



2023-V1.0-0512

Specifications

LED Power Supplies

PGDW-12V Series, 12W

PAIRUI ELECTRONICS

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2023

LED Power Supplies

PGDW-12V SERIES, 12WATT, IP67 RATING

Features

- Constant voltage design
- Universal AC input / Full range
- Small volume, low weight, high efficiency
- Cooling by free air convection
- Fully encapsulated with IP67 level
- 100% full load burn-in test
- 2 Years warranty



Dimension: 137×30×20mm

Applications

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

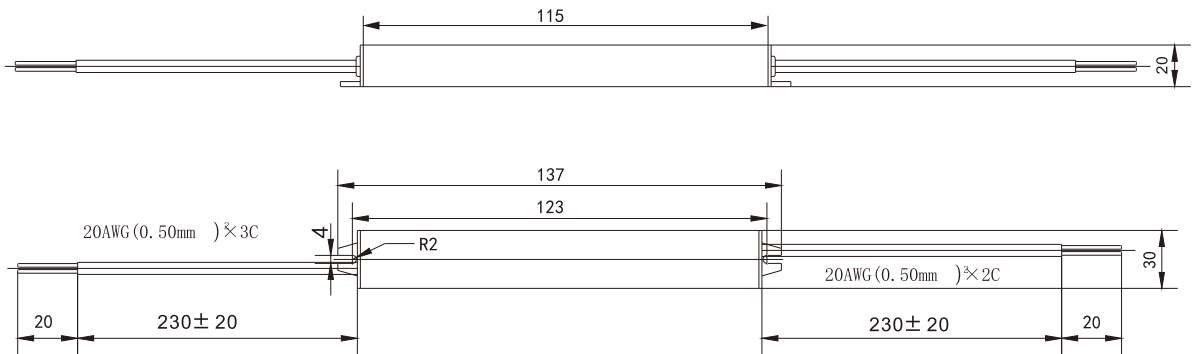
	Model	PGDW012V12	PGDW012V24	PGDW012V36
Output	DC voltage	12V	24V	36V
	Voltage tolerance	± 3%	± 2%	± 3%
	Rated current	1A	0.5A	0.33A
	Current range	0 ~ 1A	0 ~ 0.5A	0 ~ 0.33A
	Rated power	12W	12W	11.9W
	Ripple&noise	120mVp-p	150mVp-p	150mVp-p
	Setup,rise,hold up time	800ms,20ms,24ms/230VAC		
Input	Voltage range	90 ~ 264VAC 47 ~ 63Hz, 135 ~ 373VDC		
	AC current	0.3A/115VAC 0.15A/230VAC		
	Efficiency	79%	81%	82%
	Inrush current	Cold start30A/230VAC		
	leakage current	< 0.5mA/240VAC		
Protection	Overload	Rated output power135%~175%Start overload protection		
		Protection type: hiccup mode, auto-recovery after fault condition is removed		
	Over temperature	When temperature of transistor inner node is over150°C±10°C,Start over temp protection		
		Protection mode: cutoff output, auto-recovery after temperature become normal		
Environment	Working temp,humidity	-20°C~+60°C;20%~90%RH(Please refer to“derating curve”)		
	Storage temp,humidity	-40°C ~ +85°C;10%~95%RH Non-condensing		
	Withstand vibration	10-500Hz, 5G 10min./1Cycle, Period for 60min, Each axes		
Safety	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		
Fit standard	Safety standard	Compliance to IEC62368-1,UL62368-1, EN62368-1,IEC61347-1,UL61347,EN61347-1		
	EMC Standard	Compliance to EN55015(CISPR22)Class A, GB9254 Class A,EN55014,EN61000-3-2,3		
Others	MTBF	1550K hrs min. MIL-HDBK-217F(25°C)		
	Dimension	137*30*20mm (L*W*H)		
	Packing	0.16kg/100pcs/16kg/0.03m³/1.06CUFT		

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.

Mechanical specification

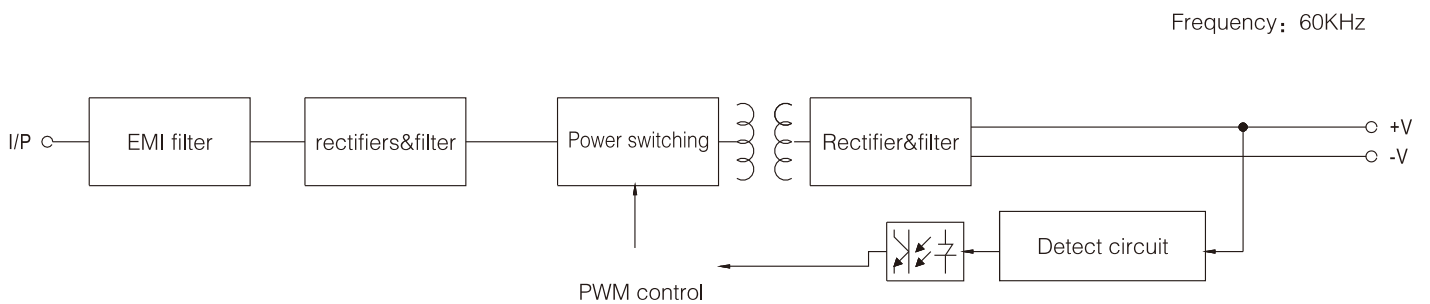
Unit:mm



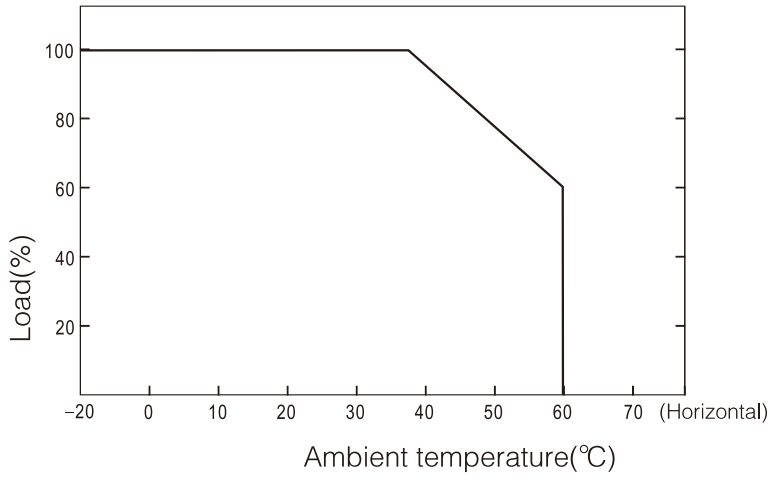
Lead-out wire assignment

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

