

APF100 SERIES
100 Watts
KEY FEATURES

- Fully Isolated Plastic Case with IP67 Level
- Universal Input: 90-305 VAC or 120-430 VDC
- Built-in Active PFC Function
- Free Air Convection
- High Reliability
- Isolation Class II
- LED Power Application
- 3-Year Product Warranty


IP67 CE cULus
 E347942 LEVEL3

ELECTRICAL SPECIFICATIONS

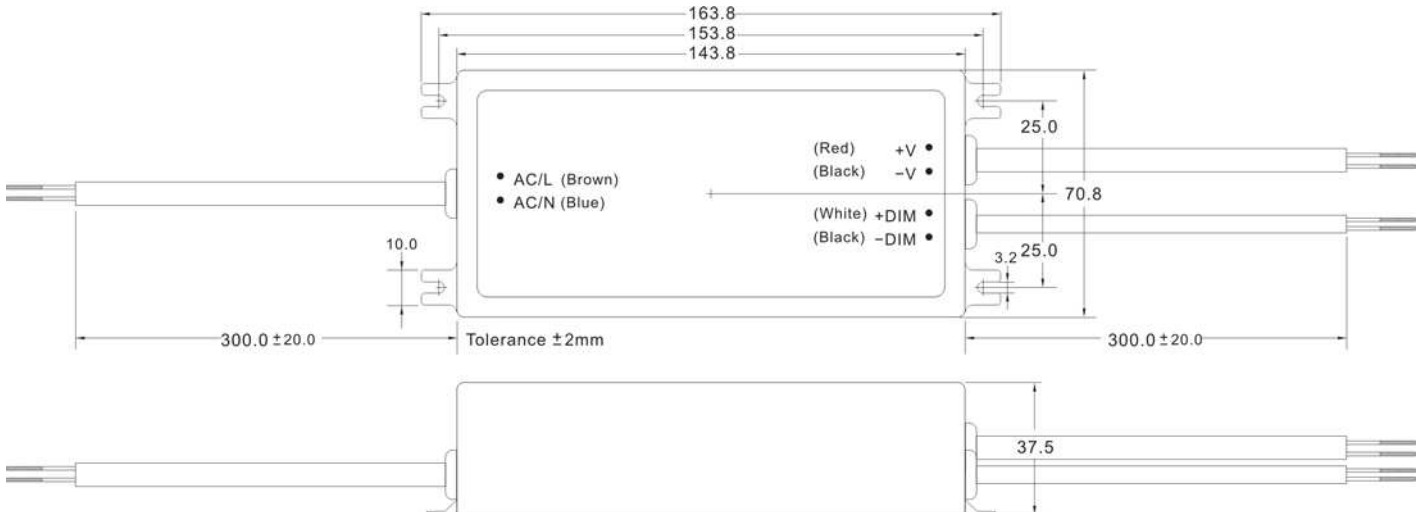
All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No.	APF100-12S	APF100-24S	APF100-36S	APF100-48S	APF100-54S
Max Output Wattage (W)	100W				
Input	Voltage				
	90-305 VAC or 120-430 VDC				
	Frequency (Hz)				
	47-63 Hz				
	Current (Full load)				
	1.5 A max. (115 VAC) / 0.7 A max. (230 VAC) / 0.6 A max. (277 VAC)				
Output	Inrush Current (<2ms)				
	40 A max. (115 VAC) / 60 A max. (230 VAC)				
	Leakage Current				
	<0.75 mA max.				
	Power Factor				
	PF>0.97 (115 VAC) / PF>0.95 (230 VAC) / PF>0.9 (277 VAC) at Full Load				
Output	Voltage (V.DC.)				
	12V	24V	36V	48V	54V
	Constant Current Range (V.DC.)				
	6 ~ 12V	12 ~ 24V	18 ~ 36V	24 ~ 48V	27 ~ 54V
	Voltage Accuracy				
	±2%				
	Current (Convection) (mA) max				
	8333	4166	2777	2083	1852
	Current ADJ Range (mA)				
	833 ~ 8333	416 ~ 4166	277 ~ 2777	208 ~ 2083	185 ~ 1852
	Line Regulation				
	±1%				
	Load Regulation				
±1%					
Minimum Load					
1%					
Maximum Capacitive Load					
100,000 uF	50,000 uF	8,000 uF	4,000 uF	3,000 uF	
Ripple & Noise (max.)					
100mVp-p	100mVp-p	100mVp-p	200mVp-p	200mVp-p	
Efficiency (typ.)					
89%	91.5%	91.5%	91.5%	91.5%	
Hold-up Time					
25 ms min.					
Protection	Over Power Protection				
	Auto recovery				
	Over Voltage Protection				
	Auto recovery				
Isolation	Overt Temperature Protection				
	Auto recovery				
	Short Circuit Protection				
	Auto recovery				
Isolation	Input-Output (V.AC)				
	3750V				
	Input-FG (V.AC)				
1880V					
Environment	Output-FG (V.AC)				
	500V				
	Operating Temperature				
	-30°C...+60°C (with derating)				
	Storage Temperature				
	-40°C...+85°C				
Temperature Coefficient					
±0.02%/°C (0~50°C)					
Humidity					
95% RH					
MTBF					
>75,000 h @ 25°C (MIL-HDBK-217F)					
Vibration					
10~500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes.					
Physical	Dimension (L x W x H)				
	5.67 x 2.76 x 1.48 Inches (144.0 x 70.0 x 37.5 mm) Tolerance ±2mm				
	Weight				
660 g ±15%					
Cooling Method					
Free air convection					
Safety	Agency Approvals				
EN61347-1:2008 、 EN61347-2-13:2006					
EMC	EMI (Conducted & Radiated Emission)				
	EN 55015				
	EMS (Noise Immunity)				
EN 61547					
Surge					
2KV L-N					

