



### ■ Features :

- Constant voltage mode power supply
- Universal AC input / Full range
- Protections: Short circuit / Over current / Over voltage
- Fully isolated plastic case
- Cooling by free air convection
- Small and compact size
- Pass LPS
- 100% full load burn-in test
- Low cost, high reliability
- Suitable for LED lighting and moving sign applications
- 2 years warranty

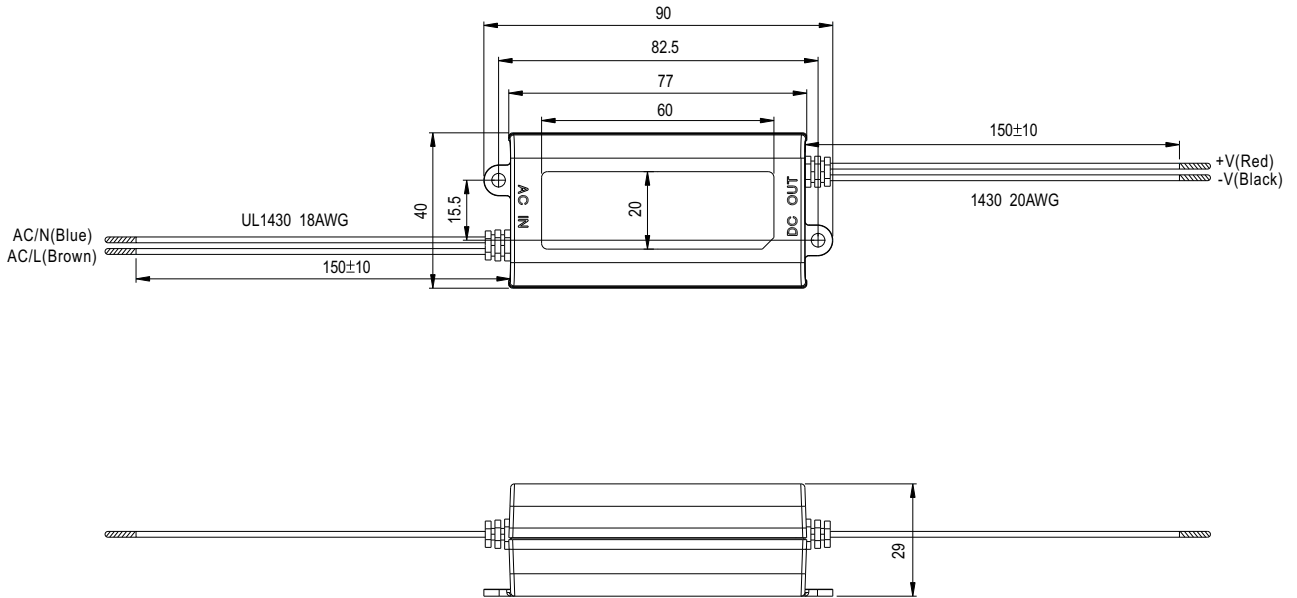
### SPECIFICATION

LPS 

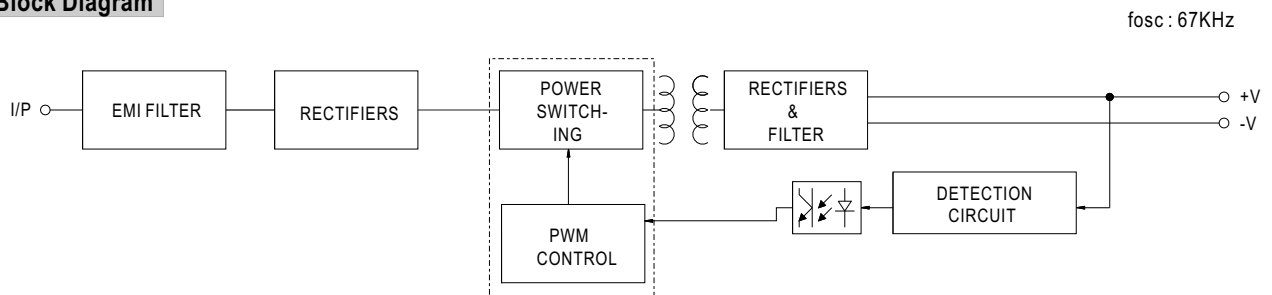
MODEL	APV-12-5	APV-12-12	APV-12-15	APV-12-24	
OUTPUT	DC VOLTAGE	5V	12V	15V	24V
	RATED CURRENT	2A	1A	0.8A	0.5A
	CURRENT RANGE	0 ~ 2A	0 ~ 1A	0 ~ 0.8A	0 ~ 0.5A
	RATED POWER	10W	12W	12W	12W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	120mVp-p	150mVp-p
	VOLTAGE TOLERANCE Note.3	±5.0%			
	LINE REGULATION	±1.0%			
	LOAD REGULATION	±2.0%			
INPUT	SETUP, RISE TIME Note.6	1500ms, 30ms / 230VAC	1500ms, 30ms / 115VAC at full load		
	HOLD UP TIME (Typ.)	20ms/230VAC	15ms/115VAC at full load		
	VOLTAGE RANGE Note.4	90 ~ 264VAC	127 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY (Typ.)	76%	80%	80%	80%
	AC CURRENT	0.2A/230VAC 0.35A/115VAC			
PROTECTION	INRUSH CURRENT(max.)	COLD START 35A/115VAC		70A/230VAC	
	LEAKAGE CURRENT	0.25mA / 240VAC			
	OVER CURRENT	Above 105% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed			
ENVIRONMENT	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16V	17.5 ~ 21V	28 ~ 32V
	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)			
SAFETY & EMC	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
	SAFETY STANDARDS	Design refer to TUV EN60950-1, EN61347-2-13, UL8750			
	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, EN55015, EN61547			
	HARMONIC CURRENT	Compliance to EN61000-3-2 Class A, EN61000-3-3			
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level(surge 2KV), criteria A			
	MTBF	Khrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	77*40*29mm (L*W*H)			
NOTE	PACKING	Kg; pcs/ Kg/ CUFT			
	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>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.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltage. Please check the static characteristics for more details.</p> <p>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.</p> <p>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.</p>				

■ Mechanical Specification

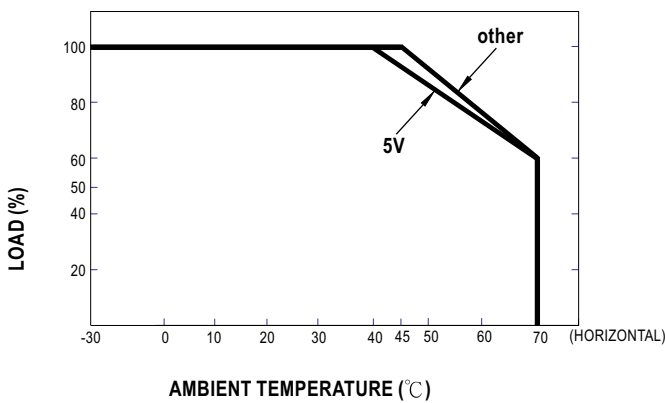
Unit:mm



■ Block Diagram



■ Derating Curve



■ Static Characteristics

