

MEAN WELL LPL-18 Series 18W Single Output Switching Power Supply Owner's Manual

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MEAN WELL LPL-18 Series 18W Single Output Switching Power Supply



Features

- 90-132VAC input only
- Fully encapsulated with IP67 level (Note.5)
- Protections: Short circuit/Overload/Over voltage/Over temperature
- Cooling by free air convection
- Class I power unit, no FG
- Pass LPS
- 100% full load burn-in test
- Suitable for LED-related fixtures or appliances (such as LED Decoration or Advertisement devices)
- High reliability/Low cost
- 2 years warranty

SPECIFICATION

MODEL		LPL-18-12	LPL-18-24	LPL-18-36		
OUTP	DC VOLTAGE	12V	24V	36V		
	RATED CURREN T	1.5A	0.75A	0.5A		
	CURRENT RANG E	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 Not e.3	±3.0%				
	LINE REGULATI ON	±1.0%				
	LOAD REGULATI	±2.0%				
	SETUP, RISE TIM	1500ms, 30ms / 115VAC				
	HOLD UP TIME (Typ.)	20ms/115VAC at full load				
	VOLTAGE RANG E	90 ~ 132VAC 127 ~ 186VDC				
	FREQUENCY RA	47 ~ 63Hz				
	EFFICIENCY(Typ.	80%	83%	84%		
	AC CURRENT	0.5A/115VAC				

INPU T	INRUSH CURRE NT(Typ.)	COLD START 40A(twidth=200µs measured at 50% Ipeak) at 115VAC				
	MAX. No. of PSU s on 16A CIRCUI T BREAKER	16 units (circuit breaker of type B) / 27 units (circuit breaker of type C) at 115VAC				
	LEAKAGE CURR ENT	0.25mA / 115VAC				
PROT ECTI ON	OVERLOAD	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 TEMPERA TURE	Shut down, recovers automatically after temperature goes down				
ENVI RON MENT	WORKING TEMP.	-30~ +70°C (Refer to "Derating Curve")				
	WORKING HUMI DITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP. , HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH				
	TEMP. COEFFICI ENT	±0.03%/°C (0 ~ 50°C)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
SAFE TY & EMC	SAFETY STAND ARDS	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 VO LTAGE	I/P-O/P:3KVAC				
	ISOLATION RESI STANCE	I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70% RH				
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, 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, EAC TP TC 020				
OTHE RS	MTBF	6901.7K hrs min. Telcordia SR-332 (Bellcore); 1171.8Khrs min. MIL-HDBK-217F (25°C)				
	DIMENSION	140*30*22(L*W*H)				
	PACKING	0.175Kg; 70pcs/13.3Kgs/0.71CUFT				

- 1. All parameters NOT specially mentioned are measured at 115VAC input, rated load, and 25C of am bient temperature.
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated wit h a 0.1uf & 47uf parallel capacitor.

Tolerance: includes set up tolerance, line regulation, and load regulation.

NOTE

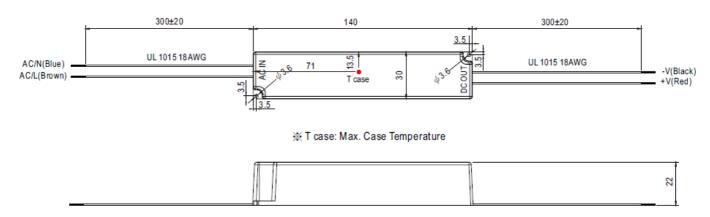
The power supply is considered a component that will be operated in combination with the final equipm ent. Since EMC performance will be affected by the

complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complet e installation again.

- . Suitable for indoor use or outdoor use without direct sunlight exposure.
- . The ambient temperature derating of 3.5~C/1000m with fanless models and of 5C/1000m with fan models for operating altitudes higher than 2000m(6500ft).

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Mechanical Specification

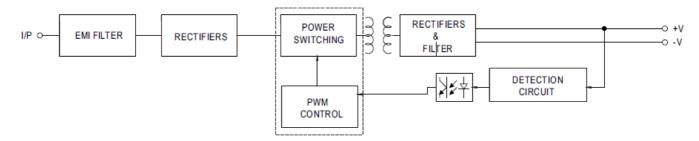


Recommend Mounting Direction

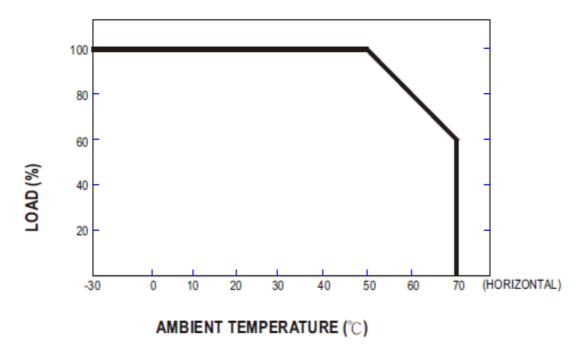


Block Diagram

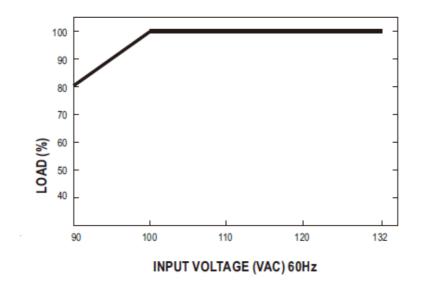
fosc: 60KHz



Derating Curve



Static Characteristics



GTIN CODE



MW Search: https://www.meanwell.com/serviceGTIN.aspx

Documents / Resources



MEAN WELL LPL-18 Series 18W Single Output Switching Power Supply [pdf] Owner's Man

LPL-18 Series, 18W Single Output Switching Power Supply, LPL-18 Series 18W Single Output Switching Power Supply, Output Switching Power Supply, Switching Power Supply, Switching Power Supply, Supply, LPL-18-12, LPL-18-24, LPL-18-36

References

• Product Liability Disclaimer-MEAN WELL Switching Power Supply Manufacturer

Manuals+,