



8W Single Output Switching Power Supply

APV-8 series

User's Manual



IP42

IS 15885(Part 2/Sec13) IS 15885(Part 2/Sec13)
R-62002178 R-41027766
(made in India only) (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)

GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

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

APV - 8 - 12

Output voltage

Output wattage

Series name



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APV-8 series

SPECIFICATION

MODEL		APV-8-5		APV-8-12		APV-8-24	
OUTPUT	DC VOLTAGE	5V		12V		24V	
	RATED CURRENT	1.4A		0.67A		0.34A	
	CURRENT RANGE	0 ~ 1.4A		0 ~ 0.67A		0 ~ 0.34A	
	RATED POWER	7W		8.04W		8.16W	
	RIPPLE & NOISE (max.) Note.2	250mVp-p		250mVp-p		300mVp-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			
	HOLD UP TIME (Typ.)	20ms/230VAC at full load					
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC		127 ~ 370VDC (Note.6)			
	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY (Typ.)	74%		80%		81%	
	AC CURRENT	0.15A/230VAC 0.3A/115VAC					
	INRUSH CURRENT(Typ.)	COLD START 70A(twidth=120μs measured at 50% Ipeak) at 230VAC					
	LEAKAGE CURRENT	0.25mA / 240VAC					
PROTECTION	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed					
	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		27.6 ~ 32.4V	
Protection type : Shut off o/p voltage, clamping by zener diode							
ENVIRONMENT	WORKING TEMP.	-30 ~ +70℃ (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +80℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 45℃)					
	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,BIS IS15885(except for 5V), BIS IS15885(R-62002178 made in India only), EAC TP TC 004, BS EN/EN 62368-1 approved					
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC					
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25℃ / 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/EN55035,BS EN/EN61000-4-2,3,4,5,6,8,11; light industry level(surge 2KV), EAC TP TC 020					
OTHERS	MTBF	9638.4K hrs min. Telcordia SR-332 (Bellcore) ; 1631.5K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	60*30*23.5mm(L*W*H)					
	PACKING	0.05Kg;144pcs/7.6Kg/0.79CUFT					
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. (as available on https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf) 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 and China.(In the EU and China the LPF/NPF/XLG/XLC/XLN series are recommended.) 8. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft). 9. Products sourced from the Americas regions may not have the ENEC/BIS logo. Please contact your MEAN WELL sales for more information. 10. 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						

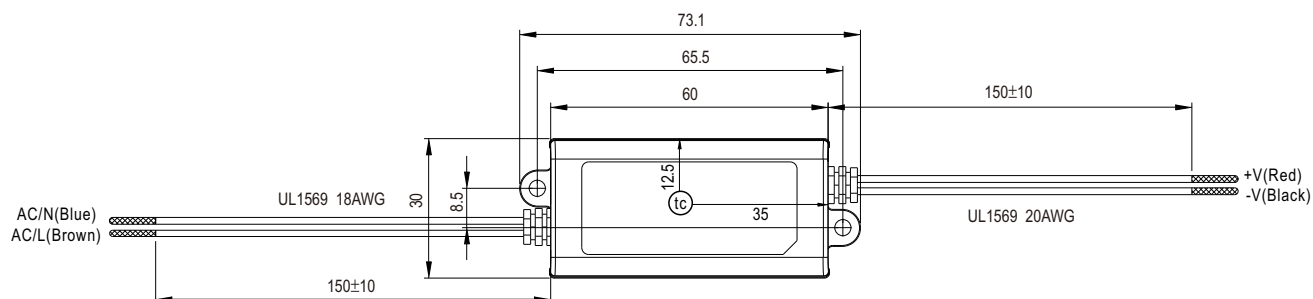


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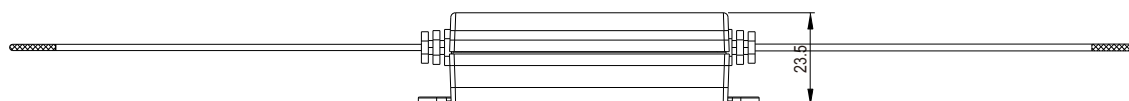
APV-8 series

Unit:mm Tolerance:±1

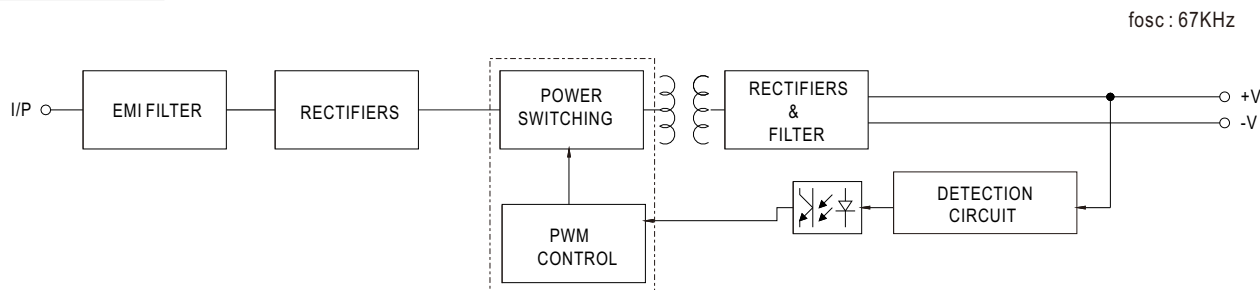
Mechanical Specification



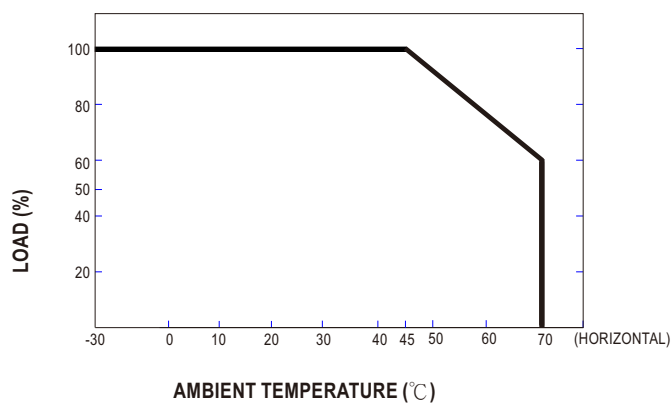
• t_c : Max. Case Temperature



Block Diagram



Derating Curve



Static Characteristics

