GPVP-60 series

60W Single Output Switching Power Supply with PFC function





■ Features:

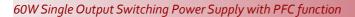
- Constant voltage design
- Universal AC input / Full range
- Built-in active PFC function, PFC > 0.9
- Protections: Short circuit / Over current / Over voltage
- Cooling by free air convection
- Isolation class II
- Fully encapsulated with IP67 level [5]



ELECTRICAL SPECIFICATION

| MODEL | GPVP-60-12 | GPVP-60-24 |
|---------------------------|---|-------------------|
| OUTPUT | | |
| RATED VOLTAGE | 12V | 24V |
| RATED CURRENT | 5A | 2.5A |
| CURRENT RANGE | 0 ÷ 5A | 0 ÷ 2.5A |
| RATED POWER | 60W | 60W |
| LINE REGULATION | ± 1% | |
| LOAD REGULATION | ± 2% | ± 2% |
| TOLERANCE [3] | ± 5% | |
| RIPPLE & NOISE (max.) [2] | 5V _{P-P} | 5V _{P-P} |
| SETUP, RISE TIME [4] | 1500ms, 250ms / 230VAC; 3000ms, 250ms / 115VAC at full load | |
| INPUT | | |
| VOLTAGE RANGE | 90 ÷ 264VAC, 127 ÷ 350VDC | |
| FREQUENCY RANGE | 47 ÷ 63Hz | |
| EFFICIENCY (typ.) | 90% | 90% |
| AC CURRENT (typ.) | 1.2A / 115VAC, 0.6A / 230VAC | |
| POWER FACTOR | PF > 0.9 / 230VAC; PF > 0.95 / 115VAC | |
| INRUSH CURRENT (typ.) | 70A / 230VAC, 35A / 115VAC | |
| LEAKAGE CURRENT (max.) | 0.25mA / 240VAC | |
| PROTECTIONS | | |
| OVER CURRENT | Range: 150 ÷ 200% rated current | |
| | Type: hiccup mode, auto-recovery. | |
| SHORT CIRCUIT | Type: hiccup mode, auto-recovery. | |

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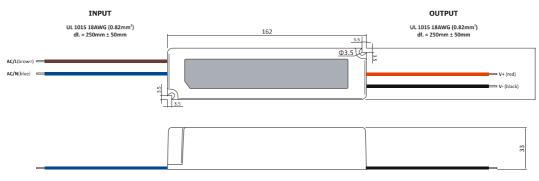




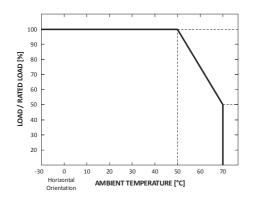
| WORKING ENVIRONMENT | | |
|----------------------------------|--|--|
| WORKING TEMPERATURE | -30°C ÷ 70°C (Refer to Derating Curve) | |
| WORKING HUMIDITY | 20 ÷ 9,% RH non-condensing | |
| STORAGE TEMPERATURE AND HUMIDITY | -40°C ÷ 80°C, 10 ÷ 95% RH non-condensing | |
| TEMPERATURE COEFFICIENT | ± 0.03% / °C (0°C ÷ 50°C) | |
| VIBRATION | 10 ÷ 500Hz, 2G, 10min / cycle, period for 60min. each along X, Y, Z axes | |
| SAFETY AND EMC REGULATIONS | | |
| SAFETY STANDARDS | Compliance to EN61347-1, EN61347-2-13, IP67 | |
| WITHSTAND VOLTAGE | I-P/O-P: 3kVAC | |
| ISOLATION RESISTANCE | I-P/O-P: 100MΩ/500VDC/25°C/70% | |
| EMC EMISSION | Compliance to EN55015 | |
| EMC IMMUNITY | Compliance to EN61547; EN55024; EN61000-4-2, -3, -4, -5, -6, -8, -11 | |
| HARMONIC CURRENT | Compliance to EN61000-3-3; EN61000-3-2 class C(≥ 60% load) | |
| OTHERS | | |
| DIMENSIONS | 162 x 42 x 33mm (L x W x H) | |
| WEIGHT AND PACKING | 0.4kg; 50pcs./box; box weight and dimensions: 21kg; 38.5 x 27.5 x 19.5cm | |

- 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 0.1µF i 47µF parallel capacitor.
- 3. Tolerance includes set up tolerance, line regulation and load regulation.
- 4. Setup and rise time is measured from 0 to 90% rated output voltage.
- 5. Suitable for indoor or outdoor use. Please avoid direct exposure to sunlight and immersion in water for over 30 minutes.
- 6. 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 must be re-qualify to comply with EMC Directives.

MECHANICAL SPECIFICATION



DERATING CURVE



STATIC CHARACTERISTICS

