



MW APV-16 series 16W Single Output Switching Power Supply Instruction Manual

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MW APV-16 series 16W Single Output Switching Power Supply



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-related fixtures or appliance
- (Such as LED Decoration or Advertisement devices)
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

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.) <small>Note.2</small>	100mVp-p	120mVp-p	120mVp-p	150mVp-p
	VOLTAGE TOLERANCE <small>Note.3</small>	±5.0%			
	LINE REGULATION	±1.0%			
	LOAD REGULATION	±2.0%			
	SETUP, RISE TIME <small>Note.6</small>	1500ms, 30ms / 230VAC 1500ms, 30ms / 115VAC at full load			
HOLD UP TIME (Typ.)	20ms/230VAC 12ms/115VAC at full load				
INPUT	VOLTAGE RANGE <small>Note.4</small>	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=250µs 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
		Protection type : Shut off o/p voltage, clamping by zener diode			
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 <small>Note.8</small>	UL8750, CSA C22.2 No.250.0-08, BIS IS15885(except for 15V), EAC TP TC 004, IP42 , BS EN/EN 62368-1 approved			
	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 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	7265.5K hrs min. Telcordia SR-332 (Bellcore); 1128.9K hrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	77*40*29mm (L*W*H)			
	PACKING	0.1Kg; 120pcs/14Kg/1.06CUFT			

NOTE

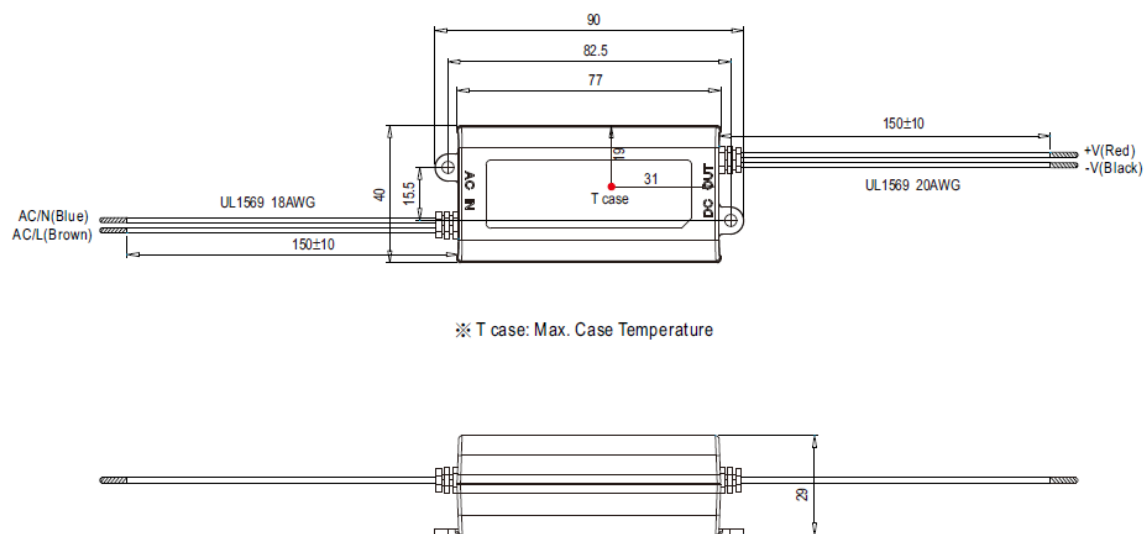
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. Derating may be needed under low input voltage. Please check the static characteristics for more details. Please connect L line to the positive pole and N line to the negative pole under DC input.
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. The length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to an increase of the set up time.
7. This product is not intended for LED lighting luminaire applications in the EU. (In the EU the LPF/NPFXLG 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 P waterproof 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
12. <https://www.meanwell.com/serviceDisclaimer.aspx>

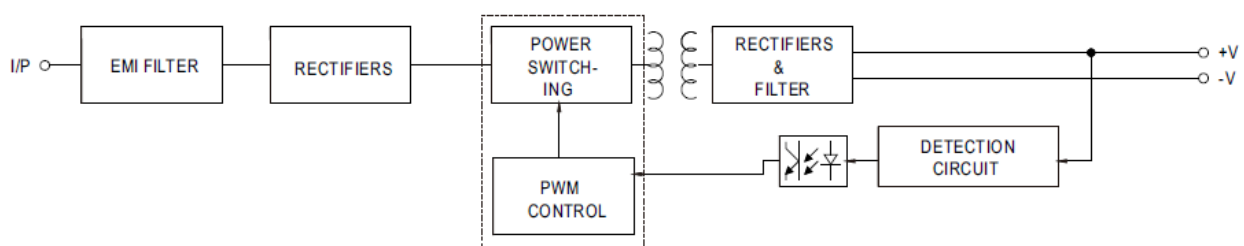
NOTE

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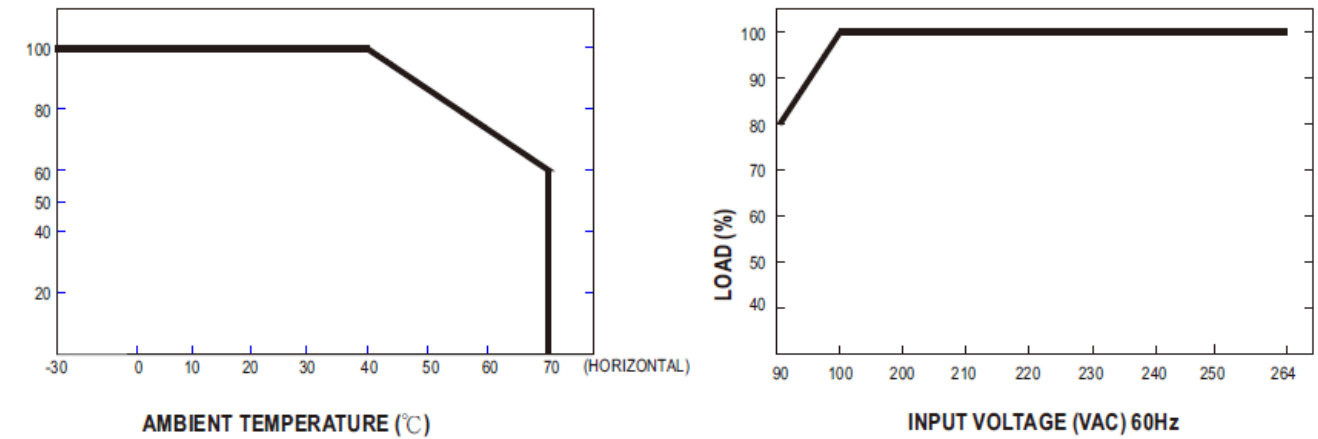
Mechanical Specification




Block Diagram



Derating Curve Static Characteristics



Documents / Resources



[MW APV-16 series 16W Single Output Switching Power Supply](#) [pdf] Instruction Manual
APV-16 series, 16W Single Output Switching Power Supply, APV-16 series 16W Single Output Switching Power Supply, Output Switching Power Supply, Power Supply

References

- [MW Product Liability Disclaimer-MEAN WELL Switching Power Supply Manufacturer](#)