60W Single Output Switching Power Supply — LPC-60 series

Features :

- Constant current design
- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Over voltage
- Cooling by free air convection
- Fully encapsulated with IP67 level (Note.8)
- Fully isolated plastic case
- Class Ⅱ power unit, no FG
- Class 2 power unit
- Pass LPS
- Suitable for LED lighting and moving sign applications (Note.7)
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

LPS IP67 (only for 1750mA) (except for 1750mA) (for 1750mA only)

SPECIFICATION

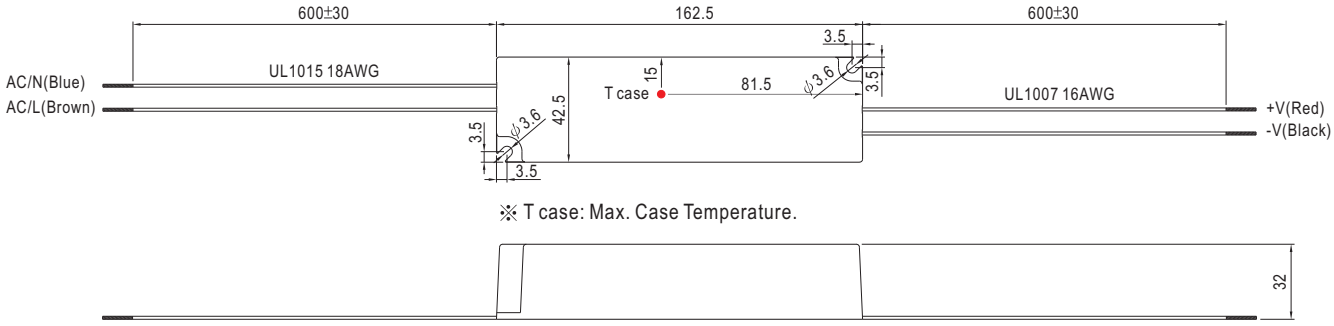
MODEL		LPC-60-1050	LPC-60-1400	LPC-60-1750
OUTPUT	RATED CURRENT	1050mA	1400mA	1750mA
	DC VOLTAGE RANGE	9 ~ 48V	9 ~ 42V	9 ~ 34V
	RATED POWER	50.4W	58.8W	59.5W
	RIPPLE & NOISE (max.) Note.2	200mVp-p	200mVp-p	200mVp-p
	VOLTAGE TOLERANCE Note.3	±5.0%		
	CURRENT ACCURACY	±5.0%		
	LINE REGULATION	±1.0%		
	LOAD REGULATION	±2.0%		
	SETUP, RISE TIME Note.6	500ms, 120ms / 230VAC 500ms, 120ms / 115VAC at full load		
	HOLD UP TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load		
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC 127 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY (Typ.)	87%	85%	87%
	AC CURRENT (Typ.)	1.2A/115VAC 0.7A/230VAC		
	INRUSH CURRENT(max.)	COLD START 30A/115VAC 60A/230VAC		
	LEAKAGE CURRENT	0.25mA / 240VAC		
PROTECTION	OVER VOLTAGE	50.4 ~ 60V	44.1 ~ 56.7V	39.1 ~ 45.9V
		Protection type : Shut off o/p voltage, clamping by TVS diode		
ENVIRONMENT	WORKING TEMP.	-30 ~ +70℃ (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +80℃, 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 & EMC	SAFETY STANDARDS	UL1310, CAN/CSA C22.2 No. 223-M91(for LPC-60-1750 only), IP67 approved ; design refer to TUV EN60950-1		
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC		
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25℃/ 70% RH		
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2 Class A, EN61000-3-3		
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A		
OTHERS	MTBF	732K hrs min. MIL-HDBK-217F (25℃)		
	DIMENSION	162.5*42.5*32mm (L*W*H)		
	PACKING	0.4Kg; 32pcs/13.8Kg/0.56CUFT		

NOTE

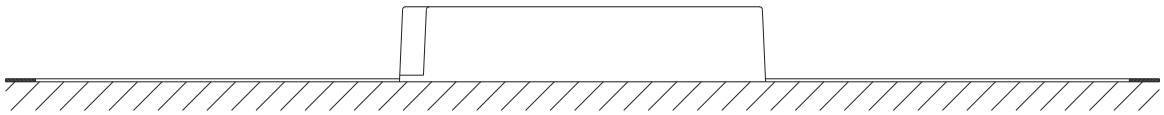
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. Derating may be needed under low input voltage. Please check the static characteristics for more details.
5. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.
6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
7. The unit might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the unit.
8. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minute.

■ Mechanical Specification

Case No. 976A Unit:mm

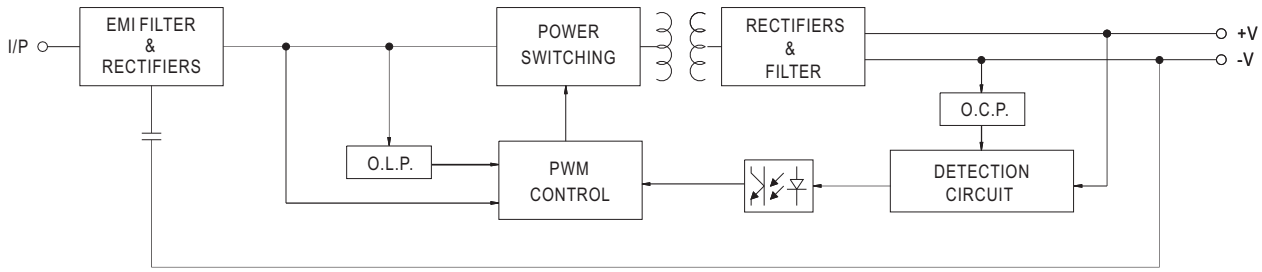


■ Recommend Mounting Direction

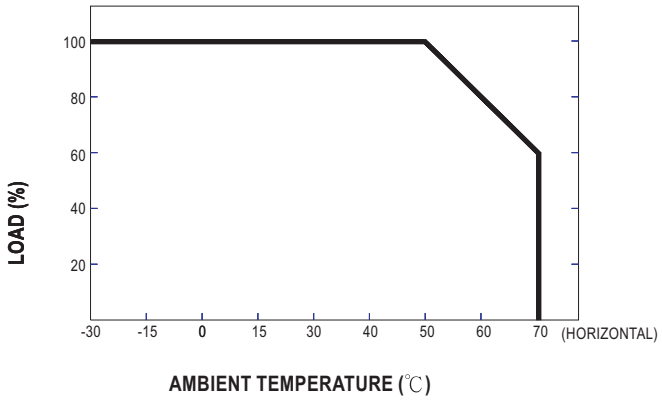
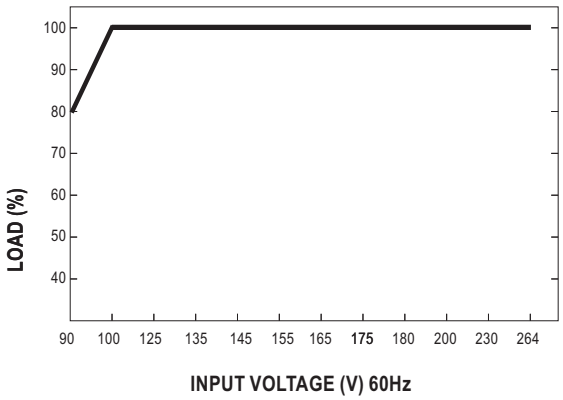


■ Block Diagram

fosc : 60KHz



■ Derating Curve



■ Static Characteristics