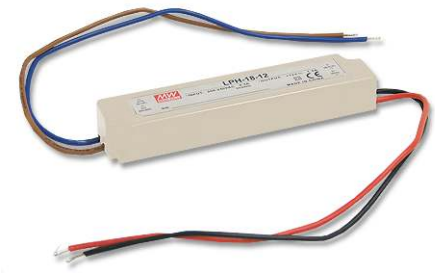
18W Single Output Switching Power Supply

LPH-18 series



Features :

- 180-264VAC input only
- Fully encapsulated with IP67 level (Note.5)
- Protections:Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Pass LPS
- 100% full load burn-in test
- Suitable for LED lighting and moving sign applications
- High reliability / Low cost
- 2 years warranty

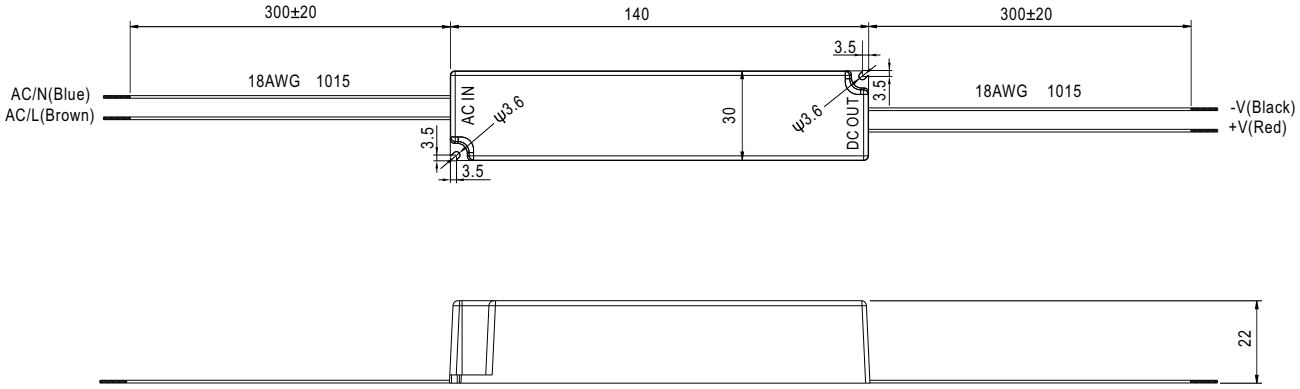
LPS IP67

SPECIFICATION

MODEL		LPH-18-12	LPH-18-24	LPH-18-36
OUTPUT	DC VOLTAGE	12V	24V	36V
	RATED CURRENT	1.5A	0.75A	0.5A
	CURRENT RANGE	0 ~ 1.5A	0 ~ 0.75A	0 ~ 0.5A
	RATED POWER	18W	18W	18W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	150mVp-p	200mVp-p
	VOLTAGE TOLERANCE Note.3	±3.0%		
	LINE REGULATION	±1.0%		
	LOAD REGULATION	±2.0%		
	SETUP, RISE TIME	1500ms, 30ms / 230VAC		
	HOLD UP TIME (Typ.)	50ms/230VAC at full load		
INPUT	VOLTAGE RANGE	180 ~ 264VAC 254 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY(Typ.)	78%	82%	83%
	AC CURRENT	0.3A/230VAC		
	INRUSH CURRENT(max.)	Cold start 50A/230VAC		
	LEAKAGE CURRENT	0.25mA / 240VAC		
PROTECTION	OVER CURRENT	Above 105% rated output power		
		Protection type : Hiccup mode, recovers automatically after fault condition is removed		
	OVER VOLTAGE	13.8~ 16.2V	27.6~ 32.4V	41.4 ~ 48.6V
		Protection type : Shut off o/p voltage, clamping by zener diode		
	OVER TEMPERATURE	Tj 170 t ypically (U1) Detect on main control IC		
		Protection type : Hiccup mode, recovers automatically after temperature goes down		
ENVIRONMENT	WORKING TEMP.	-30 ~ 70℃ (Refer to output load 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 (Note 4)	SAFETY STANDARDS	TUV EN60950-1, IP67 approved; design refer to UL1310 Class 2,EN61347-2-13, CAN/CSA C22.2 No. 223-M91		
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC		
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25℃/ 70% RH		
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B		
	HARMONIC CURRENT	Compliance to EN61000-3-2 Class A,EN61000-3-3		
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A		
OTHERS	MTBF	1200.6K hrs min. MIL-HDBK-217F (25)		
	DIMENSION	140*30*22(L*W*H)		
	PACKING	0.175Kg; 70pcs/13.3Kgs/0.71CUFT		
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. 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. 5. Suitable for indoor use or outdoor use without direct sunlight exposure.			

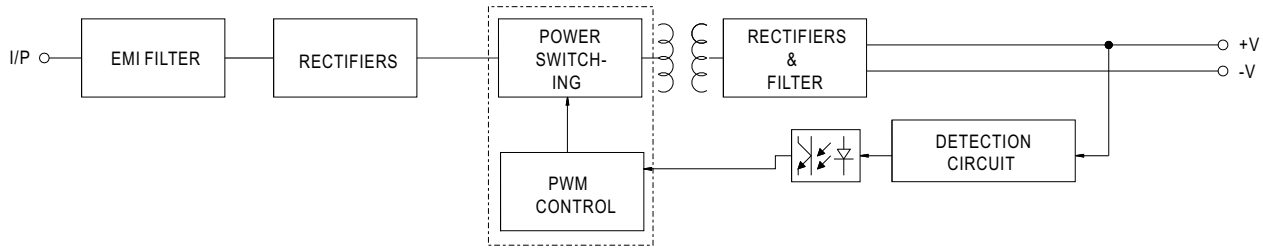
■ Mechanical Specification

Unit:mm

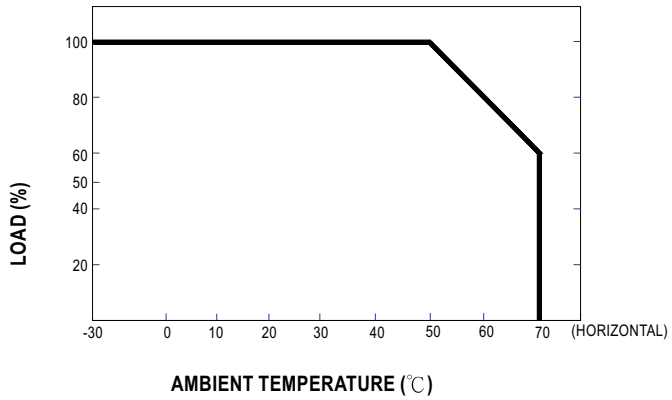


■ Block Diagram

fosc : 60KHz

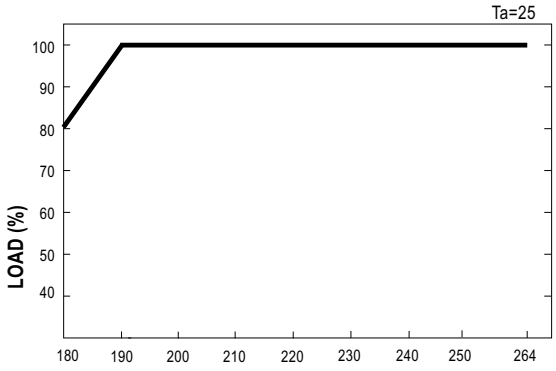


■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Static Characteristics



INPUT VOLTAGE (VAC) 60Hz