



12W Single Output Switching Power Supply

APC-12 series



■ Features :

- Constant current design
- Universal AC input / Full range
- Protections: Short circuit / Over voltage
- Fully isolated plastic case
- Small and compact size
- Cooling by free air convection
- Class II power unit, no FG
- Class 2 power unit
- Pass LPS
- IP42 design
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)(Note.6)
- 100% full load burn-in test
- Low cost / High reliability
- 2 years warranty

User's Manual



■ GTIN CODE

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

SPECIFICATION

MODEL		APC-12-350		APC-12-700	
OUTPUT	RATED CURRENT	350mA		700mA	
	DC VOLTAGE RANGE	9~36V		9~18V	
	RATED POWER	12.6W		12.6W	
	RIPPLE & NOISE (max.) Note.2	300mVp-p		250mVp-p	
	VOLTAGE TOLERANCE Note.3	±5.0%			
	CURRENT ACCURACY	±8.0%			
	LINE REGULATION	±1.0%			
	LOAD REGULATION	±3.0%			
	SETUP, RISE TIME	3000ms, 180ms / 230VAC 3000ms, 150ms / 115VAC at full load			
	HOLD UP TIME (Typ.)	20ms/230VAC, 15ms/115VAC at full load			
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC 127 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY(Typ.)	82%		80%	
	AC CURRENT	0.2A/230VAC; 0.35A/115VAC			
	INRUSH CURRENT(Typ.)	COLD START 70A(twidth=150μs measured at 50% Ipeak) at 230VAC			
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	17 units (circuit breaker of type B) / 29 units (circuit breaker of type C) at 230VAC			
	LEAKAGE CURRENT	0.25mA / 240VAC			
PROTECTION	OVER VOLTAGE	39.6~ 46.8V		20.7~ 24.3V	
		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	±0.2%/℃ (0 ~ 50℃)			
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 5)	SAFETY STANDARDS Note.7	UL8750, CSA C22.2 No.250.0-08, BIS IS15885, 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	6418.1K hrs min. Telcordia SR-332 (Bellcore); 1097.4K hrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	77*40*29(L*W*H)			
	PACKING	0.08Kg; 120pcs/11.8Kg/1.06CUFT			
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 characteristic 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. (as available on https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf) 6. This product is not intended for LED lighting luminaire applications EU and China.(In the EU and China the LPF/NPF/XLG/XLC/XLN series are recommended.) 7. 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) 8. 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				

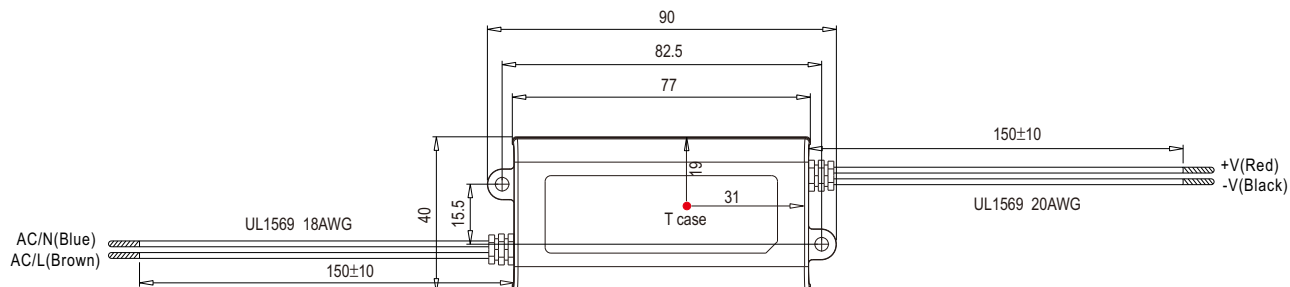


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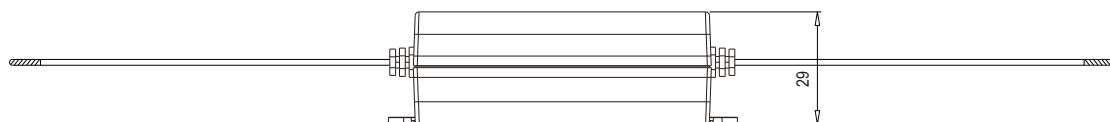
APC-12 series

Mechanical Specification

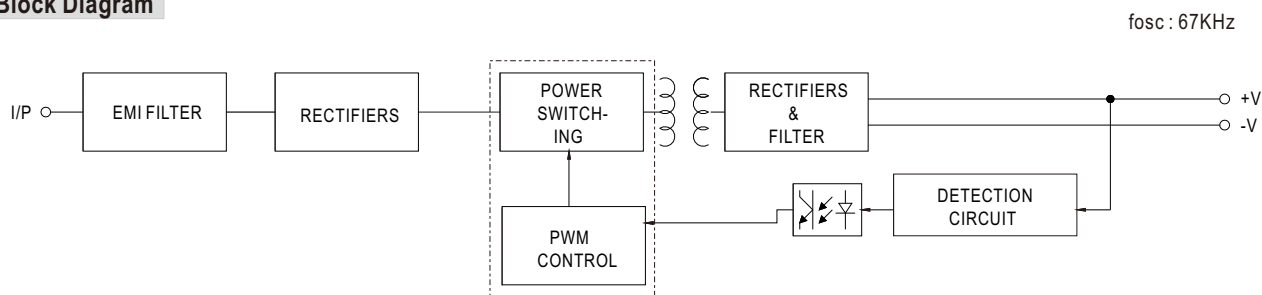
Unit:mm Tolerance:±1



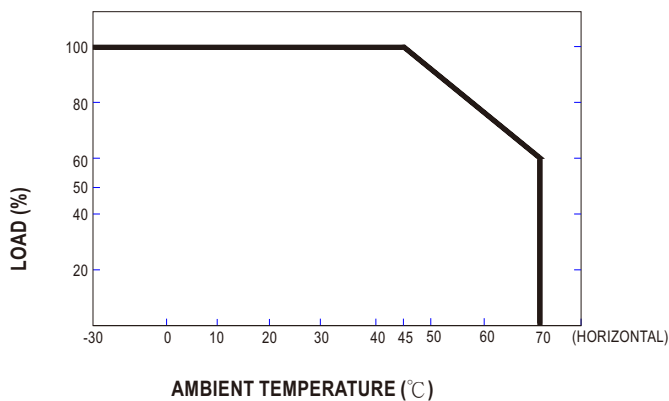
※ T case: Max. Case Temperature



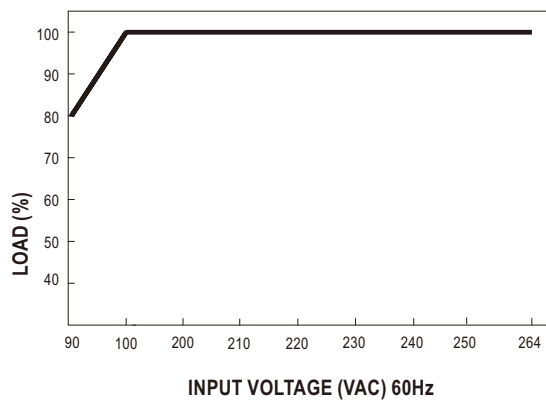
Block Diagram



Derating Curve



Static Characteristics





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■ EFFICIENCY vs LOAD (APC-12-350)

