

60W Single Output Switching Power Supply

LPV-60 series



Features :

- Constant voltage design
- Universal AC input / Full range
- Fully encapsulated with IP67 level (Note.8)
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage
- Fully isolated plastic case
- Cooling by free air convection
- UL1310 Class 2 power unit
- Pass LPS
- 100% full load burn-in test
- Low cost, high reliability
- Suitable for LED lighting and moving sign applications (Note.7)
- 2 years warranty

SPECIFICATION

| MODEL | ATION | LPV-60-5 | LPV-60-12 | LPV-60-15 | LPV-60-24 | LPV-60-36 | LPV-60-48 |
|-----------------|--|--|------------|----------------|--------------|--------------|--------------|
| OUTPUT | DC VOLTAGE | 5V | 12V | 15V | 24V | 36V | 48V |
| | RATED CURRENT | 8A | 5A | 4A | 2.5A | 1.67A | 1.25A |
| | CURRENT RANGE | 0~8A | 0~5A | 0~4A | 0~2.5A | 0~1.67A | 0~1.25A |
| | RATED POWER | 40W | 60W | 60W | 60W | 60W | 60W |
| | RIPPLE & NOISE (max.) Note.2 | 80mVp-p | 120mVp-p | 120mVp-p | 150mVp-p | 150mVp-p | 150mVp-p |
| | VOLTAGE TOLERANCE Note.3 | ±8.0% ±5.0% | | | | | |
| | LINE REGULATION | ±1.0% | | | | | |
| | LOAD REGULATION | ±6.0% ±2.0% | | | | | |
| | SETUP, RISE TIME Note.6 | 500ms, 20ms / 230VAC 500ms, 20ms / 115VAC at full load(for 5~36V) ; 500ms, 30ms / 230VAC 500ms, 30ms / 115VAC at full load(for 48V) | | | | | |
| | HOLD UP TIME (Typ.) | 50ms/230VAC 16ms/115VAC at full load | | | | | |
| INPUT | VOLTAGE RANGE Note.4 | 90 ~ 264VAC 127 ~ 370VDC | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | |
| | EFFICIENCY (Typ.) | 76% | 83% | 83% | 86% | 86% | 86% |
| | AC CURRENT | 1.2A/115VAC 1A/230VAC | | | | | |
| | INRUSH CURRENT(max.) | COLD START 30A/115VAC 60A/230VAC | | | | | |
| | LEAKAGE CURRENT | 0.25mA / 240VAC | | | | | |
| PROTECTION | | 110 ~ 150% rated output power | | | | | |
| | OVER CURRENT | Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | |
| | | 5.75~6.75V | 13.8~16.2V | 17.25 ~ 20.25V | 27.6 ~ 32.4V | 41.4 ~ 48.6V | 55.2 ~ 64.8V |
| | OVER VOLTAGE | Protection type : Shut down o/p voltage, re-power on to recover | | | | | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +70°C (Refer to output load derating curve) | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +80°C, 10 ~ 95% RH | | | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0~50°C) | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | | |
| SAFETY & EMC | SAFETY STANDARDS | UL879, UL1310 Class 2(except for LPV-60-5), CAN/CSA C22.2 No. 223-M91(except for LPV-60-5, LPV-60-48), IP67 approved ; design refer to TUV EN60950-1, EN61347-2-13 | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70% RH | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 (CISPR22) Class B | | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2 Class A, EN61000-3-3 | | | | | |
| | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A | | | | | |
| OTHERS | MTBF | 732Khrs min. MIL-HDBK-217F (25℃) | | | | | |
| | DIMENSION | 162.5*42.5*32mm (L*W*H) | | | | | |
| | PACKING | 0.4Kg; 32pcs/13.8Kg | /0.56CUFT | | | | |
| NOTE | All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. Derating may be needed under low input voltage. Please check the static characteristics for more details. 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. 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. In the European market this product is only suitable for LED lighting applications that don't have to comply with the harmonic current requirements of EN61000-3-2 Class C. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minute. | | | | | | |



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