

# **MEAN WELL APC-16E Series 16W Single Output Switching Power Supply Instruction Manual**

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Manual

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MEAN WELL APC-16E Series 16W Single Output Switching Power Supply



## **Features**

- · Constant current design
- Protections: Short circuit/Over voltage
- · Fully isolated plastic case
- Small and compact size
- · Cooling by free air convection
- · Class II power unit, no FG
- No load power consumption <0.5W
- IP42 design
- Suitable for LED lighting and moving sign applications
- 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)

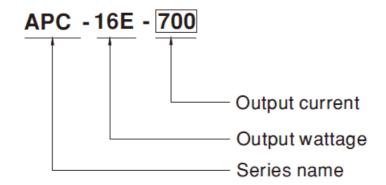
## **GTIN CODE**

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

## **Description**

APC-16E series is one 16W AC/DC constant current mode single output LED power supply. It accepts input 180 264VAC and provides two models with different output current, 350mA and 700mA, respectively, that the small wattage LED applications employ the most frequently. Exploiting Class I design (without FG pin) and adopting the 94V-0 flame retardant plastic enclosure, APC-16E ideally fits the entry-level LED applications.

# **Model Encoding**



## **SPECIFICATION**

MODEL		APC-16E-350	APC-16E-700	
OUTP	RATED CURREN T	350mA	700mA	
	DC VOLTAGE RA	12~48V	9~24V	
	RATED POWER	16.8W	16.8W	
	RIPPLE & NOISE (max.)Note.2	300mVp-p	250mVp-p	
	VOLTAGE TOLER ANCE Note.3	±5.0%		
	CURRENT ACCU RACY	±8.0%		
	LINE REGULATI ON	±1.0%		
	LOAD REGULATI ON	±3.0%		
	SETUP, RISE TIM E	500ms, 200ms / 230VAC at full load		
	HOLD UP TIME (T yp.)	20ms/230VAC at full load		
INPU T	VOLTAGE RANG E Note.4	180 ~ 264VAC 254 ~ 370VDC		
	FREQUENCY RA	47 ~ 63Hz		
	POWER FACTOR (Typ.)	PF>0.5/230VAC at full load		
	EFFICIENCY <sub>(Typ.)</sub>	83%	82%	
	AC CURRENT	0.3A/230VAC		
	INRUSH CURRE NT <sub>(Typ.)</sub>	COLD START 45A(twidth=210µs measured at 50% lpeak) at 230VAC		
1				

	MAX. No. of PSU s on 16A CIRCUI T BREAKER	13 units (circuit breaker of type B) / 23 units (circuit breaker of type C) at 230VAC 0.25mA / 240VAC		
	LEAKAGE CURR ENT			
PROT ECTI ON	OVER VOLTAGE	50.4~ 60V	27.6~ 33.5V	
		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	IP42,BS EN/EN 62368-1 approved		
	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		
	EMC IMMUNITY	Compliance to BS EN/EN55024,BS EN/EN61000-4-2,3,4,5,6,8,11; light industry I evel(surge 2KV)		
	MTBF	6106.2K hrs min. Telcordia SR-332 (Bellcore); 1014.0K hrs min. MIL-HD BK-217F (25°C)		
	DIMENSION	77*40*29(L*W*H)		
	PACKING	0.1Kg; 120pcs/14Kg/1.06CUFT		

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- 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 0.1uf & 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 det ails.
- 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.

#### **NOTE**

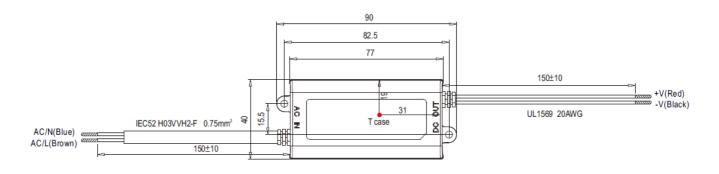
- 6. The ambient temperature derating of 3.5 C/1000m with fanless models and of 5 C/1000m with fan models for operating altitude higher than 2000m(6500ft).
- 7. This product is not intended for LED lighting luminaire applications in the EU.(In the EU the LPF/NP F/XLG series are recommended.)
- 8. For any application note and IP water proof function installation caution, please refer our user manu al before using.

## https://www.meanwell.com/Upload/PDF/LED\_ENpdi

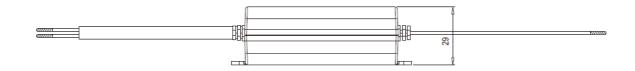
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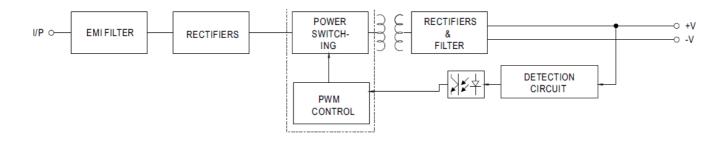
#### **Mechanical Specification**



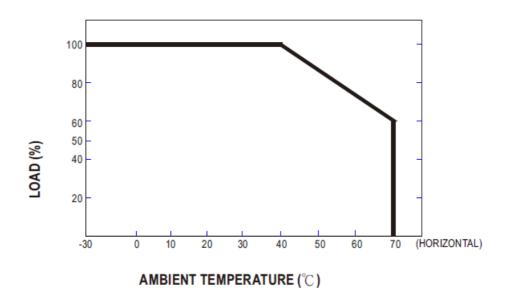
※ T case: Max. Case Temperature



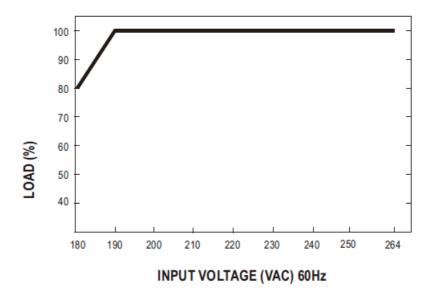
## **Block Diagram**



## **Derating Curve**



## **Static Characteristics**



## **Documents / Resources**



MEAN WELL APC-16E Series 16W Single Output Switching Power Supply [pdf] Instruction Manual

APC-16E Series 16W Single Output Switching Power Supply, APC-16E Series, 16W Single Output Switching Power Supply

