



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
- 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
- 5 years warranty

SPECIFICATION

DIMENSION:204×49×34mm



MODEL		LPF-120-24	LPF-120-36	LPF-120-48	LPF-120-54
OUTPUT	DC VOLTAGE	24V	36V	48V	54V
	CONSTANT CURRENT REGION	16~24V	24~36V	32~48V	32~54V
	RATED CURRENT	5000mA	3400mA	2500mA	2100mA
	RATED POWER	120W	122.4W	120W	113.4W
	RIPPLE&NOISE	3.6Vp-p	4.5Vp-p	4.6Vp-p	4.8Vp-p
	VOLTAGE TOLERANCE	± 5%			
	CURRENT TOLERANCE	± 5%			
	LINE REGULATION	± 3%			
	LOAD REGULATION	± 5%			
INPUT	SETUP TIME	1200ms/115VAC,500ms/230VAC(Full load)			
	VOLTAGE RANGE	90 ~ 264VAC 47 ~ 63Hz, 127 ~ 370VDC			
	AC CURRENT (Typ.)	1.6A/115VAC 0.8A/230VAC			
	POWER FACTOR (Typ.)	PF>0.92/230VAC ,PF > 0.95/115VAC(at full load)			
	EFFICIENCY (Typ.)	89%	90%	91%	91%
	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	30~33V	44~47V	57~62V	63~68V
		Protection type : Shut down o/p voltage, re-power on to recover			
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: 3KVAC ,I/P-FG:1.5KVAC,O/P-FG:0.5KVAC			
	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			
	EMC IMMUNITY	Compliance to EN61000-4-2 ,3,4,5,6,8,11; ENV50204,EN55024,EN61547,light industry level (surge 4KV), criteria B			
OTHERS	MTBF	380K hrs min. MIL-HDBK-217F(25°C)			
	DIMENSION	204*49*34mm (L*W*H)			
	PACKING	0.62kg/30pcs/19.5kg/0.027 m³/0.95CUFT			

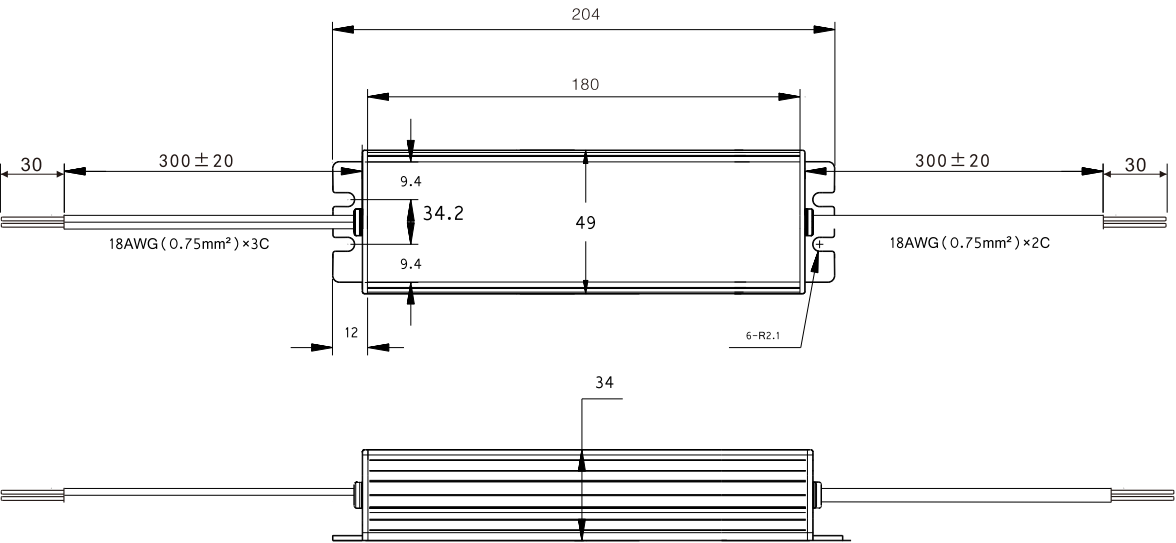
- NOTE:
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 °C of ambient temperature.
 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
 3. Tolerance : includes set up tolerance, 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

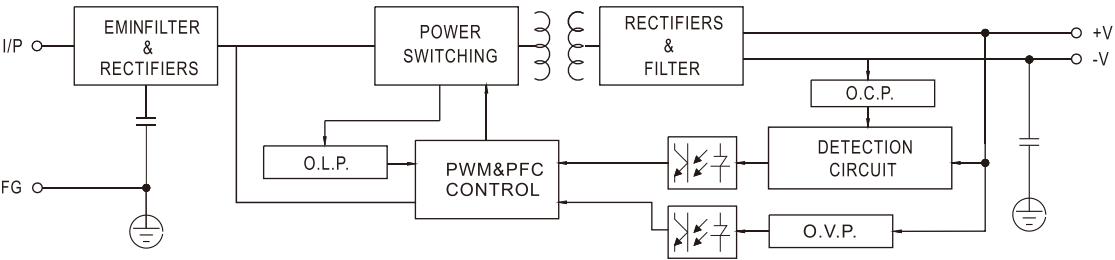
lead-out wire assignment

Input(Black three-core)		Output (Black two-core)	
Brown	AC/L	Red	DC OUTPUT +V
Blue	AC/N	Black	DC OUTPUT -V
Yellow-green	FG \perp	Shell connect with earth	

