

NeoPower 20W Waterproof LED Driver



Introducing NeoPower

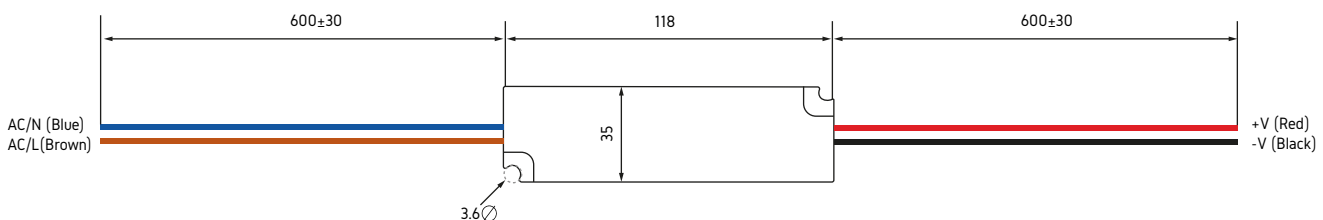
Our innovative NeoPower range of LED drivers has been completely retooled to maximise the efficiency of the transformer. These are highly toughened devices, featuring upgraded waterproofness and excellent ingress protection. Thanks to a finely tuned, the heat sink is capable of dissipating more heat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

Product Features

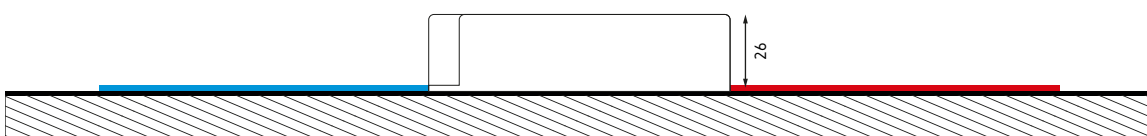
- Constant Voltage Design
- Universal AC input / full range
- Withstand 300AC surge input for 5 seconds
- Protections: Short circuit/Over load Over voltage
- Cooling by free air convection
- Compact design
- Fully encapsulated with IP67
- Isolated plastic casing
- Class II power unit, no FG
- LPS Certified
- Suitable for LED fixtures
- 100% full load burn-in test
- 2 year warranty



Technical Dimensions



Recommended Mounting Direction



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Technical Specifications

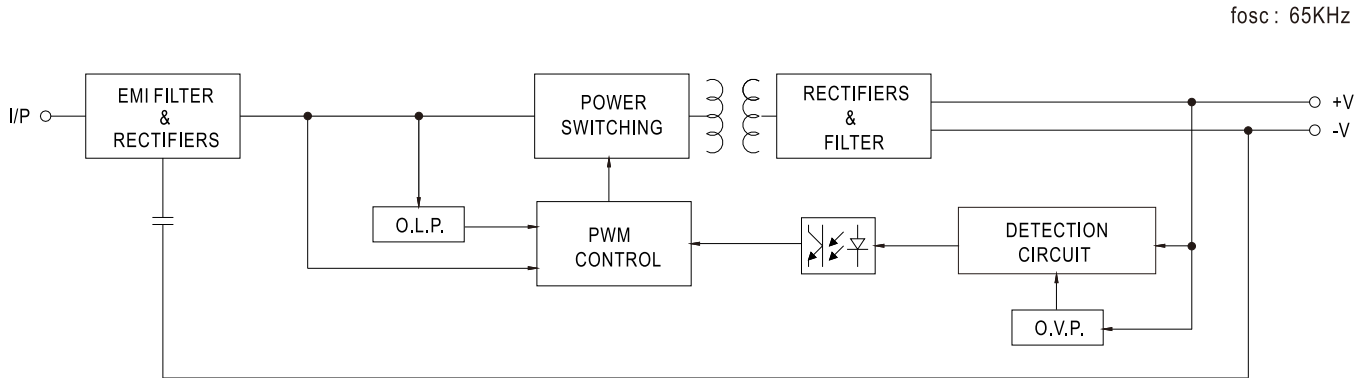
MODEL		NeoPower 20W Waterproof LED Driver	
OUTPUT	DC VOLTAGE	12V	
	RATED CURRENT	1.67A	
	CURRENT RANGE	0 ~ 1.67A	
	RATED POWER	20W	
	RIPPLE & NOISE (max.) Note.2	120mVp-p	
	VOLTAGE TOLERANCE Note.3	±5.0%	
	LINE REGULATION	±1.0%	
	LOAD REGULATION	±2.0%	
	SETUP, RISE TIME Note.6	500ms, 20ms / 230VAC 500ms, 20ms / 115VAC at full load	
HOLD UP TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load		
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC	127 ~ 370VDC
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	81%	
	AC CURRENT (Typ.)	0.55A/115VAC	0.35A/230VAC
	INRUSH CURRENT(Typ.)	COLD START 70A(twidth=215µs measured at 50% Ipeak) at 230VAC	
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	8 units (circuit breaker of type B) / 14 units (circuit breaker of type C) at 230VAC	
LEAKAGE CURRENT	0.25mA / 240VAC		
PROTECTION	OVER LOAD	110 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed	
	OVER VOLTAGE	13.8 ~ 16V 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. COEFFICIENT	±0.03%/°C (0 ~ 50°C)	
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes	
SAFETY & EMC	SAFETY STANDARDS	UL879, UL1310, CSA C22.2 No. 207-M89,CAN/CSA C22.2 No. 223-M91,IEC/EN 62368-1,EAC TP TC 004,IP67 approved	
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC	
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70% RH	
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, 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	786.5Khrs min. MIL-HDBK-217F (25°C)	
	DIMENSION	118*35*26mm (L*W*H)	
	PACKING	0.22Kg; 60pcs/14.2Kg/0.72CUFT	

NOTE

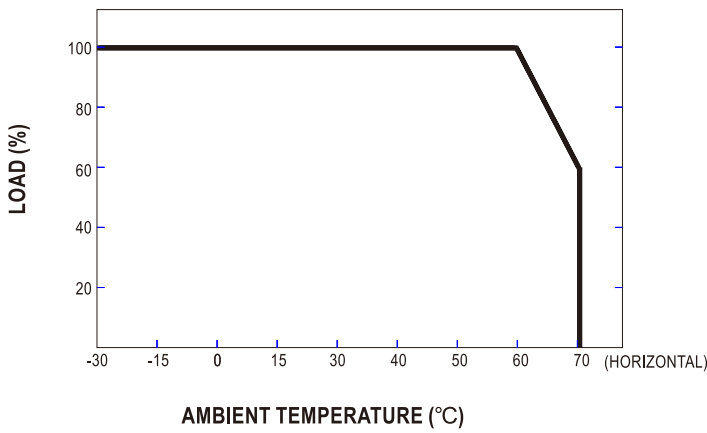
- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor.
- Tolerance : includes set up tolerance, line regulation and load regulation.
- Derating may be needed under low input voltage. Please check the static characteristics for more details.
- 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.
- 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.
- Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minute.
- 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).
- Products sourced from the Americas regions may not have the TUV/BIS/CCC logo. Please contact your MEAN WELL sales for more information.
- For any application note and IP water proof function installation caution, please refer our user manual before using.
https://www.meanwell.com/Upload/PDF/LED_EN.pdf
- This product is not intended for LED applications in the EU.(In the EU NPF/LPF/XLG series are recommended.)
- 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.

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Block Diagram



Derating Curve



Static Characteristics

