



60W Single Output Switching Power Supply

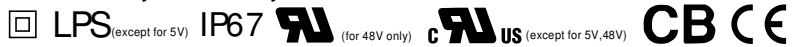
LPV-60 series



■ Features :

- Constant voltage design
- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Over load / Over voltage
- Cooling by free air convection
- Fully encapsulated with IP67 level (Note.8)
- Fully isolated plastic case
- Class II power unit, no FG
- Class 2 power unit
- Pass LPS
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)(Note.7)
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

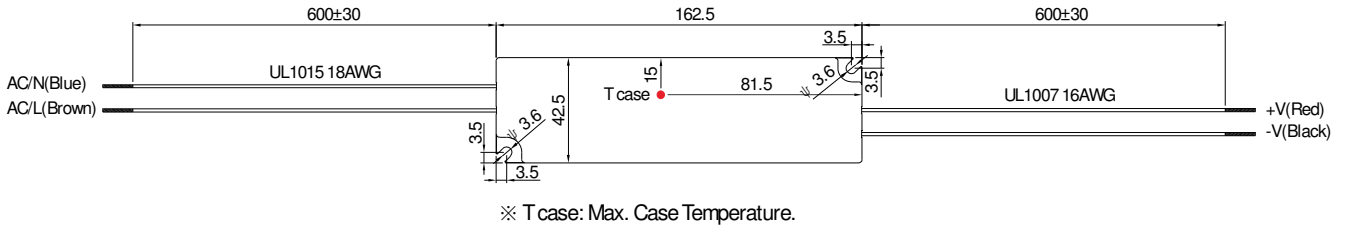
SPECIFICATION



| MODEL | 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 (Typ.) | 1.2A/115VAC 1A/230VAC | | | | | |
| | INRUSH CURRENT(Typ.) | COLD START 60A(twidth=525µs measured at 50% Ipeak) at 230VAC | | | | | |
| | MAX. No. of PSUs on 16A CIRCUIT BREAKER | 3 units (circuit breaker of type B) / 6 units (circuit breaker of type C) at 230VAC | | | | | |
| LEAKAGE CURRENT | 0.25mA / 240VAC | | | | | | |
| PROTECTION | OVER LOAD | 110 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | |
| | OVER VOLTAGE | 5.75 ~ 6.75V | 13.8 ~ 16.2V | 17.25 ~ 20.25V | 27.6 ~ 32.4V | 41.4 ~ 48.6V | 55.2 ~ 64.8V |
| | | Protection type : Shut down o/p voltage, re-power on to recover | | | | | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +70°C (Refer to "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(except for LPV-60-5), UL1310(except for LPV-60-5), CSA C22.2 No. 207-M89(except for LPV-60-5, LPV-60-48), CAN/CSA C22.2 No. 223-M91(except for LPV-60-5, LPV-60-48), IP67, IEC60950-1:2005+A2:2013 approved ; design refer to TUV EN60950-1 | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P:>100M Ohms / 500VDC / 25°C / 70% RH | | | | | |
| | EMC EMISSION | Compliance to EN55032 (CISPR32) Class B, EN61000-3-2 Class A, EN61000-3-3 | | | | | |
| EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A | | | | | | |
| OTHERS | MTBF | 732Khrs min. MIL-HDBK-217F (25°C) | | | | | |
| | DIMENSION | 162.5*42.5*32mm (L*W*H) | | | | | |
| | PACKING | 0.4Kg; 32pcs/13.8Kg/0.56CUFT | | | | | |
| NOTE | <ol style="list-style-type: none"> 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 0.1µf & 47µf 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. The unit might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the unit. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minute. | | | | | | |

■ Mechanical Specification

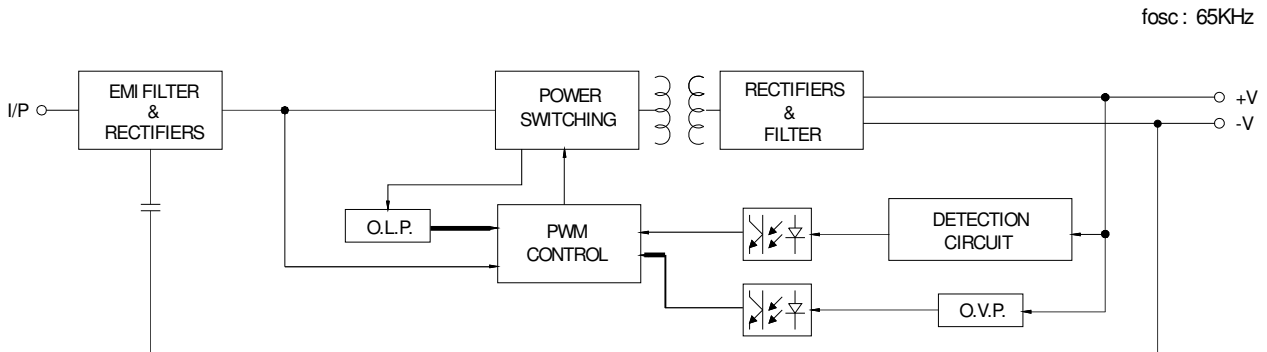
Case No. 976A Unit:mm



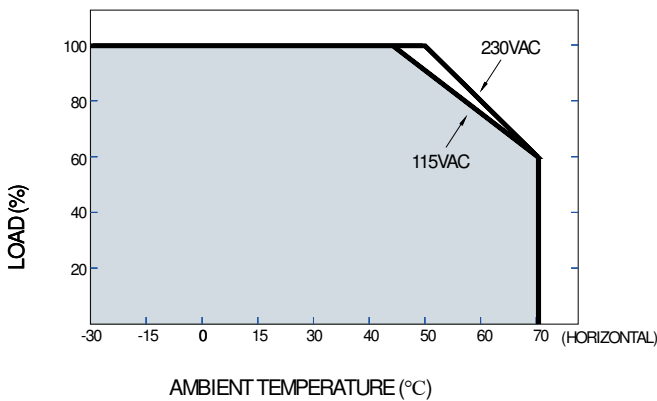
■ Recommend Mounting Direction



■ Block Diagram



■ Derating Curve



■ Static Characteristics

