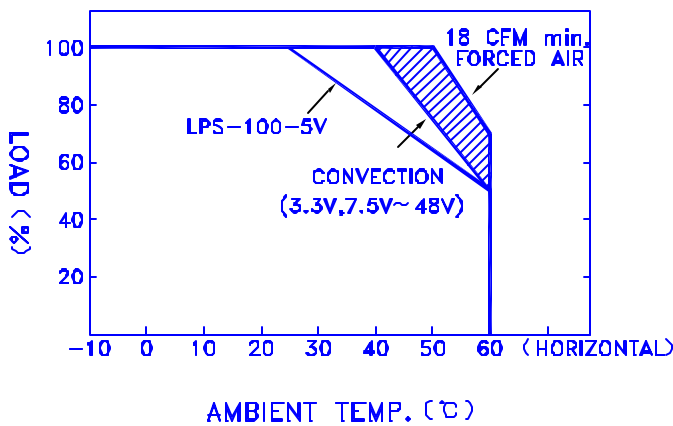
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BLOCK DIAGRAM

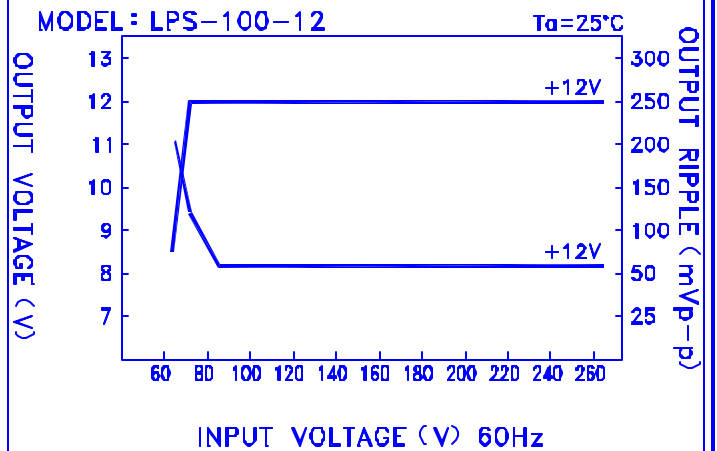


fosc : 135KHz

OUTPUT DERATING



STATIC CHARACTERISTICS



DIMENSION (mm)

☒ TERMINAL PIN NO. ASSIGNMENT

- ☒ CN1 : JST B5P-VH
PIN 1,3,5 : AC INPUT
- ☒ CN2 : JST B8P-VH
PIN 1,2,3,4 : DC OUTPUT +V
PIN 5,6,7,8 : DC OUTPUT -V

☒ MATING CONNECTORS

- ☒ CN1,2 MATING CONNECTOR TYPE
JST VHR SERIES OR EQUIVALENT WITH
JST SVH-21T-P1.1 OR EQUIVALENT
CRIMP TERMINALS.

