

## NeoPower 150W Waterproof LED Driver

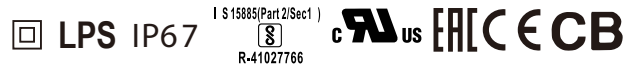


### Introducing NeoPower

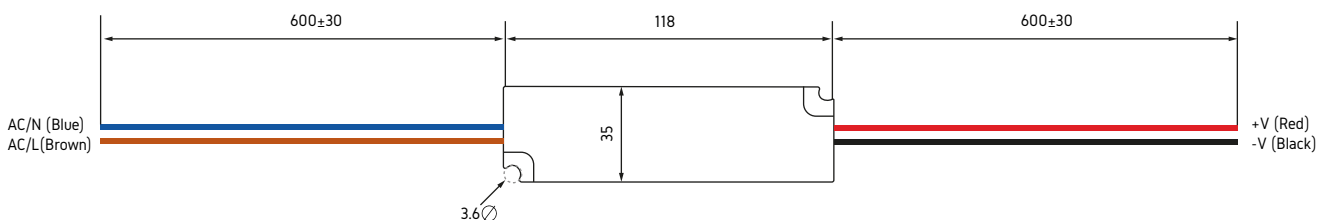
Our innovative NeoPower range of LED drivers has been completely retooled to maximise the efficiency of the transformer. These are highly toughened devices, featuring upgraded waterproofness and excellent ingress protection. Thanks to a finely tuned, the heat sink is capable of dissipating more heat than ever, extending the life of the device.

### Product Features

- Constant voltage design
- 180~305VAC input for LPV-150
- Fully encapsulated with IP67 level (Note.8)
- Class II power unit, no FG
- Protections: Short circuit/Overload/Over voltage/Over temperature
- Fully isolated plastic case
- Fanless design, cooling by free air convection
- 100% full load burn-in test
- Low cost, high reliability
- Listed in UL Sign Component Manual (SAM)
- Type "HL" for use in class |
- 2 years warranty
- Suitable for LED related fixture or appliance



