



2023-V1.0-0512

Specifications

LED Power Supplies

PGMW-60V Series, 60W

PAIRUI ELECTRONICS

No. 545 Museum Road
Yangzhou, Jiangsu
China 225009

Tel: 86 (514) 8279 1592

Fax: 86 (514) 8769 3159

2023

LED Power Supplies

PGMW-60V SERIES, 60WATT, IP67 RATING

Features

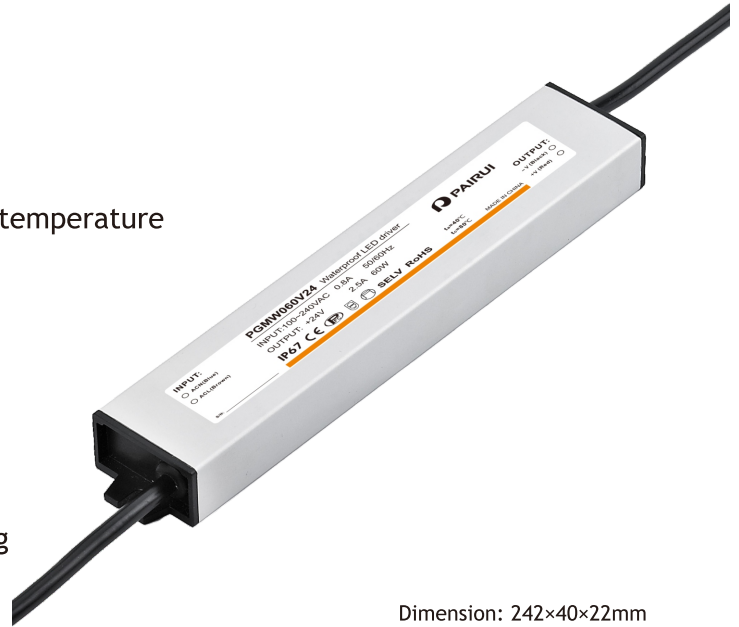
- Universal AC input range
- Fully encapsulated with IP67 level
- Protections: short circuit, over load, over voltage, over temperature
- Cooling by free air convection
- Built in active PFC function, PF ≥ 0.92
- Efficiency up to 87.5%
- 100% full load burn-in test
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- 5 Years warranty







IP67 SELV RoHS



Dimension: 242×40×22mm

Applications

- ✓ Street Light
- ✓ Tunnel Light
- ✓ Flood Light
- ✓ Other Light Fixtures for Outdoor Use

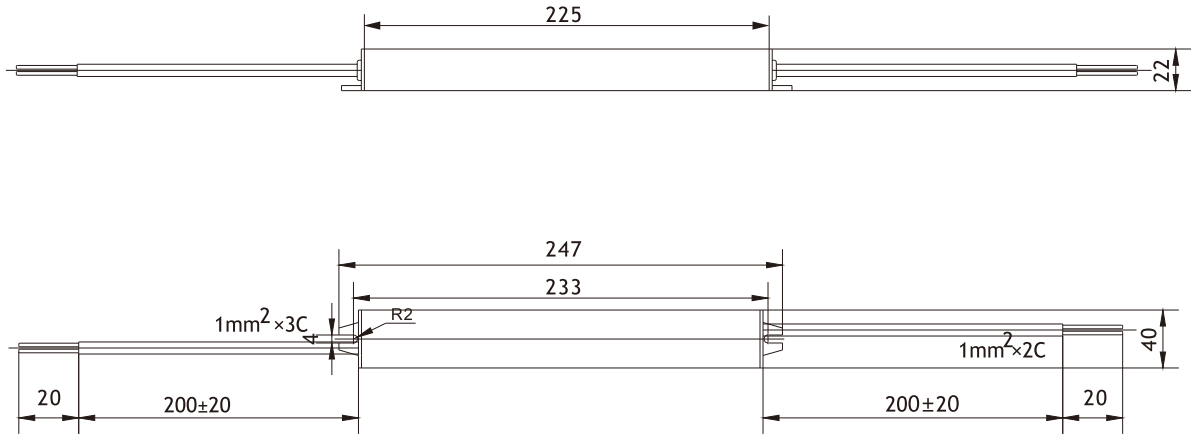
	Model	PGMW060V12	PGMW060V24
Output	DC voltage	12V	24V
	Rated current	5A	2.5A
	Current range	0 ~ 5A	0 ~ 2.5A
	Rated power	60W	60W
	Ripple&noise	150mVp-p	150mVp-p
	Voltage tolerance	±3%	
	Line regulation	±0.5%	
	Load regulation	±2%	
Input	Setup, rise, hold time	1200ms, 20ms, 24ms / 100VAC, 500ms, 20ms, 24ms / 240VAC, 400ms, 20ms, 24ms / 277VAC at full load	
	Voltage range	100-277VAC	127-388VDC 47-63Hz
	AC current	0.8A/100VAC	0.4A/220VAC 0.3A/277VAC
	Efficiency	86%	87.5%
	Power factor	PF≥0.97/100VAC, PF≥0.95/240VAC, PF≥0.92/277VAC (at full load)	
	Total Harmonic Distortion	THD<20% (100/277VAC input, output load>50%)	
	Inrush current	Cold start 35A/230VAC (twidth=120µs measured at 50% Ipeak)	
	Leakage current	< 2mA/240VAC	
Protection	Overload	110-150% rated output power Start overload protection Protection type: Hiccup mode, auto-recovery after fault condition is removed	
	Over voltage	13.5-16V	27-30V
	Over temperature	95°C±10°C(RT2) Protection type: Shut down output voltage, recovers automatically after temperature goes down	
Environment	Working temperature	-20°C ~ +60°C(Please refer to“derating curve”)	
	Working humidity	20% ~ 90%RH Non-condensing	
	Storage temp, humidity	-40°C ~ +85°C; 10% ~ 95%RH	
	Temp. coefficient	±0.03%/°C (0~50°C)	
Safety& EMC	Safety standards	UL 1020, CAN/CSA-C22.2 No. 107.1-01, UL 8570, CSA C22.2 No, 250.0-08, UL 62368-1	
		EN 61347-2-13 independent, TUV 61347-1; TUV EN 62368-1; AS 61347.2.13:2018	
		AS/NZS 61347.1:2016 Inc A1; IP65 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°C/70%RH	
	EMC emission	Compliance to EN 55015- CLASS B, EN 61000-3-2 Class C (60% load) ; EN 61000-3-3	
Others	EMC immunity	Compliance to EN 61000-4-2, 3, 4, 5, 6, 8, 11; EN 61547, EN 55024, light industry level (surge 4KV), criteria A	
	MTBF	620K hrs min.	MIL-HDBK-217F(25°C)
	Dimension	242*40*22 mm (L*W*H)	
	Packing	0.44kg/48pcs/21.7kg/0.025m³/0.91CUFT	

