



8W Single Output Switching Power Supply

APV-8 series



IS 15885(Part 2/Sect3)

IP42

8
R-41027766 (except for 5V)

■ Features

- Constant voltage design
- Universal AC input / Full range
- Class II power unit, no FG
- Fully isolated plastic case
- IP42 design
- Small and compact size
- Cooling by free air convection
- Protections: Short circuit / Overload / Over voltage
- No load power consumption <0.5W
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

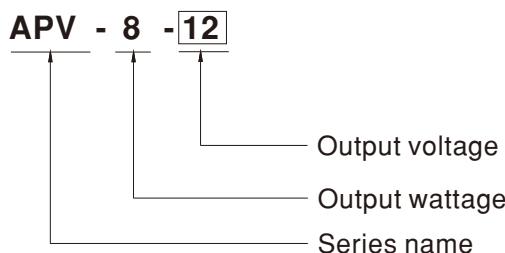
■ Applications

- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)(Note.7)

■ Description

APV-8 series is one 8W AC/DC constant voltage mode single output LED power supply. It accepts the full range input 90~264VAC and provides three models with different output voltage, 5V, 12V, 24V, respectively, that the small wattage LED applications employ the most frequently. Exploiting Class II design (without FG pin) and adopting the 94V-0 flame retardant plastic enclosure, APV-8 ideally fits the entry-level LED applications.

■ Model Encoding





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SPECIFICATION

MODEL	APV-8-5	APV-8-12	APV-8-24		
OUTPUT	DC VOLTAGE	5V	12V		
	RATED CURRENT	1.4A	0.67A		
	CURRENT RANGE	0 ~ 1.4A	0 ~ 0.67A		
	RATED POWER	7W	8.04W		
	RIPPLE & NOISE (max.) Note.2	250mVp-p	250mVp-p		
	VOLTAGE TOLERANCE Note.3	±5.0%			
	LINE REGULATION	±1.0%			
	LOAD REGULATION	±2.0%			
	SETUP, RISE TIME	500ms, 30ms / 230VAC	1500ms, 30ms / 115VAC at full load		
INPUT	HOLD UP TIME (Typ.)	20ms/230VAC at full load			
	VOLTAGE RANGE Note.4	90 ~ 264VAC	127 ~ 370VDC (Note.6)		
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY (Typ.)	74%	80%		
	AC CURRENT	0.15A/230VAC	0.3A/115VAC		
	INRUSH CURRENT(Typ.)	COLD START 70A(twidth=120μs measured at 50% Ipeak) at 230VAC			
PROTECTION	LEAKAGE CURRENT	0.25mA / 240VAC			
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed			
	OVER LOAD	Above 105% rated output power			
	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16V		
ENVIRONMENT	PROTECTION	Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	27.6 ~ 32.4V			
	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			
SAFETY & EMC	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 45°C)			
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
	SAFETY STANDARDS Note.8	UL8750, CSA C22.2 No.250.0-08, BIS IS15885(except for 5V), EAC TP TC 004 approved; design refer to BS EN/EN 62368-1			
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC			
OTHERS	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25°C / 70% RH			
	EMC EMISSION	Compliance to BS EN/EN55032,BS EN/EN61000-3-2,BS EN/EN61000-3-3, EAC TP TC 020			
	EMC IMMUNITY	Compliance to BS EN/EN55024,BS EN/EN61000-4-2,3,4,5,6,8,11; light industry level(surge 2KV), criteria A, EAC TP TC 020			
	MTBF	1631.5K hrs min. MIL-HDBK-217F (25°C)			
NOTE	DIMENSION	60*30*23.5mm(L*W*H)			
	PACKING	0.05Kg;144pcs/7.6Kg/0.70CUFT			
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. When applying DC voltage for input, please connect the brown input wire to the positive side whereas blue input wire to the negative side. 7. This product is not intended for LED lighting luminaire applications in the EU.(In the EU the LPF/NPF/XLG series are recommended.) 8. The model certified for CCC(GB19510.14, GB19510.1, GB17743 and GB17625.1) is an optional model . Please contact MEAN WELL for details. 9. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). 10. Products sourced from the Americas regions may not have the ENEC/BIS/CCC logo. Please contact your MEAN WELL sales for more information. 11. For any application note and IP water proof function installation caution, please refer our user manual before using. https://www.meanwell.com/Upload/PDF/LED_EN.pdf					
※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx					

