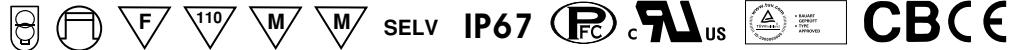




Features :

- Universal AC input / Full range (up to 305VAC)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in active PFC function
- High efficiency up to 89%
- Cooling by free air convection
- Fully isolated plastic case
- Epoxy encapsulated with IP67 level (Note.6)
- Class 2 power unit
- Built-in 3 in 1 dimming function (1~10Vdc or PWM signal or resistor)
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp locations
- 3 years warranty



SPECIFICATION

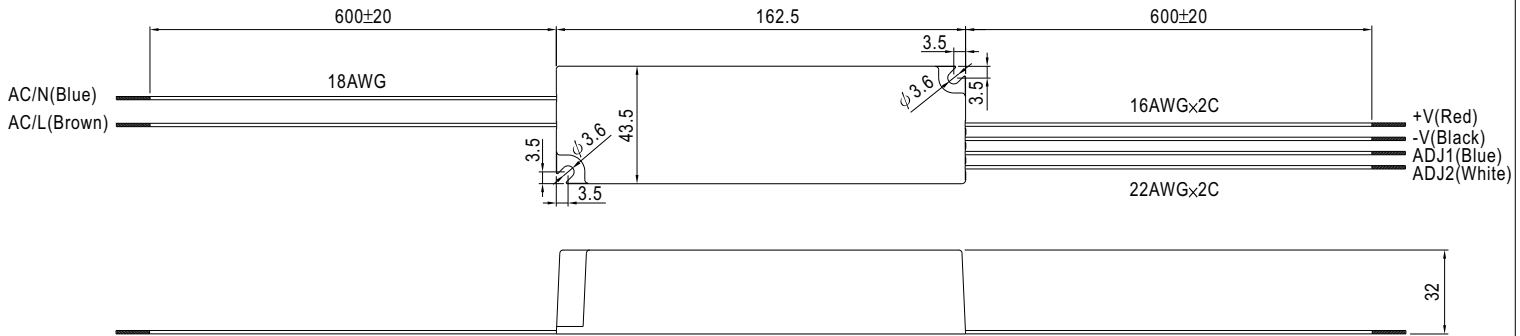
MODEL	LPF-40D-12	LPF-40D-15	LPF-40D-20	LPF-40D-24	LPF-40D-30	LPF-40D-36	LPF-40D-42	LPF-40D-48	LPF-40D-54										
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V									
	CONSTANT CURRENT REGION Note.4	7.2 ~ 12V	9 ~ 15V	12 ~ 20V	14.4 ~ 24V	18 ~ 30V	21.6 ~ 36V	25.2 ~ 42V	28.8 ~ 48V	32.4 ~ 54V									
	RATED CURRENT	3.34A	2.67A	2A	1.67A	1.34A	1.12A	0.96A	0.84A	0.76A									
	RATED POWER	40W	40W	40W	40W	40.2W	40.32W	40.32W	40.32W	41.04W									
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	250mVp-p	250mVp-p	250mVp-p	350mVp-p									
	VOLTAGE TOLERANCE Note.3	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%									
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%									
	LOAD REGULATION	±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%									
	SETUP, RISE TIME Note.8	1000ms, 80ms / 115VAC at full load		1000ms, 80ms / 230VAC															
HOLD UP TIME (Typ.)	16ms at full load		230VAC / 115VAC																
INPUT	VOLTAGE RANGE Note.5	90 ~ 305VAC		127 ~ 431VDC															
	FREQUENCY RANGE	47 ~ 63Hz																	
	POWER FACTOR	PF ≥ 0.95/230VAC			PF ≥ 0.98/115VAC at full load and rated output voltage			PF ≥ 0.9 at 60 ~ 100% load											
	EFFICIENCY (Typ.)	84%	85%	86%	87%	88%	88%	89%	89%	89%									
	AC CURRENT	0.6A / 115VAC		0.3A / 230VAC															
	INRUSH CURRENT (Typ.)	COLD START 75A/230VAC																	
LEAKAGE CURRENT	<0.75mA / 240VAC																		
PROTECTION	OVER CURRENT Note.4	95 ~ 108%																	
	SHORT CIRCUIT	Protection type : Constant current limiting, recovers automatically after fault condition is removed																	
	OVER VOLTAGE	15 ~ 17V		17.5 ~ 21V		23 ~ 27V		28 ~ 35V		34 ~ 40V		41 ~ 49V		46 ~ 54V		54 ~ 63V		59 ~ 66V	
	OVER TEMPERATURE	90°C ±10°C (RTH2)																	
ENVIRONMENT	WORKING TEMP.	-30 ~ +50°C @ full load ; +70°C @ 60% load (Refer to derating curve) ; -40°C can power on																	
	WORKING HUMIDITY	20 ~ 95% RH non-condensing																	
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH																	
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)																	
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes																	
SAFETY & EMC	SAFETY STANDARDS Note.6	UL8750, EN61347-1, EN61347-2-13 independent, IP67 approved ; Design refer to UL60950-1, TUV EN60950-1																	
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC																	
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH																	
	EMI CONDUCTION & RADIATION	Compliance to EN55015, Class B																	
	HARMONIC CURRENT	Compliance to EN61000-3-2 Class C (≥ 60% load) ; EN61000-3-3																	
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11 ; ENV50204, EN61547, EN55024, heavy industry level, criteria A																	
OTHERS	MTBF	394.9Khrs min. MIL-HDBK-217F (25°C)																	
	DIMENSION	162.5*43.5*32mm (L*W*H)																	
	PACKING	0.45Kg; 32pcs/15.4Kg/0.56CUFT																	

