

LPC-20 Series

20W Single Output Switching Power Supply



Case No: 8011BF
118 x 35 x 26mm

Features

- Constant Current design
- Universal AC input/full range
- Withstand 300VAC surge input for 5 seconds
- Protections: Short Circuit / Over voltage
- Cooling by free air convection
- Fully encapsulated with IP67 level
- Fully isolated plastic case
- Small and compact size
- Class II power unit, no FG
- Class 2 power unit
- Pass LPS
- Suitable for LED lighting and moving sign applications
- 100% full load burn-in test
- Low cost, High reliability
- 2 years warranty



Specification

INPUT	Voltage	90V ~ 264VAC	127 ~ 370VDC
	Frequency	47 ~ 63 Hz	
	AC Current (Typ.)	0.55A/115VAC	0.35A/230VAC
	Inrush Current (Typ.)	Cold start 70A (twidh=220µs measured at 50% Ipeak) at 230VAC	
	Leakage Current	<0.25mA/240VAC	
	Max. No. of PSUs on 16A Circuit Breaker	8 units (cicuit breaker of type B_/ 14 units (circuit breaker of type C) at 230VAC	
OUTPUT	Efficiency	83%	83%
	MODEL No.	LPC-20-350	LPC-20-700
	Rated Current	350mA	700mA
	DC Voltage Range	9~48V	9~30V
	Current Accuracy	±5.0%	
	Rated Power	16.8W	21W
	Ripple Noise MAX.	200mVp-p	200Vp-p
	Voltage Tolerance	± 5%	
	Line Regulation	± 1.0%	
	Load Regulation	± 2.0%	
	Setup Rise Time	500ms, 250ms / 230VAC	500ms, 250ms/115VAC at full load
Holdup Time (Typ.)	50ms / 230VAC	16ms / 115at full load	
PROTECTION	Over Voltage	50.4~60V	31.5~40.5V
		Protection Type: Shut off o/p voltage, clamping by zener diode	
ENVIRONMENT	Working Temp	-30~+70°C (Refer to "Derating Curve")	
	Working Humidity	20~90% RH non-condensing	
	Storage Temp., Humidity	-40- +80°C, 10-95%RH	
	Temp. Co-efficient	±0.03% / °C (0~50°C)	
	Vibration	10~500Hz, 2G 10min./1cycle, period for 60 min. each along X, Y, Z axes	
SAFETY & EMC	Safety Standards	UL879, UL1310, CSA C22.2 No.207-M89 (except for LPC-20-350), CAN/CSA C22.2 No. 223-M91 (except for LPC-20-350), IEC/EN 62368-1, EAC TP TC 004, IP67 approved	
	Withstand Voltage	I/P-O/P:3KVAC	
	Isolation Resistance	I/P-OP:>100M Ohms/500Vdc/25°C/70% RH	
	EMC Emission	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2 Class A, EN61000-3-3	
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A	
OTHERS	M.T.B.F.	789.5K hrs min. MIL-HDBK-217F (25°C)	
	Packaging	0.22Kg; 60pcs/14.2Kg/0.62CUFT	

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple and noise are measured at 20MHz of bandwidth by using 12" twisted pair-wire terminated with 0.1µf & 47µf 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 characteristics 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. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
7. Suitable for indoor use or outdoor use without direct sunlight exposure; please avoid immersion in water over 30 minutes.
8. The unit might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the unit.
9. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED driver can only be used behind a switch with permanent connection to the mains.
10. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models is needed for operating altitude greater than 2000m (6500ft).

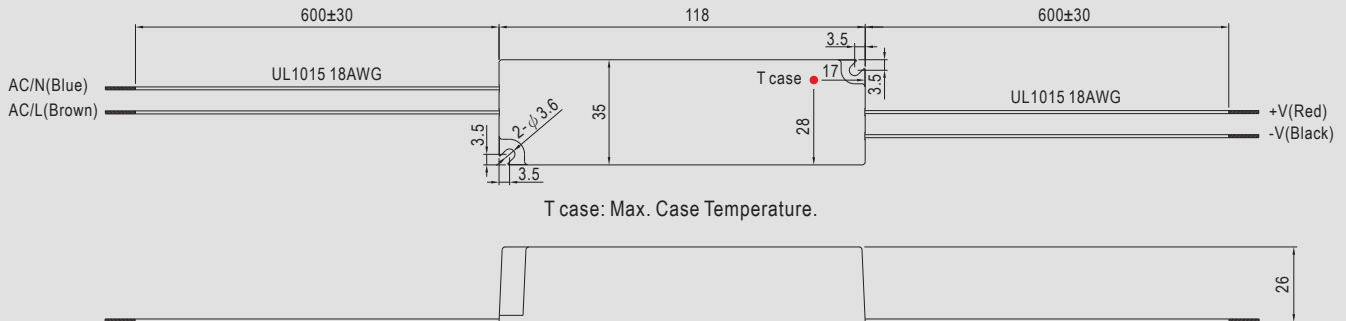
LPC-20 Series

20W Single Output Switching Power Supply



Mechanical Specification

Case No. 972A Unit:mm

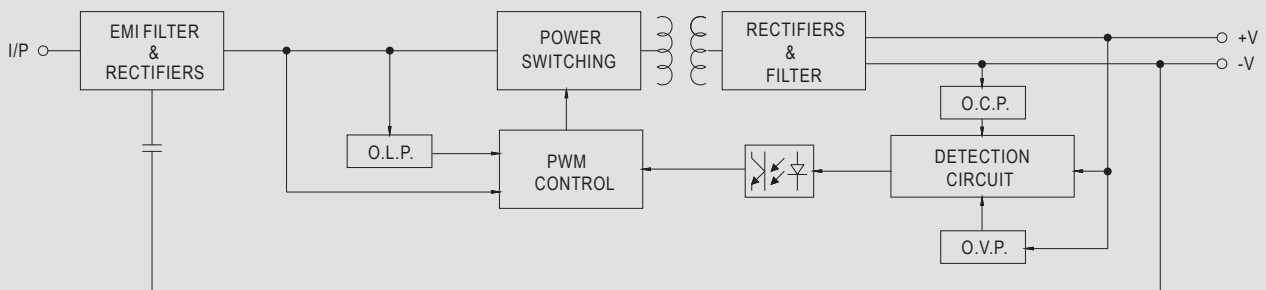


Recommended Mounting Direction

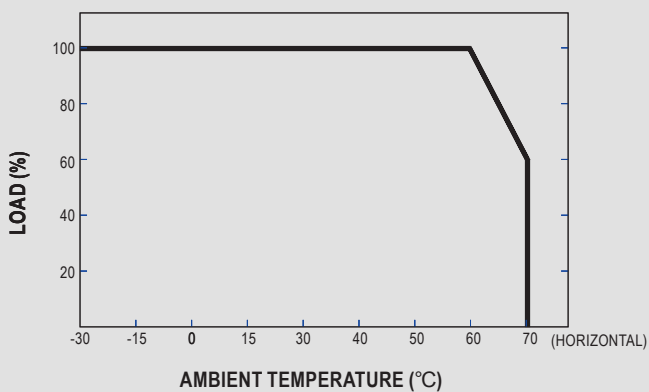


Block Diagram

fosc : 60KHz



Derating Curve



Static Characteristic