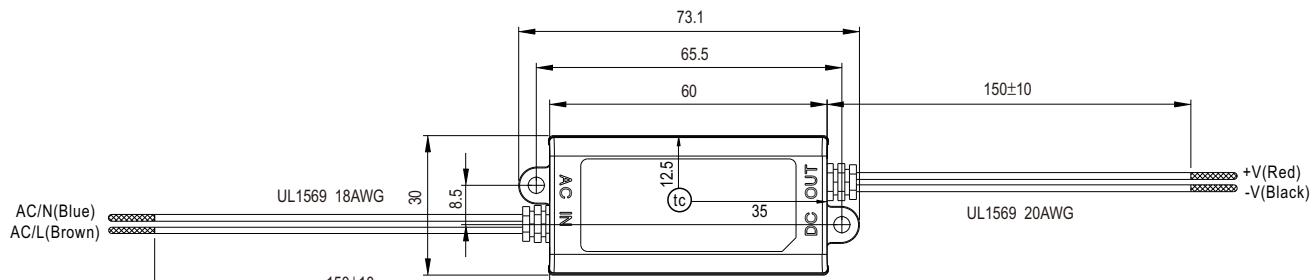


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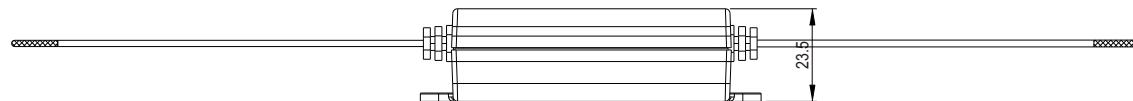
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■ Mechanical Specification

Unit:mm

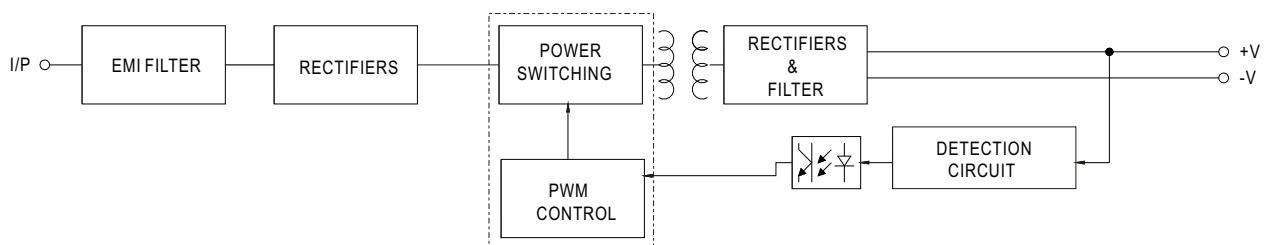


• (tc) : Max. Case Temperature

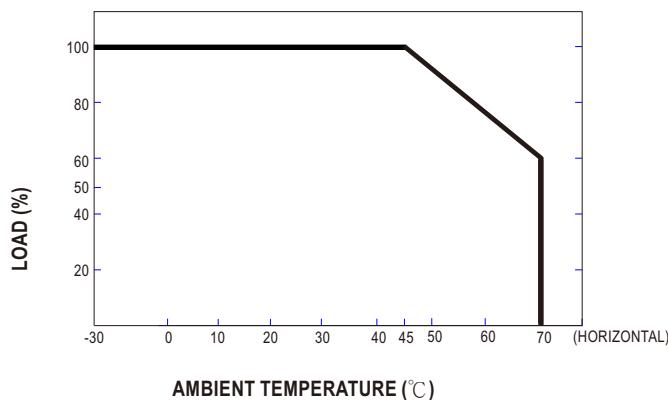


■ Block Diagram

fosc : 67KHz



■ Derating Curve



■ Static Characteristics