- 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 voltages. Please check the static characteristics for more details.
 6. Suitable for indoor use or outdoor use without direct sunlight exposure.
 7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.
 8. 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.

Mechanical Specification

Case No. LPF60A

Unit:mm



※ Output constant current level can be adjusted through output cable by 1 ~ 10Vdc, PWM signal or resistor between ADJ1(+) and ADJ2(-).

※ Reference resistance value for output current adjustment (Typical)

Resistance value	10KΩ	20KΩ	30KΩ	40KΩ	50KΩ	60KΩ	70KΩ	80KΩ	90KΩ	100KΩ	OPEN
Output current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	100%~108%

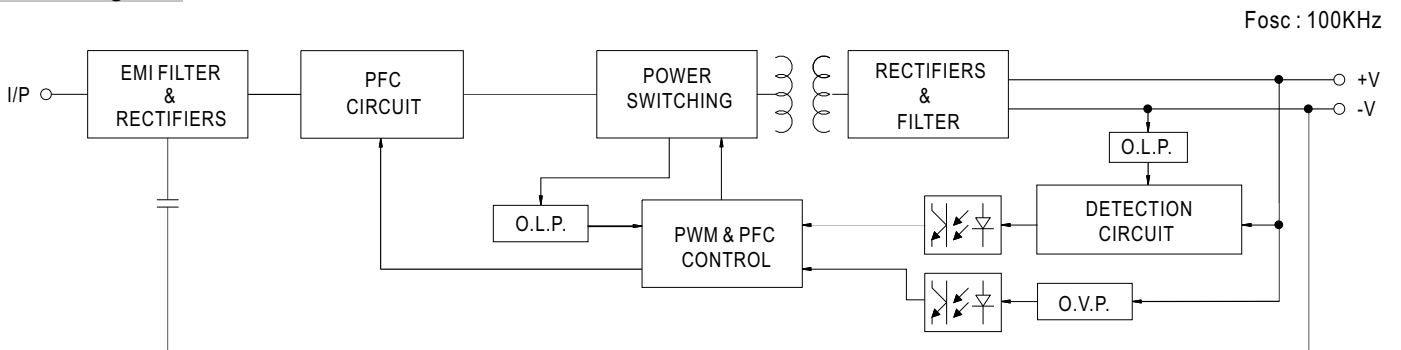
※ 1 ~ 10V dimming function for output current adjustment (Typical)

Dimming value	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Output current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	100%~108%

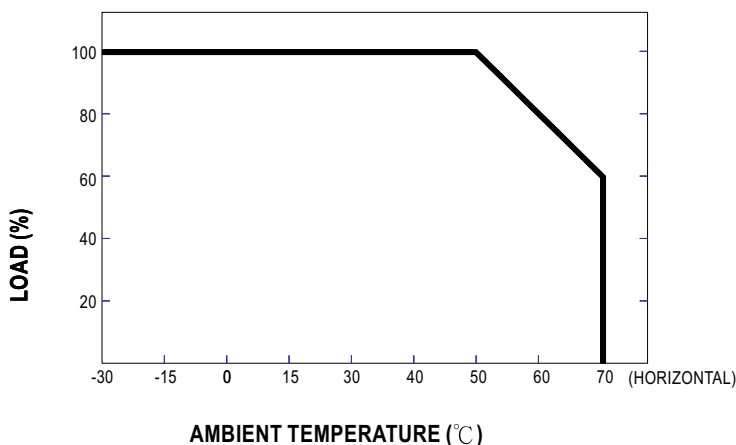
※ 10V PWM signal for output current adjustment (Typical)

Duty value	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Output current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	100%~108%

Block Diagram



Derating Curve



Static Characteristics

