HPV-200W Constant Voltage LED driver with PFC

Dimension：249×69×39mm

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 93%
- 100% full load burn-in test
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- 3 Years warranty

SELV IP67

SPECIFICATION

	Model	HPV-200-12	HPV-200-24	HPV-200-36
Output	DC voltage	12V	24V	36V
	Rated current	16.5A	8.5A	5.6A
	Current range	0～16.5A	0～8.5A	0～5.6A
	Rated power	198W	204W	201.6W
	Ripple&noise	150mVp-p	150mVp-p	150mVp-p
	Voltage tolerance	±2.0%	±1.0%	±1.0%
	Line regulation	±0.5%		
	Load regulation	±1.5%	±1.5%	±1.5%
	Setup,rise,hold time	2500ms,20ms,24ms/230VAC 1500ms,20ms,24ms/115VAC at full load		
Input	Voltage range	90~264VAC 127~370VDC 47~63Hz		
	AC current	3.2A/115VAC 1.6A/230VAC		
	Efficiency	90%	92%	93%
	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 60A/230VAC (t_{width}=750μs measured at 50% I_{peak})		
	Leakage current	<2mA/240VAC		
Protection	Overload	110~140% 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	41.4~48.6V
		Protection type：Shut down output voltage,re-power on to recover		
	Over temperature	105℃±10℃(RTH3 detect at transformer side)		
		Protection type:Shut down output voltage, recovers automatically after temperature goes down		
Environment	Working temperature	-30℃～+60℃(Please refer to “derating curve”)		
	Working humidity	20%～90%RH Non-condensing		
	Storage temp，humidity	-40℃～+80℃;10%～95%RH		
	Temp.coefficient	±0.03%/℃（0~50℃）		
	Vibration	10～500Hz，5G 12min./1Cycle，Period for 72min，Each axes		
Safety& EMC	Safety standards	UL1020,CAN/CSA-C22.2No. 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:0.5KVAC		
	Isolation resistance	I/P-O/P：100M Ohms/500VDC/25℃/70%RH		
	EMC emission	Compliance to EN55022-B，EN61000-3-2 Class C（ 60% load）; EN61000-3-3		
	EMC immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024, light industry level (surge 4KV), criteria A		
Others	MTBF	280K hrs min. MIL-HDBK-217F(25℃)		
	Dimension	249*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℃ of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf 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 uo 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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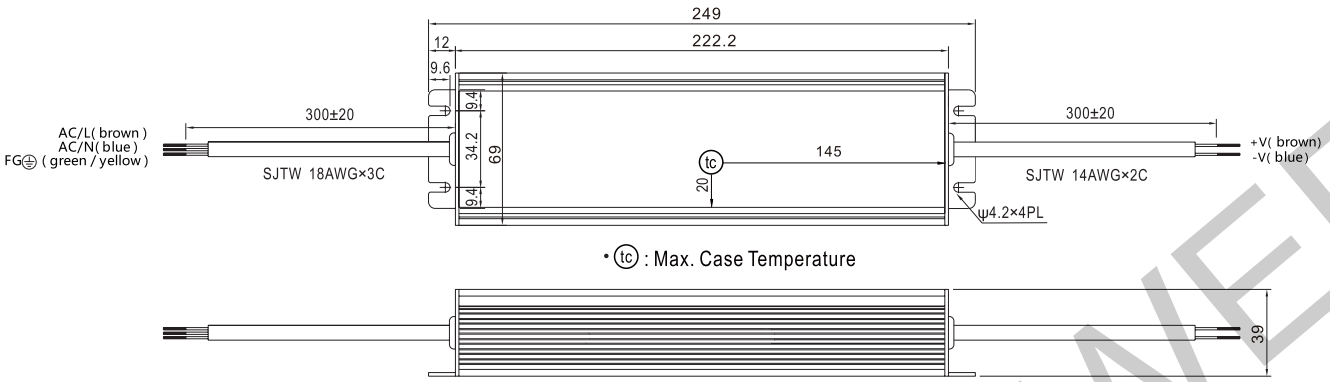
Mechanical specification

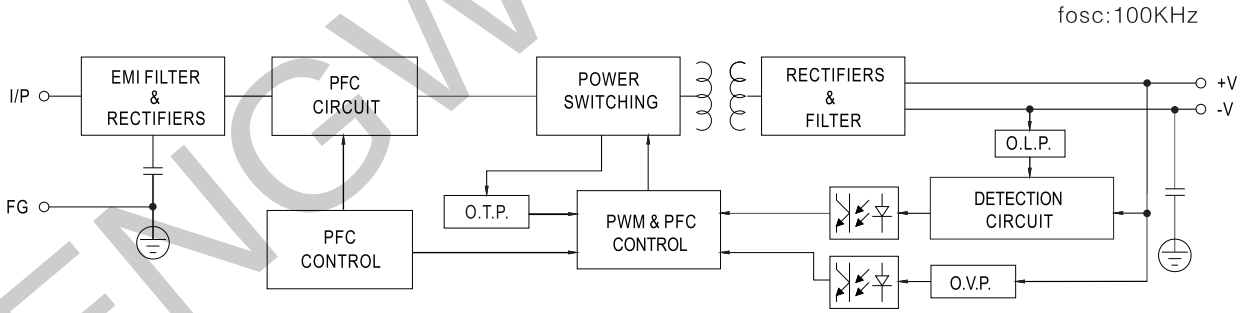
Unit:mm



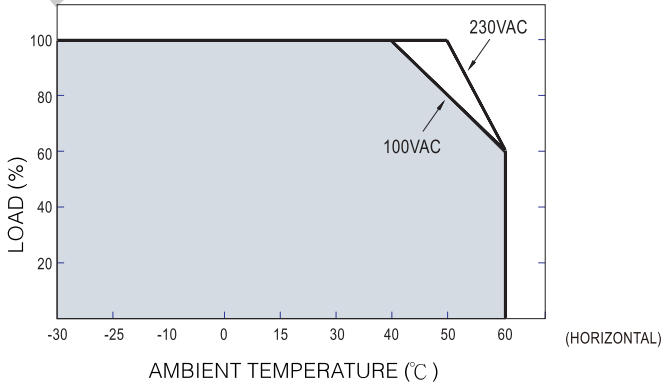
lead−out wire assignment

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

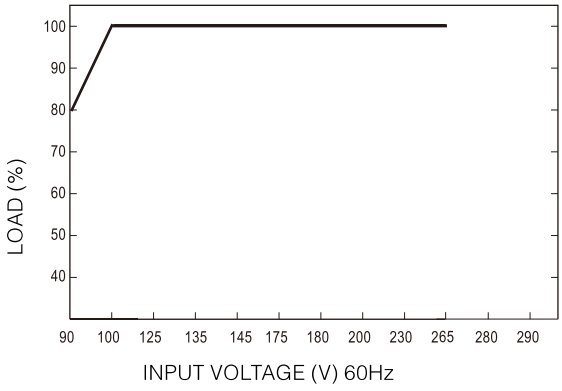
Block diagram



Derating curve



Static characteristic



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