

## KEY FEATURES

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC, 47-440 Hz
- Regulated Output
- Low Ripple and Noise
- Screw Terminal For Optional
- CE, UL, TUV Approval
- 2-Years Product Warranty



## ELECTRICAL SPECIFICATIONS

Model No. ( Single Output )	ANC-5S A	ANC-12S A	ANC-15S A	ANC-24S A	
Max Output Wattage (W)	15W	15W	15W	15W	
Input	Voltage				
	90-264 VAC or 120-370 VDC				
	Frequency (Hz)				
	47-440 Hz				
	Current (Full load)				
	280 mA max. (115 VAC) / 170 mA max. (230 VAC)				
Inrush Current (<2ms)					
10 A max. (115 VAC) / 20 A max. (230 VAC)					
Leakage Current					
0.75 mA max.					
External Fuse (recommend)					
1.5 A slow blow type					
Output	Voltage (V.DC.)	5V	12V	15V	24V
	Voltage Accuracy	±2%			
	Current (mA) max	3000	1250	1000	625
	Line Regulation (LL-HL) (typ.)	±0.5%			
	Load Regulation (5-100%) (typ.)	±0.5%			
	Minimum Load	4%	2%	0%	0%
	Maximum Capacitive Load	470-23,000µF depending on model			
	Ripple	<0.2% Vout +40mV max (Vp-p)			
	Noise	<0.5% Vout +50mV max (Vp-p)			
	Efficiency	70%	73%	73%	77%
	Hold-up Time	15 ms min.			
	Switching Frequency	100 kHz			
Protection	Over Power Protection	Hiccup technique, auto-recovery			
	Over Voltage Protection	Zener diode clamp			
	Short Circuit Protection	Hiccup mode, indefinite (automatic recovery)			
Isolation	Input-Output (V.AC)	3000V			
	Input-FG (V.AC)	1500V			
	Output-FG (V.AC)	500V			
Environment	Operating Temperature	-25°C...+70°C (with derating)			
	Storage Temperature	-40°C...+85°C			
	Temperature Coefficient	±0.02%/°C			
	Humidity	95% RH			
	MTBF	>200,000 h @ 25°C (MIL-HDBK-217F)			
Physical	Dimension (L x W x H)	2.91 x 2.13 x 0.87 Inches ( 74.0 x 54.0 x 22.0 mm ) Tolerance ±0.5 mm			
	Case Material	Plastic resin with Fiberglass (flammability to UL 94V-0)			
	Weight	140 g			
	Cooling Method	Free air convection			
Safety	Agency Approvals	UL/cUL, CE, TUV			
EMC	EMI (Conducted & Radiated Emission)	EN 55022 class B			
	EMS (Noise Immunity)	EN 55024			

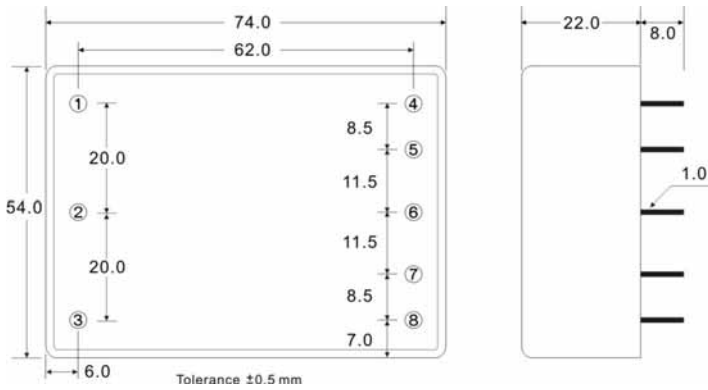
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