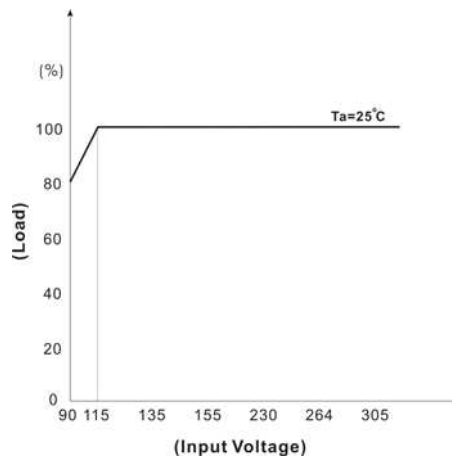
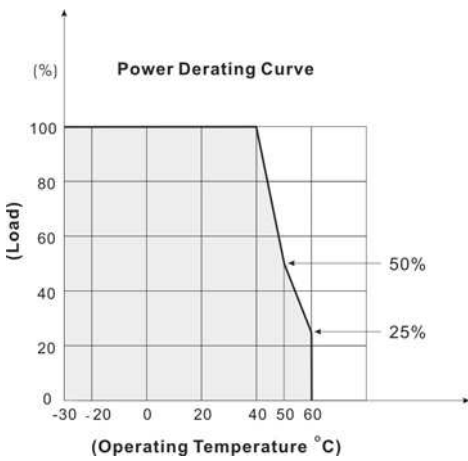
NOTE

1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. It's recommended to add Varistor 14S561K at L / N input side in parallel.

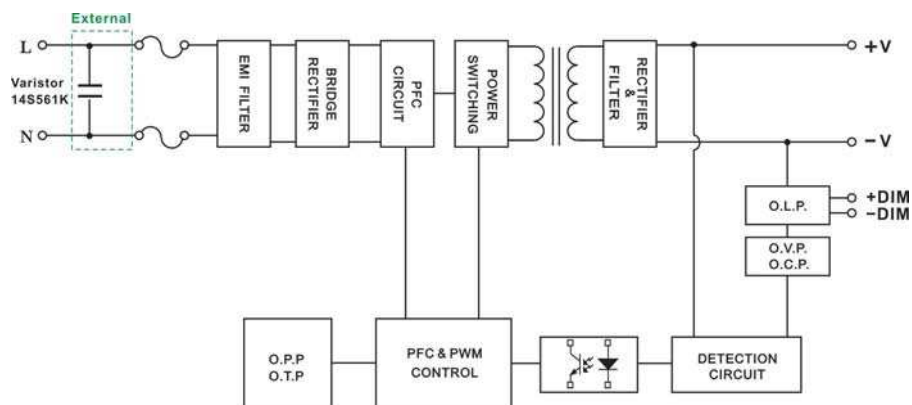
MECHANICAL DIMENSION (Top View)



DERATING



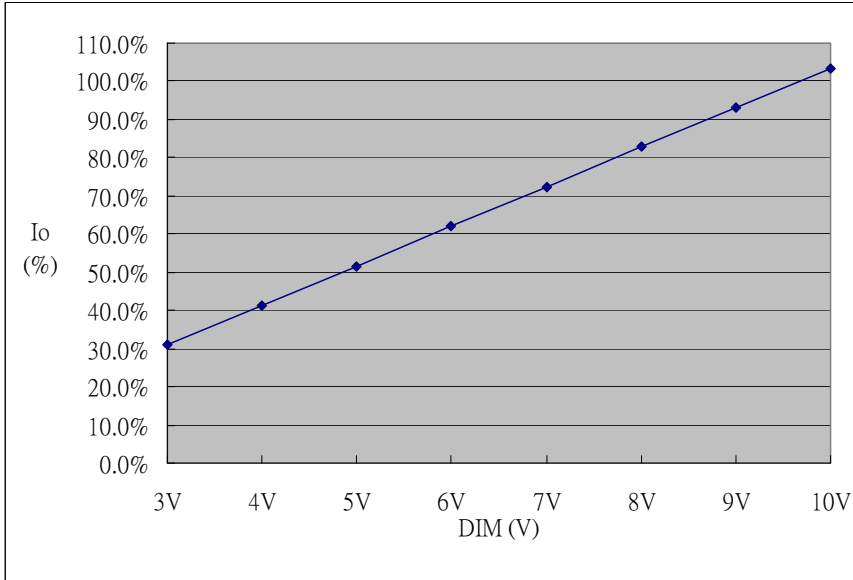
BLOCK DIAGRAM



DIMMING OPERATION

Output constant current level can be adjusted through output cable by connecting a 3~10Vdc or 10V PWM signal between DIM+ and DIM-

I. 3~10V dimming function for output current adjustment (typ.)



II. 10V PWM signal for output current adjustment (typ.) : Frequency range:100Hz~3KHz

