



2023-V1.0-0512

Specifications

LED Power Supplies

PGMW-200V Series, 200W

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2023

LED Power Supplies

PGMW-200V SERIES, 200WATT, 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 \geq 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
- 5 Years warranty



Dimension: 244x71x37.5mm



Applications

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

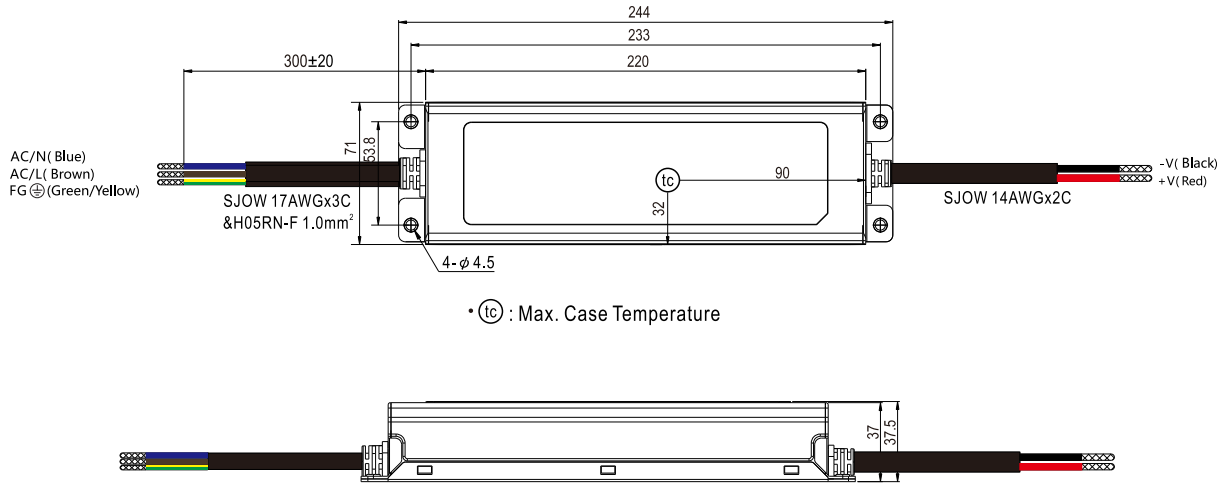
| | Model | PGMW200V12 | PGMW200V24 | PGMW200V36 |
|------------------------|--|--|---|------------|
| Output | DC voltage | 12V | 24V | 36V |
| | Rated current | 16.5A | 8.5A | 5.6A |
| | Current range | 0~16.5A | 0~8.5A | 0~5.6A |
| | Rated power | 198W | 204W | 201.6W |
| | Ripple&noise | 150mVp-p | 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 (twidth=750µs measured at 50% Ipeak) | | |
| | 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 |
| Over temperature | | 105°C ± 10°C(RTH3 detect at transformer side) Protection type: Shut down output voltage, recovers automatically after temperature goes down | | |
| Environment | Working temperature | -30°C~+60°C(Please refer to“derating curve”) | | |
| | Working humidity | 20%~90%RH Non-condensing | | |
| | Storage temp, humidity | -40°C ~ +80°C; 10%~95%RH | | |
| | Temp. coefficient | ± 0.03%/°C (0~50°C) | | |
| | 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, UL 62368-1,UL8750,TUV 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°C/70%RH | | |
| EMC | EMC emission | Compliance to EN55015- CLASS 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°C) | | |
| | Dimension | 244*71*37.5 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°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

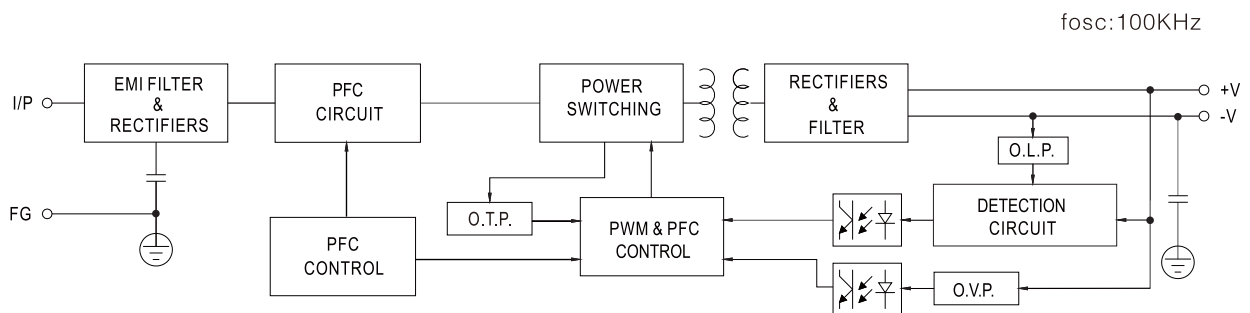
Unit:mm



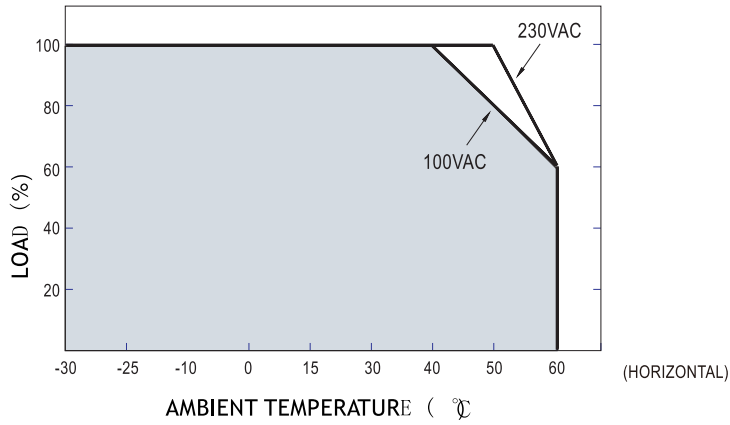
Lead-out wire assignment

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

Block diagram



Derating curve



Static characteristic

