18W Single Output Switching Power Supply — LPLC-18 series



■ Features :

- Constant current mode power supply
- 90-132VAC input only
- Fully encapsulated with IP67 level (Note.6)
- Protections:Short circuit / Over voltage / Over temperature
- Cooling by free air convection
- Class Ⅱ power unit, no FG
- Pass LPS
- 100% full load burn-in test
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)
- High reliability / Low cost
- 2 years warranty

LPS IP67 (LVD)

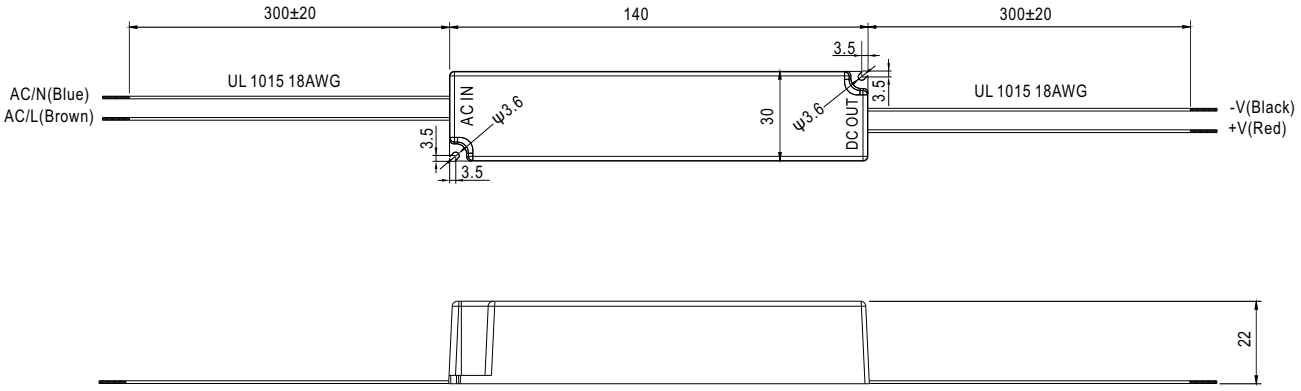
SPECIFICATION

MODEL		LPLC-18-350	LPLC-18-700
OUTPUT	RATED CURRENT	350mA	700mA
	DC VOLTAGE RANGE	6~48V	6~25V
	RATED POWER	16.8W	17.5W
	RIPPLE & NOISE (max.) Note.2	300mVp-p	250mVp-p
	VOLTAGE TOLERANCE Note.3	±5.0%	
	CURRENT ACCURACY	±8.0%	
	LINE REGULATION	±1.0%	
	LOAD REGULATION	±3.0%	
	SETUP, RISE TIME	3600ms, 150ms / 115VAC	
	HOLD UP TIME (Typ.)	20ms/115VAC at full load	
INPUT	VOLTAGE RANGE	90 ~ 132VAC 127 ~ 186VDC	
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY(Typ.)	82%	80%
	AC CURRENT	0.5A/115VAC	
	INRUSH CURRENT(Typ.)	COLD START 40A(twidth=280μs measured at 50% Ipeak) at 115VAC	
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	12 units (circuit breaker of type B) / 20 units (circuit breaker of type C) at 115VAC	
	LEAKAGE CURRENT	0.25mA / 120VAC	
PROTECTION	OVER VOLTAGE	50.4~ 60V	28.75~ 33.75V
		Protection type : Shut off o/p voltage, clamping by zener diode	
	OVER TEMPERATURE	Tj 140℃ typically (U1) Detect on main control IC	
		Protection type : Hiccup mode, recovers automatically after temperature goes down	
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	±0.2%/℃ (0 ~ 50℃)	
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes	
SAFETY & EMC (Note 5)	SAFETY STANDARDS	EAC TP TC 004, IP67 approved; design refer to UL1310 Class 2,TUV EN60950-1, 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	
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class A, FCC Part 15, EN61000-3-2 Class A, EN61000-3-3, EAC TP TC 020	
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A, EAC TP TC 020	
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 115VAC 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. Derating may be needed under low input voltage. Please check the static characteristic 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. Suitable for indoor use or outdoor use without direct sunlight exposure.		

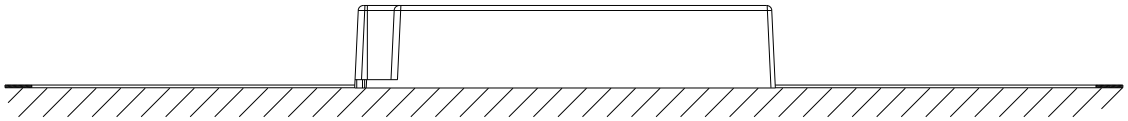
Bravo Electro Components, Inc. | www.bravoelectro.com | (800) 392-6318

■ Mechanical Specification

Unit:mm

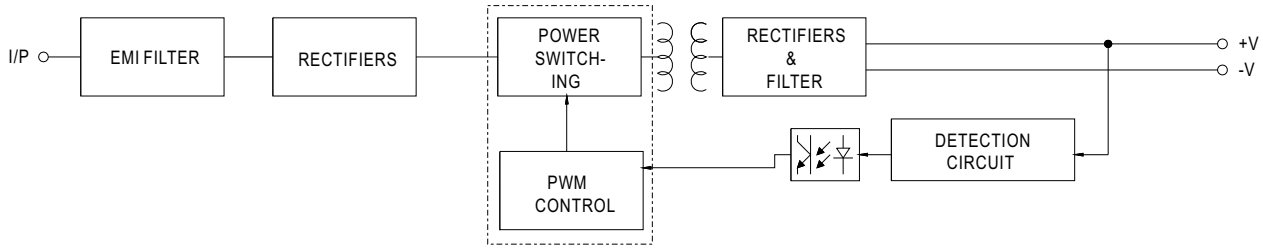


■ Recommend Mounting Direction

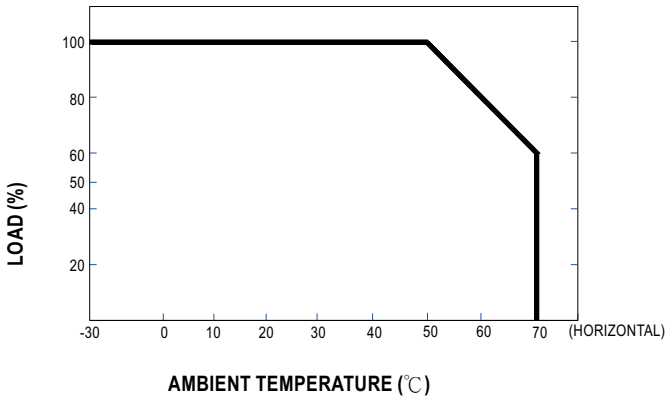


■ Block Diagram

fosc : 67KHz

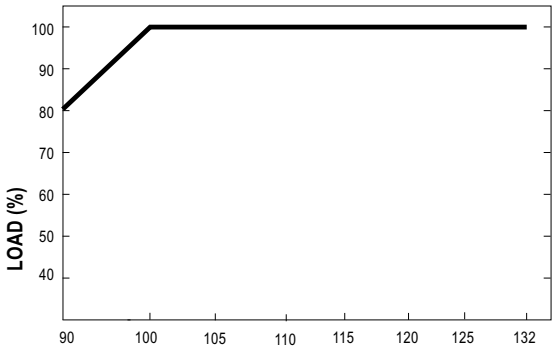


■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Static Characteristics



INPUT VOLTAGE (VAC) 60Hz