2023-V1.0-0512

Specifications

LED Power Supplies

PGMW-100V Series, 100W

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2023

LED Power Supplies

PGMW-100V SERIES, 100WATT, IP67 RATING

Features

Dimension: 240×43×30mm

- 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
- Class 2 power supply unit,CLASS II power supply,no FG
- 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

Applications

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

	Model	PGMW100V12	PGMW100V24
Output	DC voltage	12V	24V
	Rated current	8.5A	4.2A
	Current range	0~8.5A	0~4.2A
	Rated power	102W	100.8W
	Ripple&noise	150mVp-p	150mVp-p
	Voltage tolerance	± 3%	
	Line regulation	±0.5%	
	Load regulation	± 2%	
	Setup,rise,hold time	1200ms,20ms,24ms/100VAC,500ms,20ms,24ms/240VAC,400ms,20ms,24ms/277VAC at full load	
Input	Voltage range	100~240VAC 50/60Hz	
	AC current	1.2A/100VAC 0.6A/220VAC 0.5A/277VAC	
	Efficiency	85%	87%
	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 55A/230VAC (twidth=120μs measured at 50% Ipeak)	
	Leakage current	＜2mA/240VAC	
Protection	Overload	105~140% rated output power Start overload protection	
		Protection type: Hiccup mode, auto-recovery after fault condition is removed	
	Over voltage	13.5~16V	27~30V
		Protection type: Hiccup mode, auto-recovery after fault condition is removed	
	Over temperature	95℃±10℃(RT2)	
		Protection type: Shut down output voltage, recovers automatically after temperature goes down	
Environment	Working temperature	-30℃~+40℃(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	Compliance to UL 1020,CAN/CSA–C22.2No. 107.1-01,UL 8570,CSA C22.2 No,250.0-08,	
		Compliance to EN 61347-1,EN 61347-2-13 , EN 60335–1, EN 62368–1	
		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 EN 55015- CLASS B, EN 55014- CLASS B,EN 61000-3-2,EN 61000-3-3	
	EMC immunity	Compliance to EN 61000–4–2,3,4,5,6,8,11; EN 61547, EN 55024	
Others	MTBF	420K hrs min. MIL-HDBK-217F(25℃)	
	Dimension	240*43*30 mm (L*W*H)	
	Packing	0.66kg/25pcs/16.7kg/0.023m³/0.8CUFT(box dimension:36x30x21cm)	

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 minutes.

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.

8. The LED driver is “Non-IC classified” under AS/NZS 61347.1.

9. The LED driver is not suitable for residential installation.

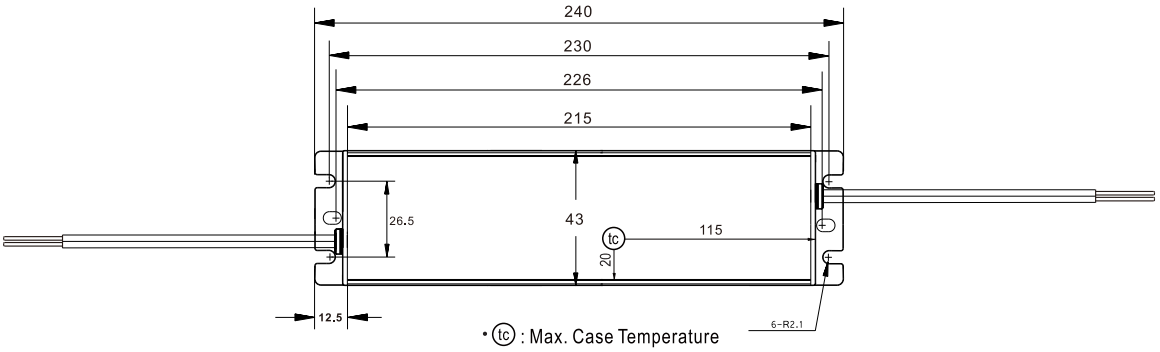
10.The minimum distance from the top and sides of the controlgear to normally flammable building elements should be no less than 5cm.

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.

