

HPS-240 single output constant voltage LED driver



Dimension: 247 × 69 × 39mm

SPECIFICATION

Features:

- Universal AC input range
- Fully encapsulated with IP67 level
- Protections: short circuit, over load, over voltage, over temperature
- Cooling by free air convection
- Built in active PFC function, PF ≥ 0.95
- Efficiency up to 91%
- 100% full load burn-in test
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- 5 Years warranty



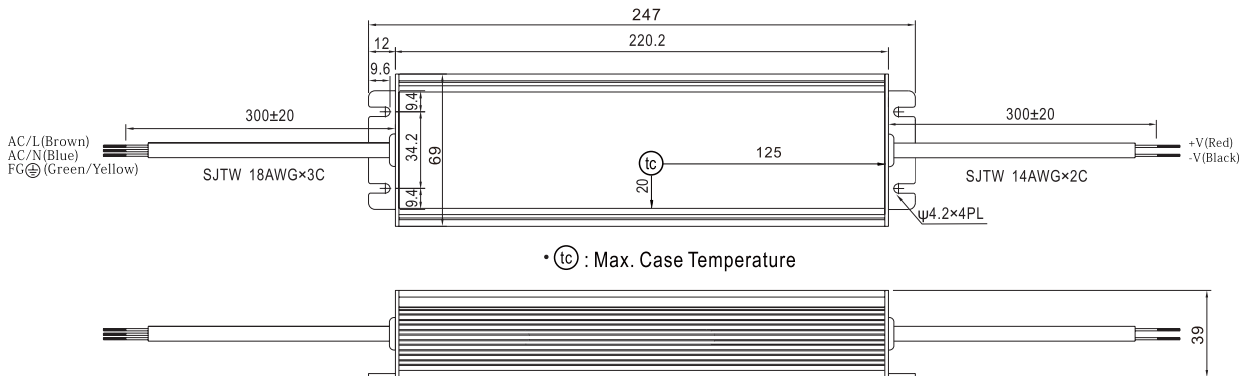
	Model	HPS-12-240	HPS-24-240
Output	DC voltage	12V	24V
	Rated current	20A	10A
	Current range	0 ~ 20A	0 ~ 10A
	Rated power	240W	240W
	Ripple&noise	150mVp-p	150mVp-p
	Voltage tolerance	± 2.0%	± 1.0%
	Line regulation	± 0.5%	
	Load regulation	± 1.5%	± 1.5%
Input	Setup, rise, hold time	2500ms, 20ms, 24ms/230VAC	1500ms, 20ms, 24ms/115VAC at full load
	Voltage range	90~264VAC 127~370VDC	47~63Hz
	AC current	2.6A/115VAC	1.4A/230VAC
	Efficiency	89%	91%
	Power factor	PF ≥ 0.95/230VAC	PF ≥ 0.98/115VAC (at full load)
	Total Harmonic Distortion	THD < 20% (90/264VAC input, output load > 50%)	
	Inrush current	Cold start 75A/230VAC (twidth=880 μ s measured at 50% I _{peak})	
Protection	Leakage current	< 0.75mA/240VAC	
	Overload	115~135% rated output power Start overload protection Protection type: Hiccup mode, auto-recovery after fault condition is removed	
	Over voltage	15.8~18V	30.6~33.6V
Environment	Over temperature	95°C ± 10°C (TSW1) Protection type: Shut down output voltage, recovers automatically after temperature goes down	
	Working temperature	-30°C ~ +60°C (Please refer to "derating curve")	
	Working humidity	20% ~ 90% RH Non-condensing	
	Storage temp, humidity	-40°C ~ +80°C; 10% ~ 95% RH	
	Temp. coefficient	± 0.03%/°C (0~50°C)	
Safety & EMC	Vibration	10 ~ 500Hz, 2G 12min./1Cycle, Period for 72min, Each axes	
	Safety standards	UL1020, CAN/CSA-C22.2 No. 107.1-01, UL8570, CSA C22.2 No. 250.0-08, TUV EN61347-1 EN61347-2-13 independent, UL60950-1, UL8750, TUV EN60950-1 IP67 certificated, J61347-1, J61347-2-13	
	Withstand voltage	I/P-O/P: 3KVAC I/P-FG: 2KVAC O/P-FG: 1.5KVAC	
	Isolation resistance	I/P-O/P: 100M Ohms/500VDC/25°C/70%RH	
	EMC emission	Compliance to EN55022-B, EN61000-3-2 Class C (60% load); EN61000-3-3	
Others	EMC immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547, EN55024, light industry level (surge 4KV), criteria A	
	MTBF	220K hrs min.	MIL-HDBK-217F(25°C)
	Dimension	247*69*39 mm (L*W*H)	
	Packing	1.3kg/20pcs/27kg/0.025m³/1.15CUFT	

- Note: 1. All parameters NOT specially mentioned are measured at 230VAC 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 0.1μf & 47μf parallel capacitor.
 3. Tolerance : includes set up tolerance, line regulation and load regulation.
 4. 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.
 5. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minute.
 6. Derating may be needed under low input voltage. Please check the static characteristics for more details.
 7. 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.

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Mechanical specification

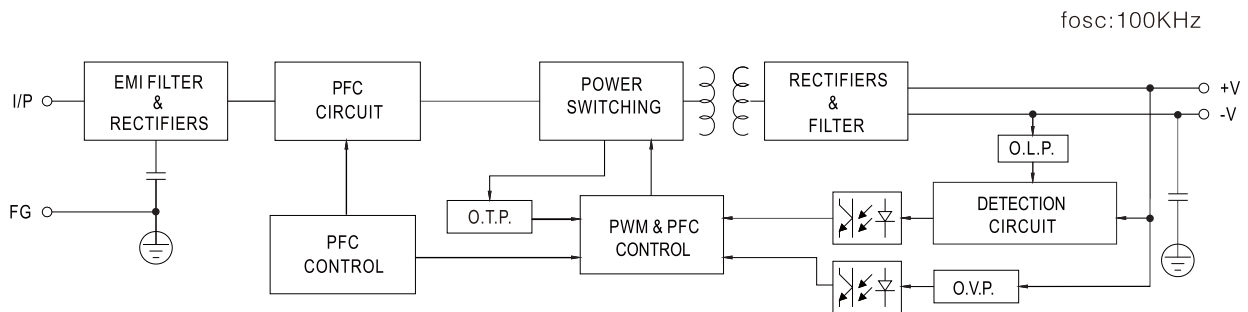
Unit:mm



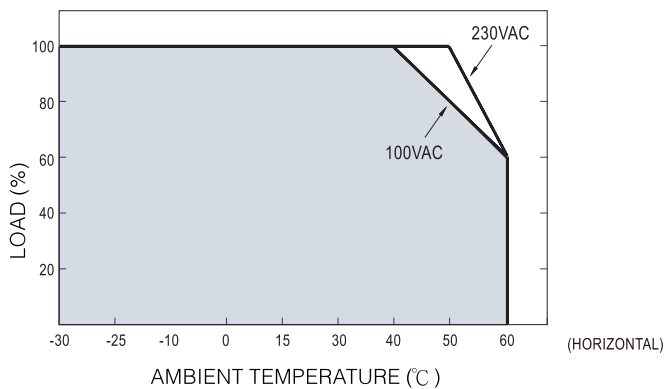
lead-out wire assignment

Input(Black three-core)		Output (Black two-core)	
Brown	AC/L	Red	DC OUTPUT +V
Blue	AC/N	Black	DC OUTPUT -V
Yellow-green	FG		

Block diagram



Derating curve



Static characteristic

