



## 35W Single Output Switching Power Supply

# LPV-35 series



### ■ Features :

- Constant voltage design
- Universal AC input / Full range
- Epoxy encapsulated with IP67 level
- 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
- 2 years warranty

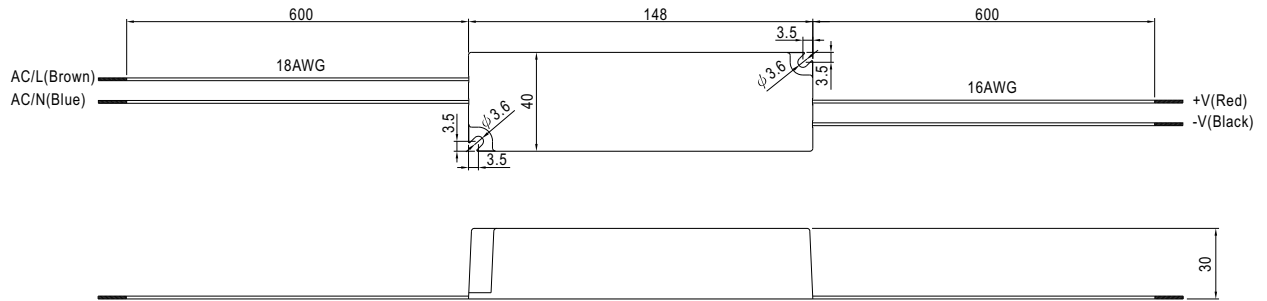
LPS IP67 c

### SPECIFICATION

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	90 ~ 264VAC				
	FREQUENCY RANGE	47 ~ 63Hz				
	EFFICIENCY (Typ.)	77%	84%	84%	85%	85%
	AC CURRENT	1.1A/115VAC 0.7A/230VAC				
	INRUSH CURRENT(max.)	COLD STAR 30A/115VAC 60A/230VAC				
LEAKAGE CURRENT	0.25mA / 240VAC					
PROTECTION	OVER CURRENT Note.4	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
ENVIRONMENT	WORKING TEMP.	-30 ~ +75°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	UL1310 Class 2, CAN/CSA C22.2 No. 223-M91, 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				
OTHERS	HARMONIC CURRENT	Compliance to EN61000-3-2,-3				
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A				
	MTBF	743.5Khrs min. MIL-HDBK-217F (25°C)				
NOTE	DIMENSION	148*40*30mm (L*W*H)				
	PACKING	0.34Kg; 40pcs/14.6Kg/0.63CUFT				
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. Derating may be needed under low input voltage. Please check the derating curve for more details.</li> <li>5. The power supply is considered a component which will be installed a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> <li>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.</li> <li>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.</li> </ol>					

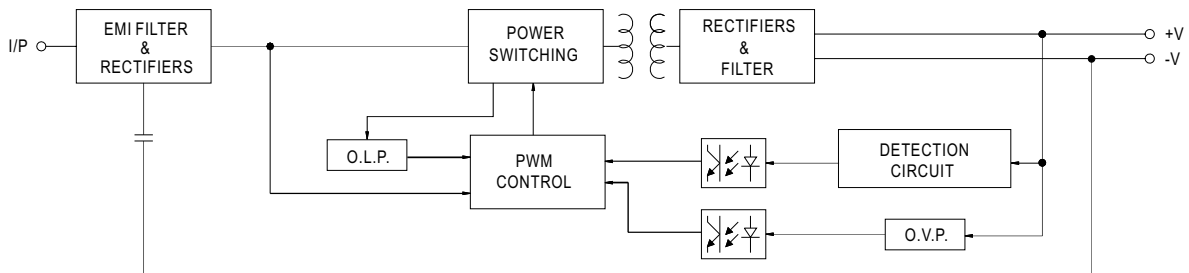
### Mechanical Specification

Case No.975A Unit:mm

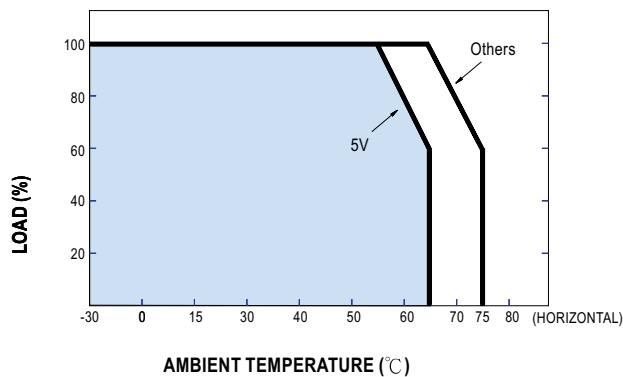


### Block Diagram

fosc : 65KHz



### Derating Curve



### Static Characteristics