12.The external flexible cable or cord of this luminaire cannot be replaced; if the cord isdamaged, the luminaire shall be destroyed.

Mechanical specification

Unit:mm

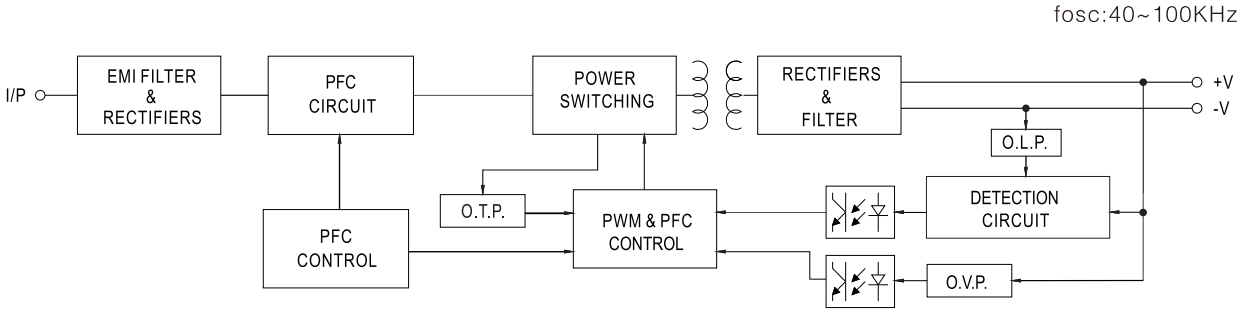


NOTE:The Driver Shell Must Be Grounded When Install

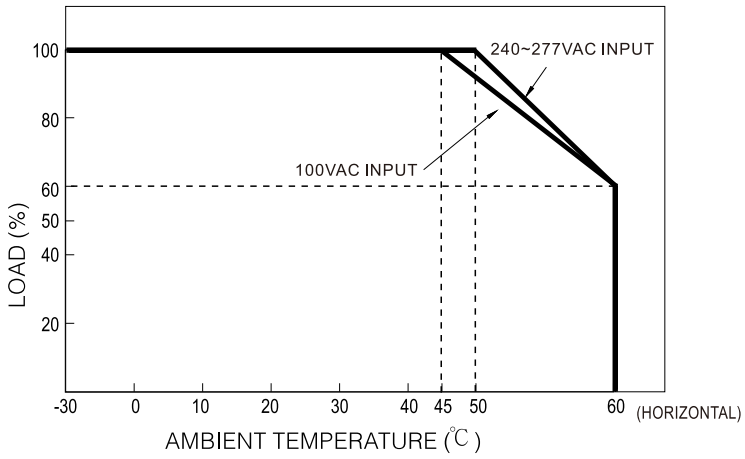
Lead-out wire assignment

Input(Black two–core)		Output (Black two–core)	
Brown	AC/L	Red	DC OUTPUT +V
Blue	AC/N	Black	DC OUTPUT -V

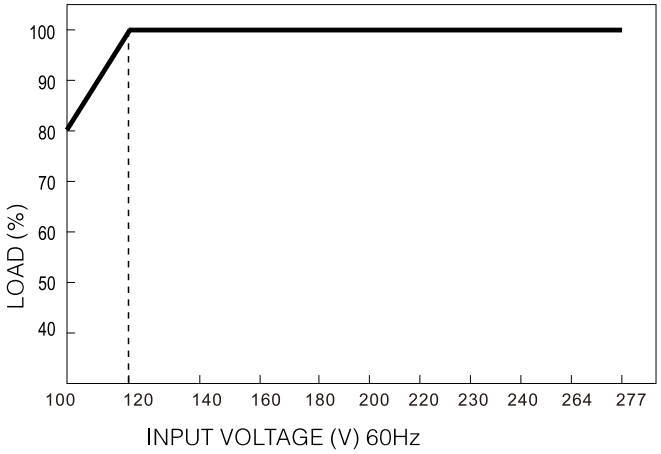
Block diagram



Derating curve



Static characteristic



Power Factor Characteristic