### Technical Dimensions



### Recommended Mounting Direction

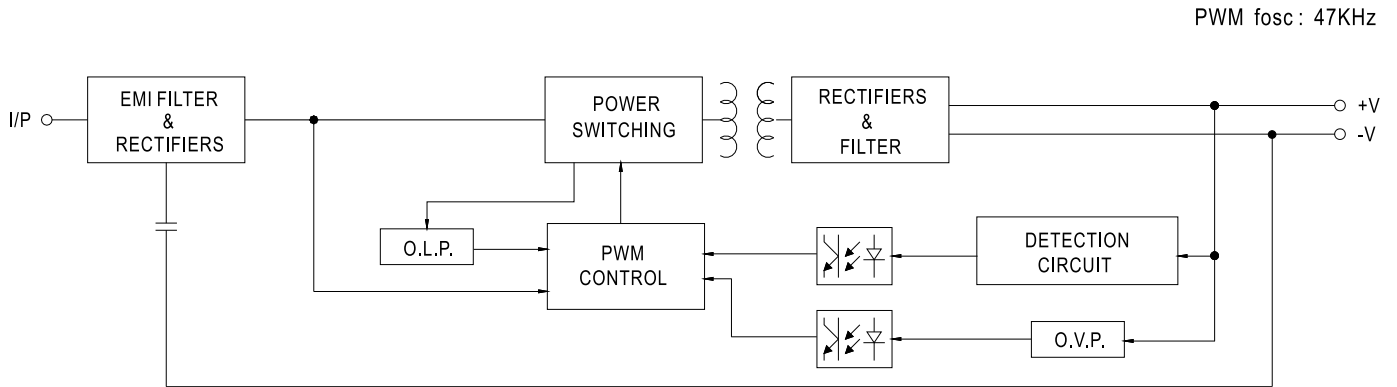


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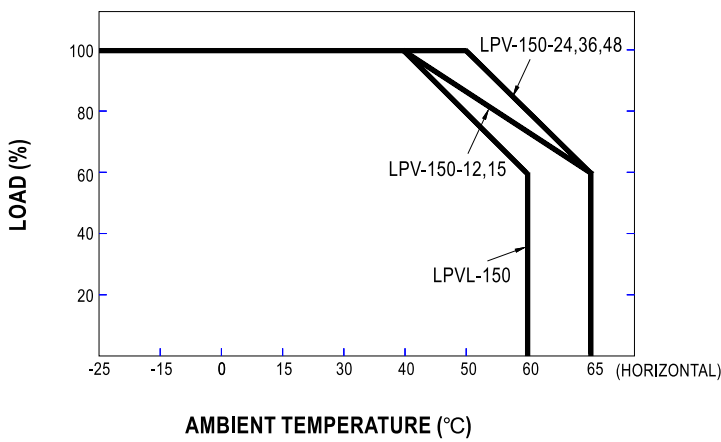
OUTPUT	DC VOLTAGE	12V	24V	
	RATED CURRENT	10A	6.3A	
	CURRENT RANGE	0 ~ 10A	0 ~ 6.3A	
	RATED POWER	120W	151.2W	
	RIPPLE & NOISE (max.) Note.2	200mVp-p	200mVp-p	
	VOLTAGE TOLERANCE Note.3	±5.0%		
	LINE REGULATION	±1.0%		
	LOAD REGULATION	±2.0%		
	SETUP, RISE TIME Note.6	LPV-150: 500ms, 50ms / 230VAC    500ms, 50ms / 277VAC;	LPVL-150: 1500ms, 50ms / 115VAC	
	HOLD UP TIME (Typ.)	LPV-150: 18ms/230VAC    20ms/277VAC at full load;	LPVL-150: 10ms/115VAC at full load	
INPUT	VOLTAGE RANGE Note.4	LPV-150: 180 ~ 305VAC    254 ~ 431VDC;	LPVL-150: 90~132VAC	
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY (Typ.)	87%	89%	
	AC CURRENT	LPV-150: 1.7A/230VAC    1.5A/277VAC;	LPVL-150: 3.0A/115VAC	
	INRUSH CURRENT (Typ.)	Blank type	COLD START 60A(twidth=900µs measured at 50% Ipeak) at 230VAC	
		L type	COLD START 75A(twidth=900µs measured at 50% Ipeak) at 115VAC	
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	Blank type	2 units (circuit breaker of type B) / 3 units (circuit breaker of type C) at 230VAC	
L type		1 units (circuit breaker of type B) / 2 units (circuit breaker of type C) at 115VAC		
LEAKAGE CURRENT	LPV-150: 0.25mA / 240VAC	LPVL-150:0.25mA / 120VAC		
PROTECTION	OVERLOAD	110 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed		
	OVER VOLTAGE	13.5 ~ 18V	27 ~ 35V	
		Protection type : Shut down o/p voltage, re-power on to recover		
OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down			
ENVIRONMENT	WORKING TEMP.	-25 ~ +65°C (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 40°C for LPV-150-12,15 and LPVL-150-12,24;0~50°C for LPV-150-24,36,48)		
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes		
SAFETY & EMC	SAFETY STANDARDS	Blank type	UL8750, CSA C22.2 No 250, 13-12, UL879, CSA C22.2 No.207-M89, BIS IS15885(for LPV-150-12,24 only), EAC TP TC 004, IP67; IEC/EN 62368-1 approved.	
		L type	UL8750(type"HL"), CSA C22.2 No 250, 13-12, UL879, CSA C22.2 No.207-M89, IP67 approved	
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC		
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70% RH		
	EMC EMISSION	Blank type	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2 Class A(≤80% load), EN61000-3-3, EAC TP TC 020	
		L type	Compliance to FCC part 15	
EMC IMMUNITY	Blank type	Compliance to EN61000-4-2,3,4,5,6,8,11; EN55024, light industry level, criteria A, EAC TP TC 020		
	L type	Design refer to IEC61000-4-2,3,4,5,6,8,11; light industry level, criteria A		
OTHERS	MTBF	703Khrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	191*63*37.5mm (L*W*H)		
	PACKING	LPV-150: 0.74Kg;20pcs/15.8Kg/0.95CUFT;	LPVL-150: 0.85Kg;20pcs/17Kg/0.95CUFT	
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC(115VAC for LPVL) input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltage. Please check the static characteristics for more details.</p> <p>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.</p> <p>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.</p> <p>7. Suitable for indoor use or outdoor use without direct sunlight exposure.</p> <p>8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> <p>9. For any application note and IP water proof function installation caution, please refer our user manual before using. <a href="https://www.meanwell.com/Upload/PDF/LED_EN.pdf">https://www.meanwell.com/Upload/PDF/LED_EN.pdf</a></p> <p>10. This product is not intended for LED applications in the EU.(In the EU NPF/LPF/XLG series are recommended.)</p> <p>11. To fulfill requirements of latest ErP regulation for lighting luminaires, this LED Driver can only be used behind a switch without permanently connected to mains.</p> <p>⊗ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p>			

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### Block Diagram



### Derating Curve



### Static Characteristics

