

# MEAN WELL APC-12 Series 12W Single Output Switching Power Supply Owner's Manual

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MEAN WELL APC-12 Series 12W Single Output Switching Power Supply



## **Product Usage Instructions**

#### Installation

 Please ensure that the L line is connected to the positive pole and the N line is connected to the negative pole under DC input.

#### · Powering On

Connect the power supply to a suitable power source within the specified voltage and frequency range.

#### Maintenance

 Refer to the user manual for any IP water-proof function installation cautions and application notes before using the product.

#### **FAQs**

- · What is the maximum current rating for the APC-12 series power supply?
  - The maximum current rating for the APC-12 series power supply is 700mA.
- Is the product suitable for LED lighting luminaire applications in the EU?
  - No, this product is not intended for LED lighting luminaire applications in the EU. The LPF/NPF/XLG series are recommended for such applications.
- How many units can be connected to a 16A circuit breaker at 230VAC?
  - 17 units can be connected with a circuit breaker of type B, while 29 units can be connected with a circuit breaker of type C at 230VAC.

#### **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 appliances (such as LED Decoration or Advertisement devices)(Note.6)
- 100% full load burn-in test
- · Low cost / High reliability
- · 2 vears warranty

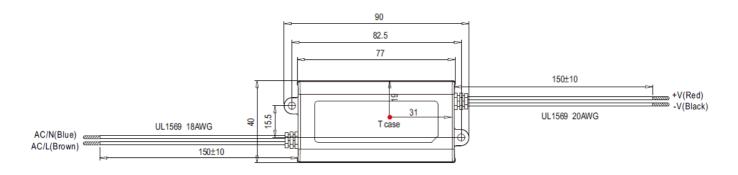
#### **GTIN CODE**

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

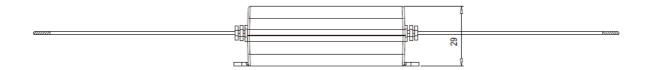
## **Specifications**

MODEL		APC-12-350	APC-12-700
	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%	
OUTPUT	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	
	VOLTAGE RANGE Note.4	90 ~ 264VAC 127 ~ 370VDC	
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY(Typ.)	82%	80%
INPUT	AC CURRENT	0.2A/230VAC;0.35A/115VAC	
	INRUSH CURRENT (Typ.)	COLD START 70A(twidth=150µs measured at 50% lpeak) at 230VAC	
	MAX. No. of PSUs on 16A	17 units (circuit breaker of type B) / 29 units (circuit breaker of type C) at 230 VAC	
	CIRCUIT BREAKER	17 drills (circuit breaker of type b) / 29 drills (circuit breaker of type C) at 250 VAC	
	LEAKAGE CURRENT	0.25mA / 240VAC	
PROTECTION	OVER VOLTAGE	39.6~ 46.8V	20.7~ 24.3V
	OVER VOLIAGE	Protection type: Shut off o/p voltage, clamping by zener diode	
	WORKING TEMP.	-30 ~ 70°C (Refer to "Derating Curve")	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40~+80°C, 10~95% RH	
	TEMP. COEFFICIENT	±0.2%/°C (0 ~ 50°C)	
	VIBRATION 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes		xes
	SAFETY STANDARDS Note.7	UL8750,CSA C22.2 No.250.0-08, BIS IS15885, EAC TP TC 004,BS EN/EN 62368-1 approved	
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC	
EMC	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25°C / 70% RH	
(Note 5)	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	
	MTBF	6418.1K hrs min. Telcordia SR-332 (Bellcore); 1097.4K hrs min	. MIL-HDBK-217F (25°C)
OTHERS	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°C of ambient temperature.		
	Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.     Tolerance : includes set up tolerance, line regulation and load regulation.		
	<ol> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>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.</li> <li>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.</li> </ol>		
	(as available on https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)		
	6. This product is not intended for LED lighting luminaire applications in the EU.(In the EU the LPF/NPF/XLG series are recommended.)		
	7. The model certified for CCC(GB19510.14, GB19510.1, GB19743 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(6500ff		
	9. 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  Strong Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx.		
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	※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx		

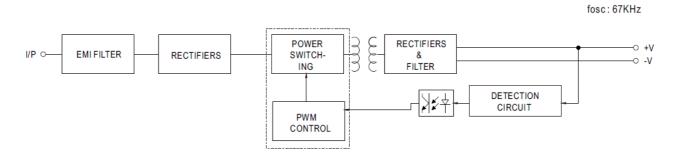
# **Mechanical Specification**



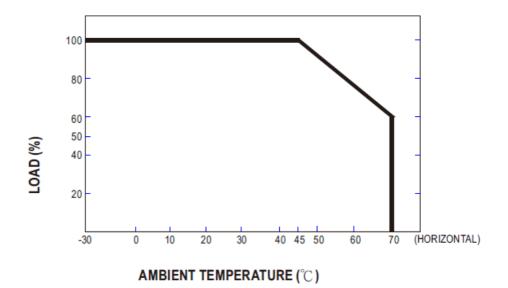
 $\fint Max.$  Case Temperature



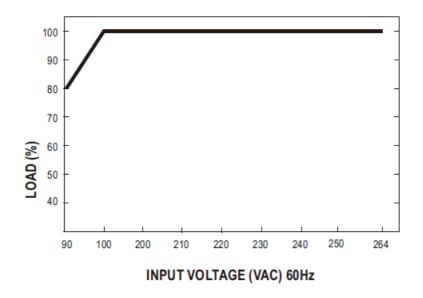
# **Block Diagram**



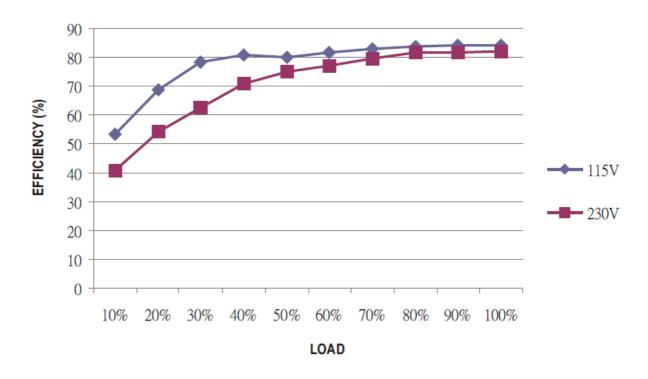
## **Derating Curve**



#### **Static Characteristics**



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



• Unit: mm

• Downloaded from Arrow.com.

• File Name: APC-12-SPEC 2024-01-08













#### **Documents / Resources**



MEAN WELL APC-12 Series 12W Single Output Switching Power Supply [pdf] Owner's Ma

APC-12 Series 12W Single Output Switching Power Supply, APC-12 Series, 12W Single Output Switching Power Supply, Output Switching Power Supply, Switching Power Supply, Power Supply ly, Supply

## References

User Manual

#### Manuals+, Privacy Policy

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