



Features:

- Universal AC input range/Full range
- Built-in active PFC function
- Protections: Short circuit / Over load/Over voltage/Over temperature
- Cooling by free air convection
- Class II power unit, no FG, plastic case, laser labeling
- IP67 design for indoor or outdoor installations
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp / wet locations
- 3 years warranty

SPECIFICATION

DIMENSION: 162.5 × 42.5 × 32mm



MODEL		LPF-60-1750	LPF-60-1400	LPF-60-1050
OUTPUT	DC VOLTAGE	34V	42V	48V
	CONSTANT CURRENT REGION	20.4~34V	25.2~42V	28.8~48V
	RATED CURRENT	1750mA	1400mA	1050mA
	RATED POWER	59.5W	58.8W	50.4W
	RIPPLE&NOISE	2.8Vp-p	3.6Vp-p	4.6Vp-p
	VOLTAGE TOLERANCE	± 5%		
	CURRENT TOLERANCE	± 5%		
	LINE REGULATION	± 3%		
INPUT	LOAD REGULATION	± 5%		
	SETUP TIME	2800ms/115VAC, 1400ms/230VAC(Full load)		
	VOLTAGE RANGE	90 ~ 264VAC 47 ~ 63Hz, 127 ~ 370VDC		
	AC CURRENT (Typ.)	0.8A/115VAC 0.4A/230VAC		
	POWER FACTOR (Typ.)	PF>0.9/230VAC ,PF > 0.92/115VAC(at full load)		
	EFFICIENCY (Typ.)	86%	87%	88%
	INRUSH CURRENT (Typ.)	Cold start current 40A/230VAC		
PROTECTION	LEAKAGE CURRENT	< 0.75mA/240VAC		
	OVER CURRENT	95~110% Protection type : Constant current limiting, recovers automatically after fault condition is removed		
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed		
	OVER VOLTAGE	42~46.6V	47~56.6V	57~62.6V
ENVIRONMENT	OVER TEMPERATURE	90°C ± 10°C(RTH2) Protection type : Shut down o/p voltage, re-power on to recover		
	WORKING TEMP,HUMIDITY	-30°C ~ +50°C; 20% ~ 90%RH(Please refer to"derating curve")		
	STORAGE TEMP,HUMIDITY	-40°C ~ +80°C; 10% ~ 95%RH Non-condensing		
	VIBRATION	10 ~ 500Hz, 5G 12min./1 cycle, period for 72 min, each along X, Y, Z axes		
SAFETY& EMC	SAFETY STANDARDS	UL8750, TUV EN61347-1,EN61347-2-13, UL60950-1,IP67 Certificated		
	WITHSTAND VOLTAGE	I/P-O/P: 3.75KVAC		
	ISOLATION RESISTANCE	I/P-O/P: 100M Ohms/500VDC/25°C/70%RH		
	EMC INTERFERENCE	Compliance to EN55015,EN61000-3-2 Class C(≥65% Load)		
	EMC EMISSION	Compliance to EN61000-3-2 Class C(≥75% Load); EN61000-3-3		
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2 ,3,4,5,6,8,11; ENV50204,EN55024,EN61547,light industry level (surge 4KV), criteria B		
	MTBF	420K hrs min. MIL-HDBK-217F(25°C)		
	DIMENSION	162.5*42.5*32 (L*W*H)		
	PACKING	0.41kg/40pcs/16.5kg/0.027 m³/0.95CUFT		

