



2023-V1.0-0512

Specifications

LED Power Supplies

PGDW-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

PGDW-60V SERIES, 60WATT, IP67 RATING

Features

- Constant voltage design
- 90~264 VAC input range
- Fully encapsulated with IP67 level
- Protections: short circuit,over load
- Cooling by free air convection
- 100% full load burn-in test
- Suitable for LED lighting and moving sign applications
- High reliability/Low cost
- 2 Years warranty



Dimension: 200×40×22mm

Applications

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

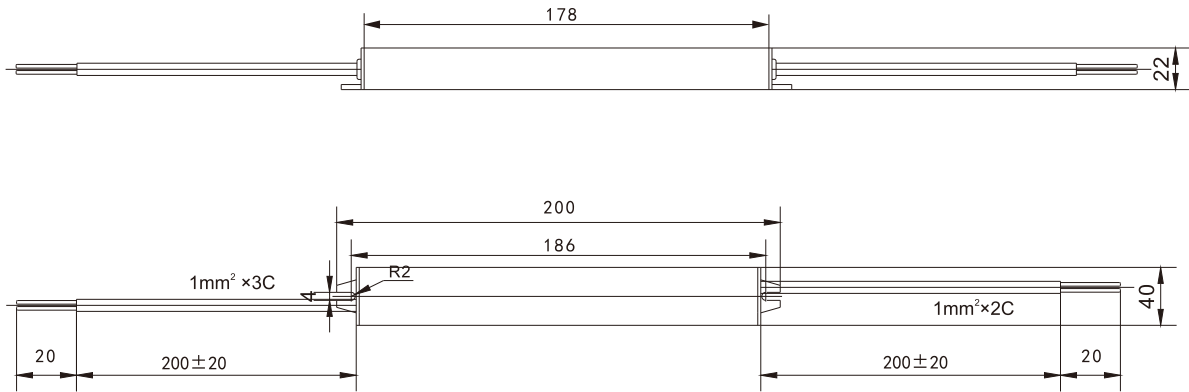
	Model	PGDW060V12	PGDW060V24
Output	DC voltage	12V	24V
	Rated current	5A	2.5A
	Current range	0 ~ 5A	0 ~ 2.5A
	Rated power	60W	60W
	Ripple&noise	120mVp-p	150mVp-p
	Voltage tolerance	± 3.0%	± 2.0%
	Line regulation	± 1.0%	
	Load regulation	± 2.0%	± 2.0%
	Setup, rise time	800ms, 20ms/230VAC at full load	
	Hold up time	24ms/230VAC at full load	
Input	Voltage range	90-264VAC 135-373VDC	
	Efficiency	85.5%	87.5%
	Frequency range	47-63Hz	
	AC current	1.4A/115VAC, 0.7A/230VAC	
	Inrush current	Cold start 55A/230VAC (twidth=500µs 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	
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)	
	Vibration	10 ~ 500Hz, 5G 10min./1Cycle, Period for 60min, Each axes	
Safety& EMC	Safety standards	Compliance to IEC62368-1, UL62368-1, EN62368-1, IEC61347-1, UL61347, EN61347-1	
	Withstand voltage	I/P-O/P: 1.5KVAC I/P-FG: 1.5KVAC O/P-FG: 0.5KVAC	
	Isolation resistance	I/P-O/P: 100M Ohms/500VDC/25°C/70%RH	
	EMC emission	Compliance to EN55015(CISPR22)Class A, GB9254 Class A, EN55014, EN61000-3-2,3	
	EMC immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A	
Others	MTBF	790K hrs min. MIL-HDBK-217F(25°C)	
	Dimension	200*40*22 mm (L*W*H)	
	Packing	0.36kg/60pcs/21.6kgs/0.039m³/1.39CUFT	

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 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.

Mechanical specification

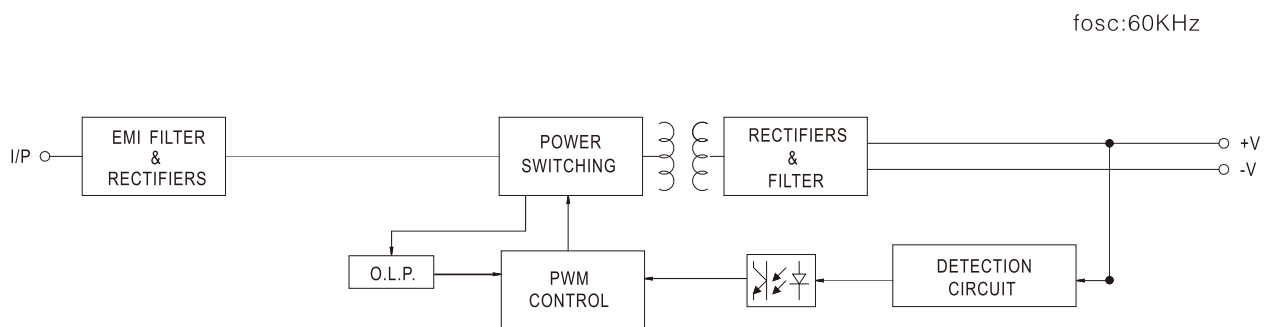
Unit:mm



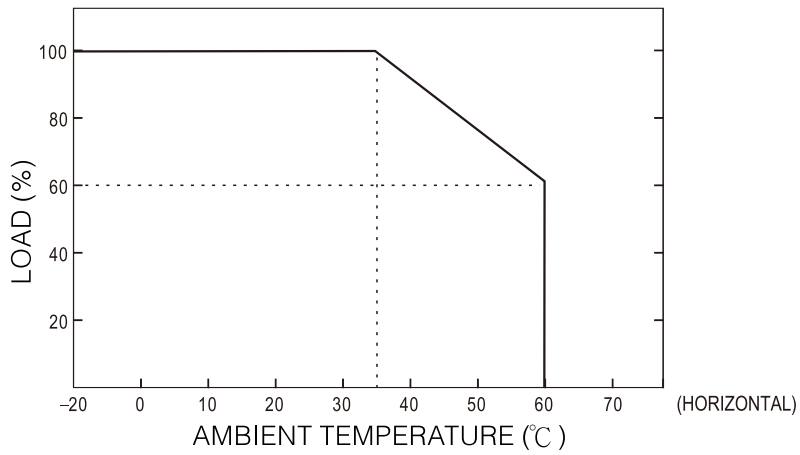
Lead-out wire assignment

Input(Black three-core)		Output (White two-core)	
Brown	AC/L	Red	DC OUTPUT +V
Blue	AC/N	Black	DC OUTPUT -V
Yellow-green	FG \perp	Shell connect with earth	

Block diagram



Derating curve



Static characteristic