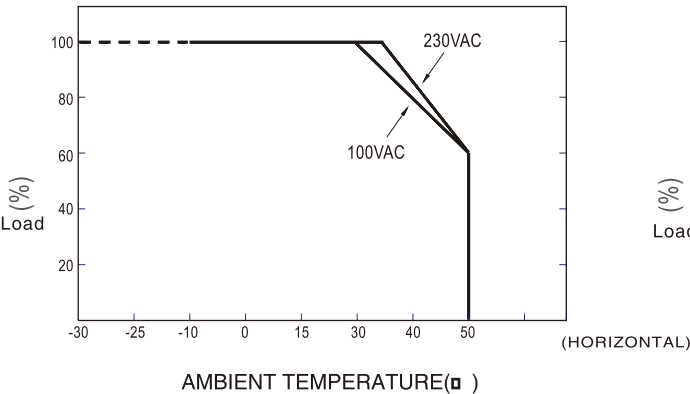


Block Diagram

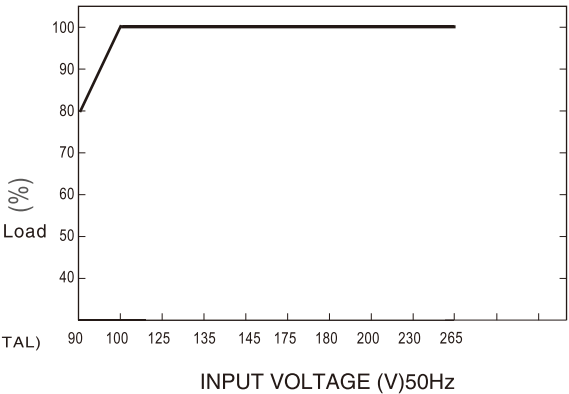
Fosc: 90KHz(115VAC)
120KHz(230VAC)



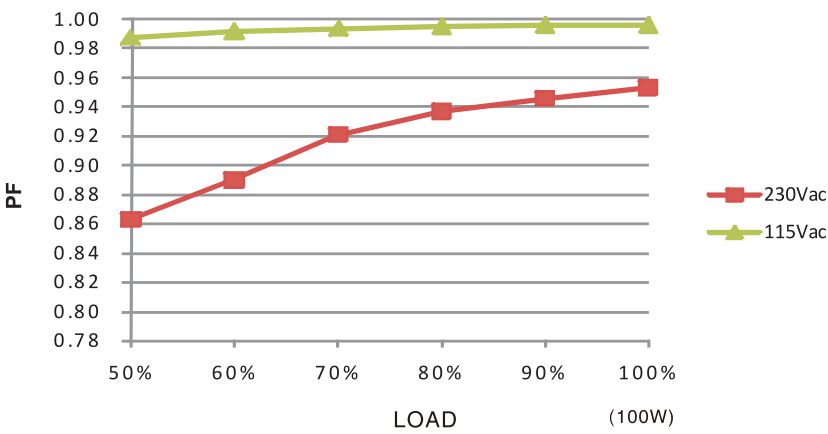
Derating Curve



Static Characteristics

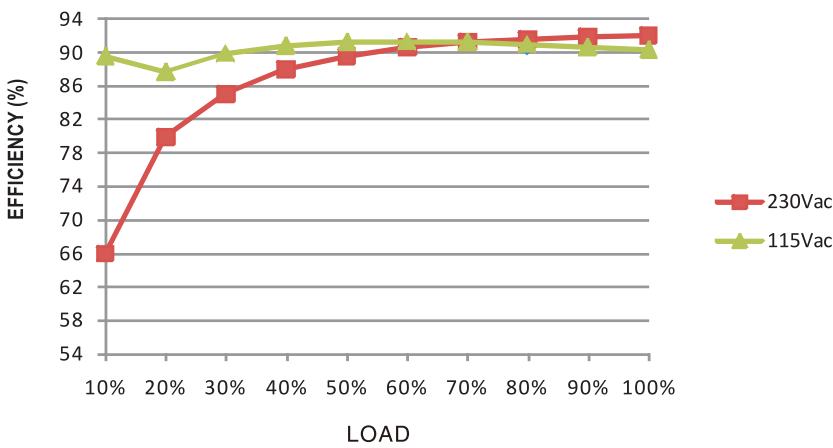


Power Factor Characteristic



Efficiency vs Load(36V model)

LPF-120 series possess superior working efficiency that up to 90.5% 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