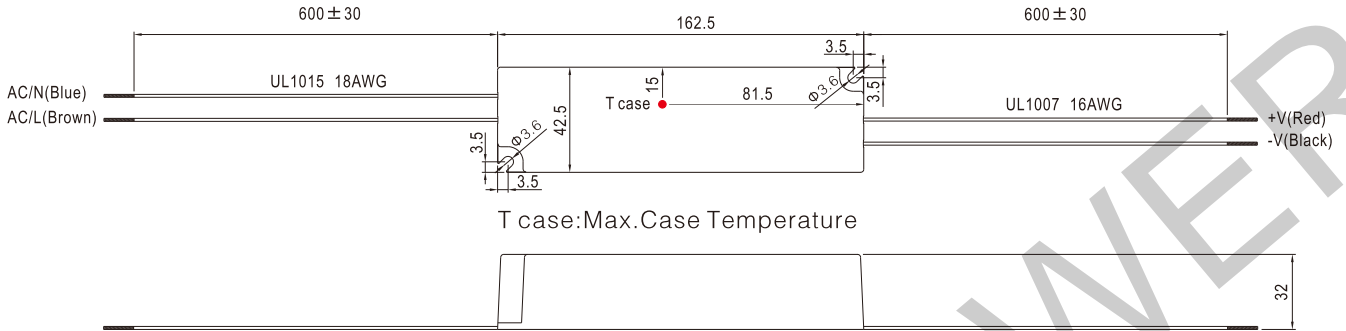
- NOTE:
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 °C of ambient temperature.
 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
 3. Tolerance : includes set up tolerance, line regulation and load regulation.
 4. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.
 5. Derating may be needed under low input voltage. Please check the static characteristics for more details.
 6. Setup time is measured at cold start condition. Turning ON/OFF the power supply frequently may increase the set up time.
 7. 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-quality EMC Directive on the complete installation again.

Mechanical specification

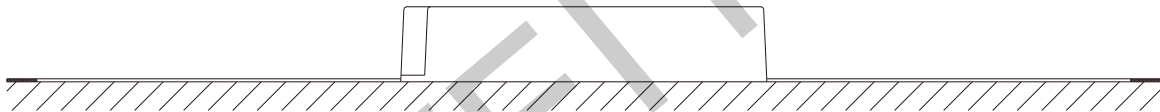
Unit:mm

lead-out wire assignment

Input		Output	
Blue	AC/N	Red	DC OUTPUT +V
Brown	AC/L	Black	DC OUTPUT -V

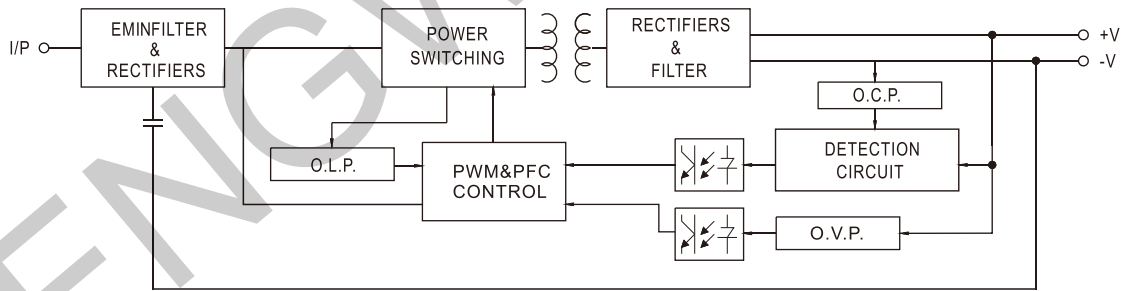


Recommend Mounting Direction

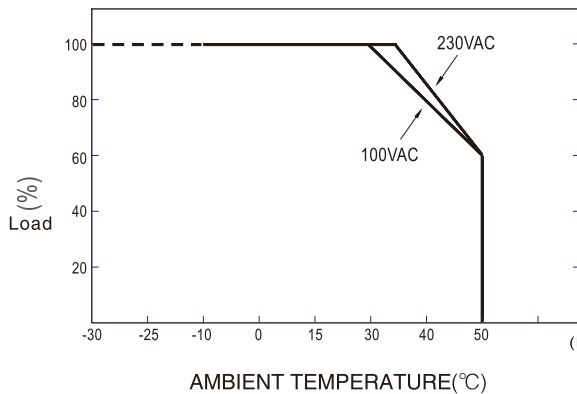


Block Diagram

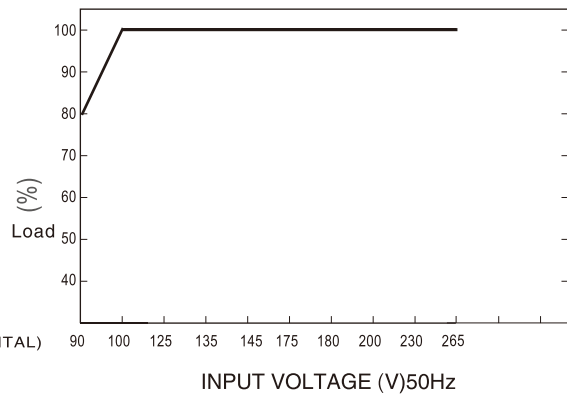
Fosc: 90KHz(115VAC)
120KHz(230VAC)



