



100W Single Output Switching Power Supply

LPV-100 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 / Over current / Over voltage
- Fully isolated plastic case
- Cooling by free air convection
- 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 | LPV-100-5 | LPV-100-12 | LPV-100-15 | LPV-100-24 | LPV-100-36 | LPV-100-48 | |
|---------------------|--------------------------------------|---|--------------|----------------|--------------|--------------|--------------|
| OUTPUT | DC VOLTAGE | 5V | 12V | 15V | 24V | 36V | 48V |
| | RATED CURRENT | 12A | 8.5A | 6.7A | 4.2A | 2.8A | 2.1A |
| | CURRENT RANGE | 0 ~ 12A | 0 ~ 8.5A | 0 ~ 6.7A | 0 ~ 4.2A | 0 ~ 2.8A | 0 ~ 2.1A |
| | RATED POWER | 60W | 102W | 100.5W | 100.8W | 100.8W | 100.8W |
| | 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 | 2000ms, 25ms / 230VAC 2000ms, 25ms / 115VAC | | | | | |
| HOLD UP TIME (Typ.) | 50ms/230VAC 14ms/115VAC at full load | | | | | | |
| INPUT | VOLTAGE RANGE Note.4 | 90 ~ 264VAC | 127 ~ 370VDC | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | |
| | EFFICIENCY (Typ.) | 80% | 85% | 87% | 88% | 88% | 89% |
| | AC CURRENT | 2.2A/115VAC 1.2A/230VAC | | | | | |
| | INRUSH CURRENT(Typ.) | COLD START 75A(twidth=700µs measured at 50% Ipeak) at 230VAC | | | | | |
| | LEAKAGE CURRENT | 0.25mA / 240VAC | | | | | |
| PROTECTION | OVER CURRENT | 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 |
| ENVIRONMENT | WORKING TEMP. | -25 ~ +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 | IP67 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 EN55022 (CISPR22) Class B, EN61000-3-2 Class A(≤80% load), EN61000-3-3 | | | | | |
| OTHERS | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; EN55024, light industry level, criteria A | | | | | |
| | MTBF | 703Khrs min. MIL-HDBK-217F (25°C) | | | | | |
| | DIMENSION | 190*52*37mm (L*W*H) | | | | | |
| NOTE | PACKING | 0.63Kg;20pcs/13.6Kg/0.51CUFT | | | | | |
| | | 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. Derating may be needed under low input voltage. Please check the static characteristics for more details. 5. 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. 6. 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. 7. 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. 8. Suitable for indoor use or outdoor use without direct sunlight exposure. | | | | | |

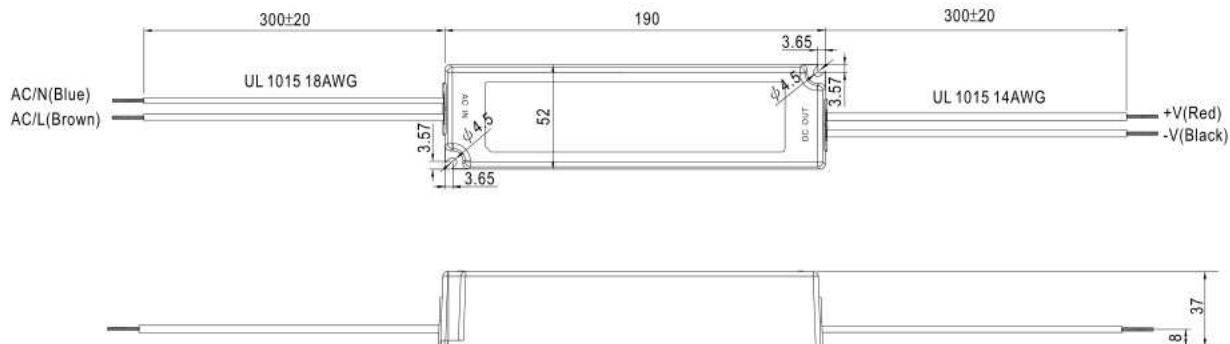


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■ Mechanical Specification

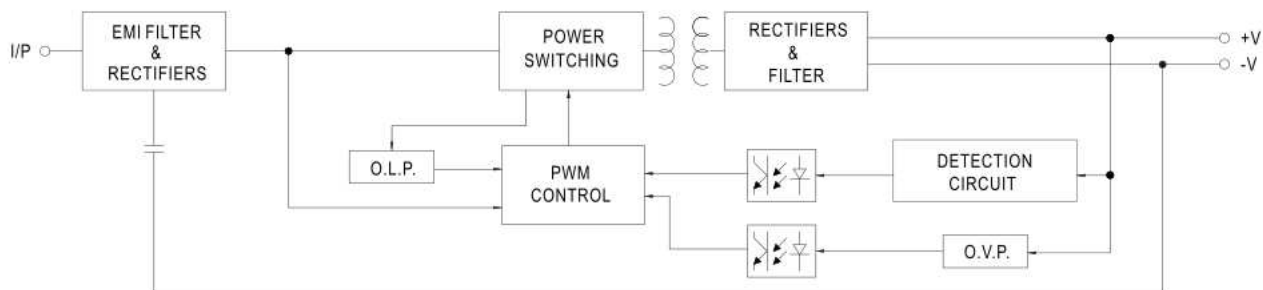
Case No. 999A Unit:mm



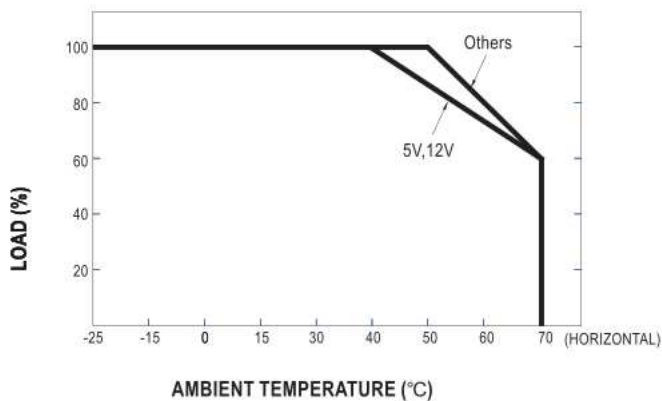
■ Recommend Mounting Direction



■ Block Diagram



■ Derating Curve



■ Static Characteristics

