35W Single Output Switching Power Supply

LPV-35 series



Features :

- Constant voltage design
- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Fully encapsulated with IP67 level (Note.9)
- Fully isolated plastic case
- Class Ⅱ power unit, no FG
- Class 2 power unit
- Pass LPS
- Suitable for LED lighting and moving sign applications (Note.8)
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

SPECIFICATION

LPS IP67

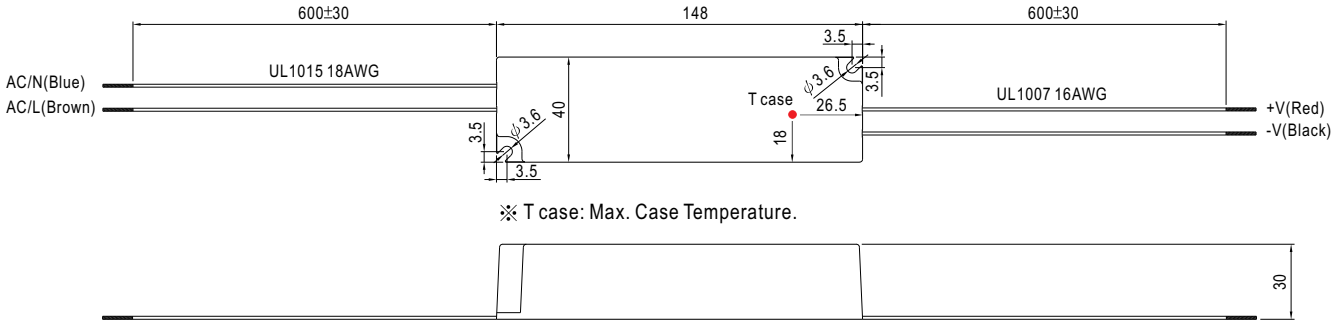
MODEL		LPV-35-5	LPV-35-12	LPV-35-15	LPV-35-24	LPV-35-36
OUTPUT	DC VOLTAGE	5V	12V	15V	24V	36V
	RATED CURRENT	5A	3A	2.4A	1.5A	1A
	CURRENT RANGE	0 ~ 6A (Note.7)	0 ~ 3A	0 ~ 2.4A	0 ~ 1.5A	0 ~ 1A
	RATED POWER	30W	36W	36W	36W	36W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	120mVp-p	150mVp-p	150mVp-p
	VOLTAGE TOLERANCE Note.3	±6.0%	±5.0%			
	LINE REGULATION	±1.0%				
	LOAD REGULATION	±4.0%	±2.0%			
	SETUP, RISE TIME Note.6	500ms, 20ms / 230VAC 500ms, 20ms / 115VAC at full load				
	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.)	77%	84%	84%	85%	85%
	AC CURRENT (Typ.)	1.1A/115VAC 0.7A/230VAC				
	INRUSH CURRENT(max.)	COLD START 30A/115VAC 60A/230VAC				
	LEAKAGE CURRENT	0.25mA / 240VAC				
PROTECTION	OVERLOAD	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
		Protection type : Shut down o/p voltage, re-power on to recover				
ENVIRONMENT	WORKING TEMP.	-30 ~ +75℃ (Refer to "Derating Curve")				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +80℃, 10 ~ 95% RH				
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
SAFETY & EMC	SAFETY STANDARDS	UL1310, CAN/CSA C22.2 No. 223-M91, 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℃/ 70% RH				
	EMC EMISSION	Compliance to EN55022 (CISPR22) 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	743.5Khrs min. MIL-HDBK-217F (25℃)				
	DIMENSION	148*40*30mm (L*W*H)				
	PACKING	0.34Kg; 40pcs/14.6Kg/0.63CUFT				

NOTE

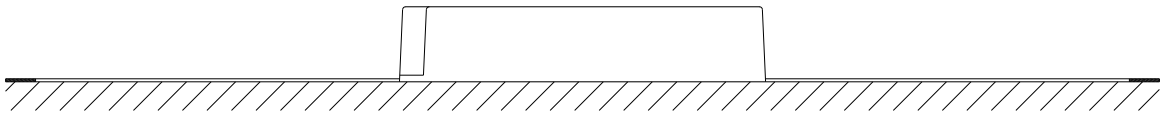
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation 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. LPV-35-5 can provide 6A of output current continuously. Based on the requirement of UL1310 class 2, the output current is only certified up to 5A for the test report of LPV-35-5.
8. 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.
9. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minute.

■ Mechanical Specification

Case No.975A Unit:mm

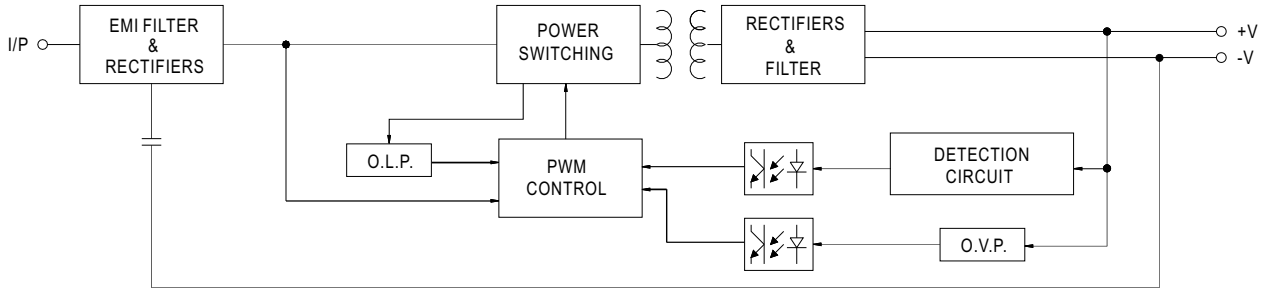


■ Recommend Mounting Direction

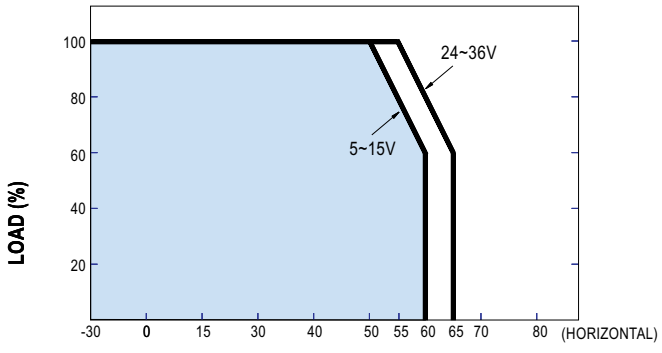


■ Block Diagram

fosc : 65KHz



■ Derating Curve



■ Static Characteristics