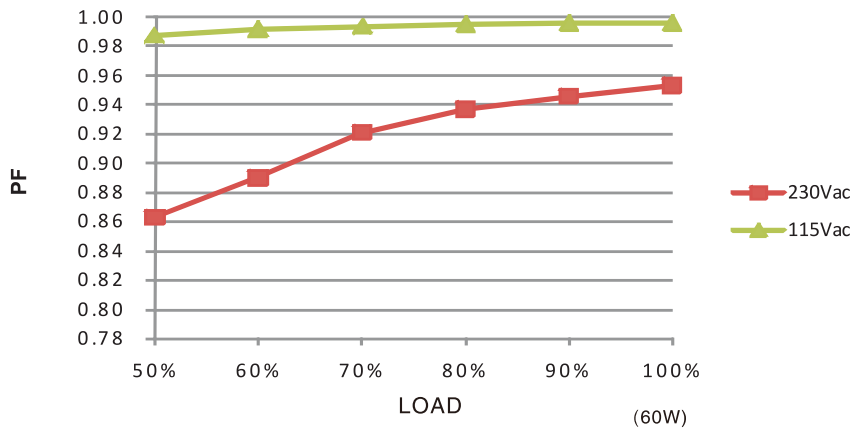
Derating Curve



Static Characteristics

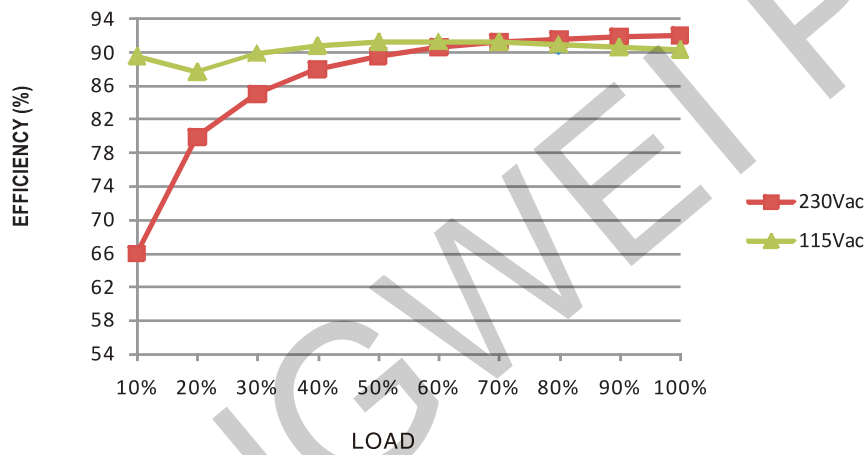


Power Factor Characteristic



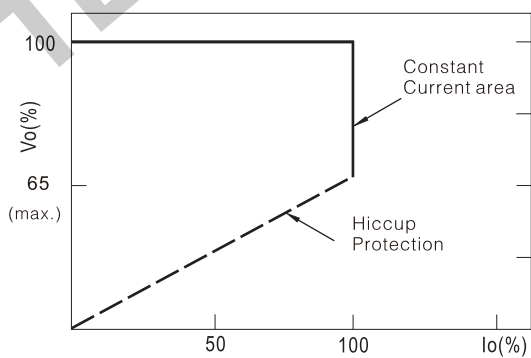
Efficiency vs Load(48V model)

LPF-60 series possess superior working efficiency that up to 88% can be reached in field applications.



Driving Methods Of LED Module

This LED power supply is suggested to work in constant current mode area (CC) to drive the LEDs



Typical LED power supply I-V curve