

# **MEAN WELL APC-12 12W Single Output Switching Power Supply Instruction Manual**

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### **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



IS 15885(Part 2/Sec13)





## **SPECIFICATION**

MODEL	APC-12-350	APC-12-700
RATED CURREN T	350mA	700mA
DC VOLTAGE RA NGE	9~36V	9~18V
RATED POWER	12.6W	12.6W
RIPPLE & NOISE (max.) Note.2	300mVp-p	250mVp-p
VOLTAGE TOLER ANCE Note.3	±5.0%	

OUTP UT	CURRENT ACCU RACY	±8.0%		
	LINE REGULATI ON	±1.0%		
	LOAD REGULATI ON	±3.0%		
	SETUP, RISE TIM	3000ms, 180ms / 230VAC 3000ms, 15	50ms / 115VAC at full load	
	HOLD UP TIME ( Typ.)	20ms/230VAC,15ms/115VAC at full load		
	VOLTAGE RANG E Note.4	90 ~ 264VAC 127 ~ 370VDC		
	FREQUENCY RA			
	EFFICIENCY(Typ.	82%	80%	
	<b>AC CURRENT</b> 0.2A/230VAC;0.35A/115VAC			
INPU T INRUSH CURRE NT(Typ.) COLD START 70A(twidth=120µs mea		COLD START 70A(twidth=120µs measured	easured at 50% Ipeak) at 230VAC	
	MAX. No. of PSU s on 16A CIRCUI T BREAKER	17 units (circuit breaker of type B) / 29 units (circuit breaker of type C) at 230VAC		

	LEAKAGE CURR ENT	0.25mA / 240VAC		
PROT ECTI ON	OVER VOLTAGE	39.6~ 46.8V	20.7~ 24.3V	
		Protection type : Shut off o/p voltage, clamping by zener diode		
ENVI RON MENT	WORKING TEMP.	-30 ~ 70°C(Refer to "Derating Curve")		
	WORKING HUMI DITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP. , HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH		
	TEMP. COEFFICI ENT	±0.2%/°C (0 ~ 50°C)		
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes		
SAFE TY & EMC (Note 5)	SAFETY STAND ARDS Note.7	UL8750,CSA C22.2 No.250.0-08, BIS IS15885, EAC TP TC 004 approved; design refer to BS EN/EN 62368-1		
	WITHSTAND VO LTAGE	I/P-O/P:3.75KVAC		
	ISOLATION RESI STANCE	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 I evel(surge 2KV), criteria A, EAC TP TC 020	
OTHE RS	MTBF	1145.7K hrs min. MIL-HDBK-217F (25°C)	
	DIMENSION	77*40*29(L*W*H)	
	PACKING	0.08Kg; 120pcs/11.8Kg/1.06CUFT	

- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of am bient temperature.
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated wit h a 0.1 of & 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 det ails.
- 5. The power supply is considered as a component that will be operated in combination with final equip ment. Since EMC performance will be affected by the complete installation, the final equipment manufa cturers must re-qualify EMC Directive on the complete installation again.

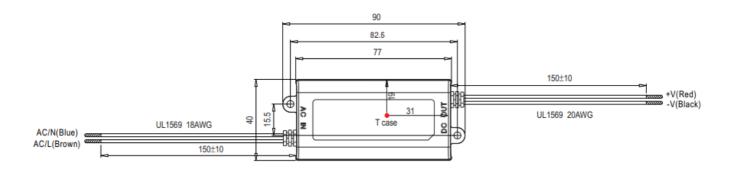
### NOTE

- 6. This product is not intended for LED lighting luminaire applications in the EU.(In the EU the LPF/NP F/XLG series are recommended.)
- 7. The model certified for CCC(GB19510.14, GB19510.1, GB17743 and GB17625.1) is an optional model . Please contact MEAN WELL for details.
- 8. 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). 9. For any application note and IP water proof function installation caution, please refer our user manual before using.

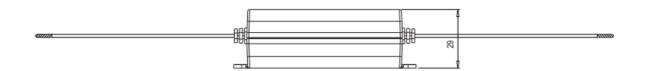
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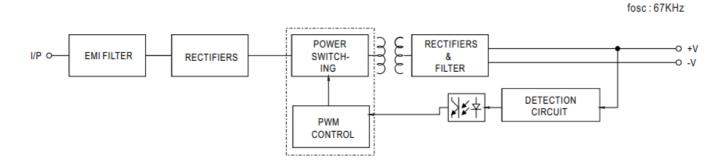
## **Mechanical Specification**



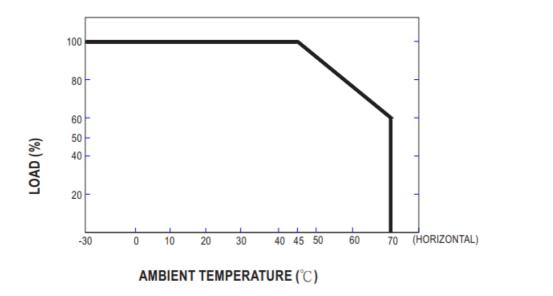
※ T case: Max. Case Temperature



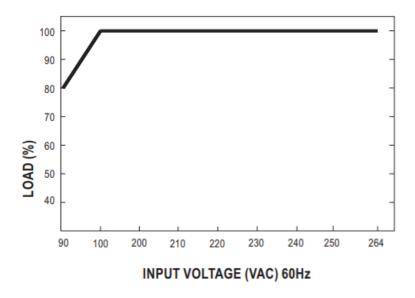
# **Block Diagram**



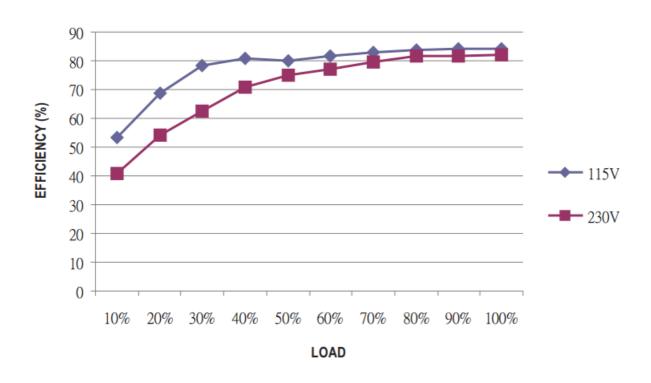
# **Derating Curve**



# **Static Characteristics**



# **EFFICIENCY vs LOAD (APC-12-350)**





## **Documents / Resources**



MEAN WELL APC-12 12W Single Output Switching Power Supply [pdf] Instruction Manual APC-12, 12W Single Output Switching Power Supply, Output Switching Power Supply, Switching Power Supply, Power Supply, Supply