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 0.1uf & 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 minutes.
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.
8. The LED driver is "Non-IC classified" under AS/NZS 61347.1.
9. The LED driver is not suitable for residential installation.
10. The minimum distance from the top and sides of the controlgear to normally flammable building elements should be no less than 5cm.
11. Relevant information will be supplied if the controlgear is required to be mounted on a specific surface or has additional installation requirements, For example, use in noncombustible enclosed space or to ensure adequate sealing to maintain its IP rating.

Mechanical specification

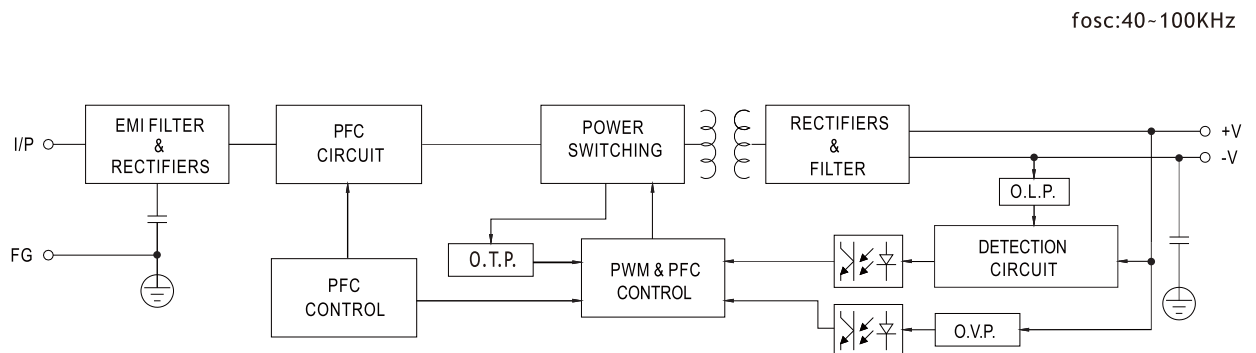
Unit:mm



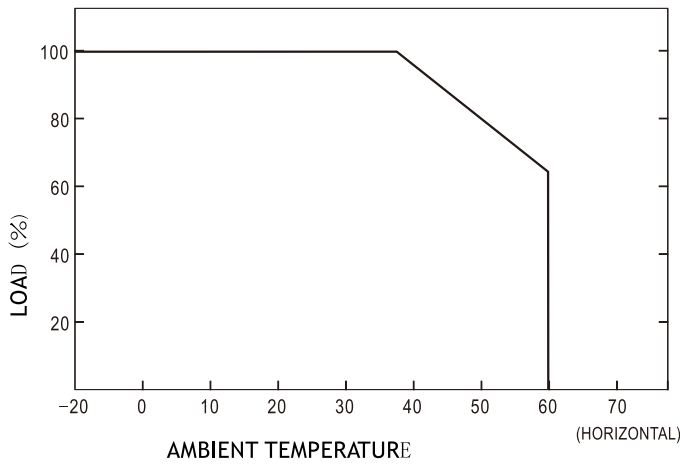
Lead-out wire assignment

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 \perp		

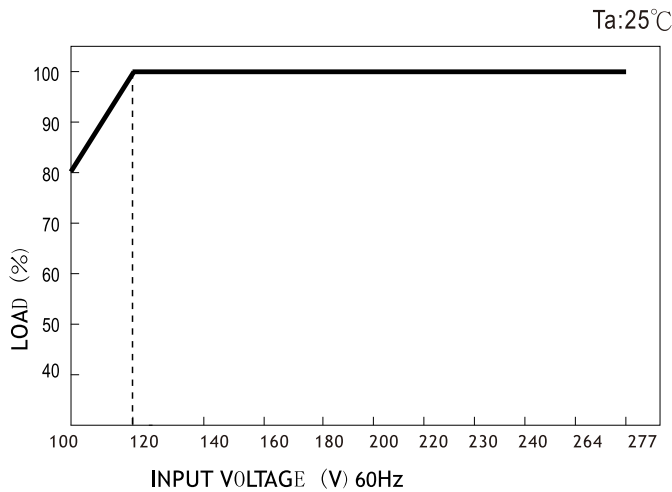
Block diagram



Derating curve



Static characteristic



Power Factor Characteristic

