



## 16W Single Output Switching Power Supply

## APV-16 series



## ■ Features :

- Constant voltage design
- Universal AC input / Full range
- Protections: Short circuit / Over load / Over voltage
- Fully isolated plastic case
- Cooling by free air convection
- Small and compact size
- Class II power unit, no FG
- Class 2 power unit
- Pass LPS
- IP42 design
- Suitable for LED lighting and moving sign applications
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

IS 15885(Part 2/Sec13)



R-41027766 (except for 15V)

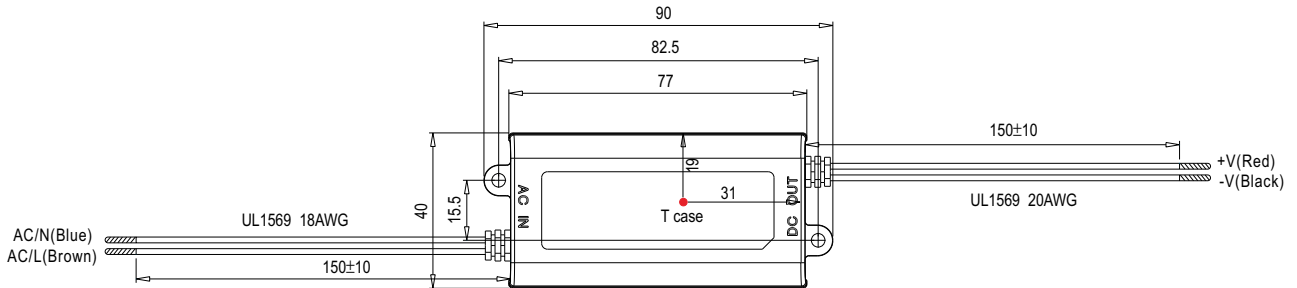


## SPECIFICATION

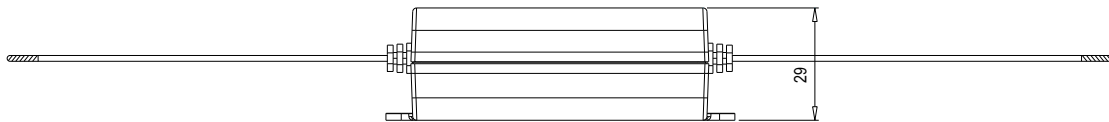
MODEL	APV-16-5	APV-16-12	APV-16-15	APV-16-24	
OUTPUT	DC VOLTAGE	5V	12V	15V	24V
	RATED CURRENT	2.6A	1.25A	1A	0.67A
	CURRENT RANGE	0 ~ 2.6A	0 ~ 1.25A	0 ~ 1A	0 ~ 0.67A
	RATED POWER	13W	15W	15W	16.08W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	120mVp-p	150mVp-p
	VOLTAGE TOLERANCE Note.3	±5.0%			
	LINE REGULATION	±1.0%			
	LOAD REGULATION	±2.0%			
	SETUP, RISE TIME Note.6	1500ms, 30ms / 230VAC		1500ms, 30ms / 115VAC at full load	
HOLD UP TIME (Typ.)	20ms/230VAC	12ms/115VAC at full load			
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC	127 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY (Typ.)	76%	80%	81%	83%
	AC CURRENT	0.3A/230VAC 0.5A/115VAC			
	INRUSH CURRENT(Typ.)	COLD START 50A(twidth=185µs measured at 50% Ipeak) at 230VAC			
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	13 units (circuit breaker of type B) / 22 units (circuit breaker of type C) at 230VAC			
LEAKAGE CURRENT	0.25mA / 240VAC				
PROTECTION	OVER LOAD	Above 105% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16V	17.5 ~ 21V	27.6 ~ 32.4V
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 Note.8	UL8750, CSA C22.2 No.250.0-08, ENEC EN61347-1, EN61347-2-13, EN62384 Independent, IP42 Approved; design refer to EN60950-1			
	WITHSTAND VOLTAGE	I/P-O/P: 3.75KVAC			
	ISOLATION RESISTANCE	I/P-O/P: >100M Ohms / 500VDC / 25°C / 70% RH			
	EMC EMISSION	Compliance to EN55032, EN61000-3-2 Class A, EN61000-3-3			
	EMC IMMUNITY	Compliance to EN55024, EN61000-4-2, 3, 4, 5, 6, 8, 11; light industry level (surge 2KV), criteria A			
OTHERS	MTBF	1145.7K hrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	77*40*29mm (L*W*H)			
	PACKING	0.1Kg; 120pcs/14Kg/1.06CUFT			
NOTE	<ol style="list-style-type: none"> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf &amp; 47µf parallel capacitor.</li> <li>Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>Derating may be needed under low input voltage. Please check the static characteristics for more details.</li> <li>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.</li> <li>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>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.</li> <li>The model certified for CCC(GB19510.14, GB19510.1, GB17743 and GB17625.1) is an optional model . Please contact MEAN WELL for details.</li> </ol>				

## Mechanical Specification

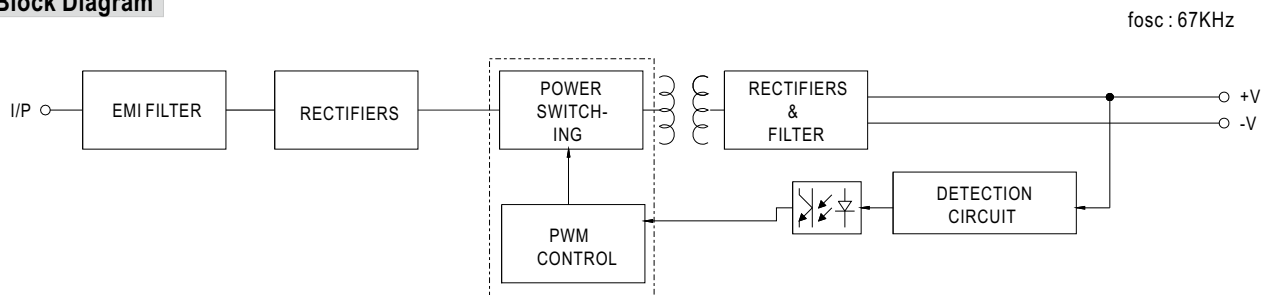
Unit:mm



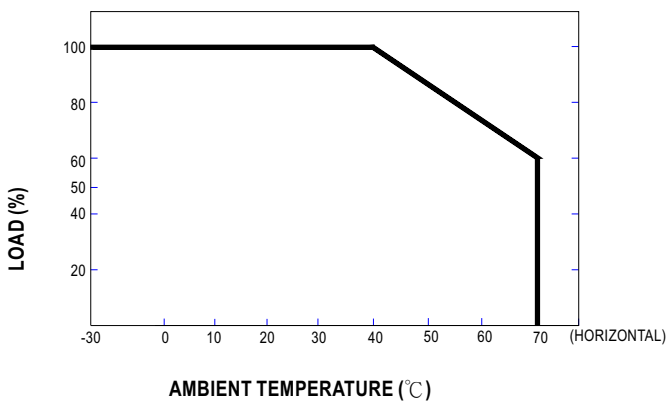
※ T case: Max. Case Temperature



## Block Diagram



## Derating Curve



## Static Characteristics