**ELECTRICAL SPECIFICATIONS**

Model No. (Dual, Triple Output)	ANC-5D A	ANC-12D A	ANC-15D A	ANC-5S12D A	ANC-5S15D A			
Max Output Wattage (W)	15W	15W	15W	15W	15W			
Input	Voltage							
	90-264 VAC or 120-370 VDC							
	Frequency (Hz)							
	47-440 Hz							
	Current (Full load)							
	280 mA max. (115 VAC) / 170 mA max. (230 VAC)							
Inrush Current (<2ms)								
10 A max. (115 VAC) / 20 A max. (230 VAC)								
Leakage Current								
0.75 mA max.								
External Fuse (recommend)								
1.5 A slow blow type								
Output	Voltage (V.DC.)		±5V	±12V	±15V	5/±12	5/±15	
	Voltage Accuracy				±5%		±2%	
	Current (mA) max		±1500	±650	±500	2000/±200	2000/±150	
	Line Regulation (LL-HL) (typ.)				±0.5%		±1% / ±5%	
	Load Regulation (5-100%) (typ.)				±3%		±2% / ±5%	
	Minimum Load				0%		5V 10% (200 mA)	
	Maximum Capacitive Load					470-23,000µF depending on model		
	Ripple					<0.2% Vout +40mV max (Vp-p)		
	Noise					<0.5% Vout +50mV max (Vp-p)		
	Efficiency		71%	76%	65%	68%	68%	
	Hold-up Time					15 ms min.		
	Switching Frequency					100 kHz		
	Protection	Over Power Protection					Hiccup technique, auto-recovery	
Over Voltage Protection					Zener diode clamp			
Short Circuit Protection					Hiccup mode, indefinite (automatic recovery)			
Isolation	Input-Output (V.AC)					3000V		
	Input-FG (V.AC)					1500V		
	Output-FG (V.AC)					500V		
Environment	Operating Temperature					-25°C...+70°C (with derating)		
	Storage Temperature					-40°C...+85°C		
	Temperature Coefficient					±0.02%/°C		
	Humidity					95% RH		
	MTBF					>200,000 h @ 25°C (MIL-HDBK-217F)		
Physical	Dimension (L x W x H)					2.91 x 2.13 x 0.87 Inches ( 74.0 x 54.0 x 22.0 mm ) Tolerance ±0.5 mm		
	Case Material					Plastic resin with Fiberglass (flammability to UL 94V-0)		
	Weight					140 g		
	Cooling Method					Free air convection		
Safety	Agency Approvals					UL/cUL, CE, TUV		
EMC	EMI (Conducted & Radiated Emission)					EN 55022 class B		
	EMS (Noise Immunity)					EN 55024		

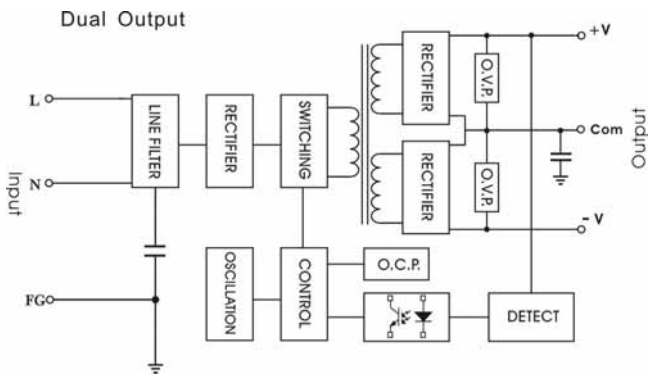
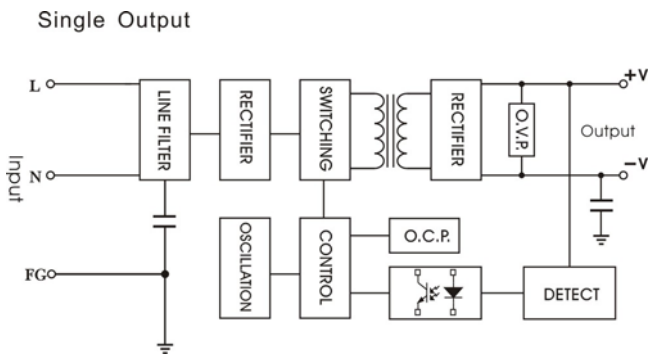
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**MECHANICAL DIMENSION ( Top View )**

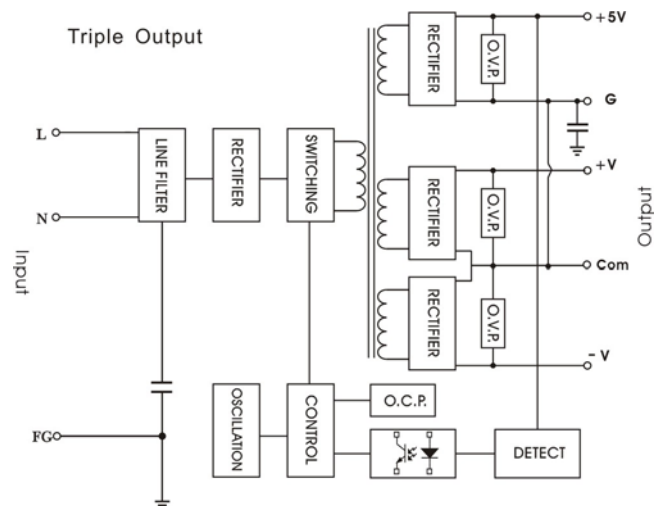
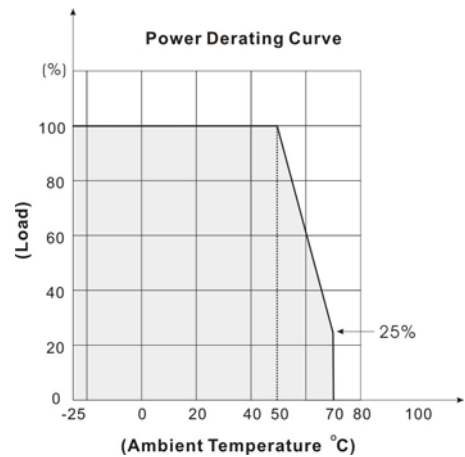


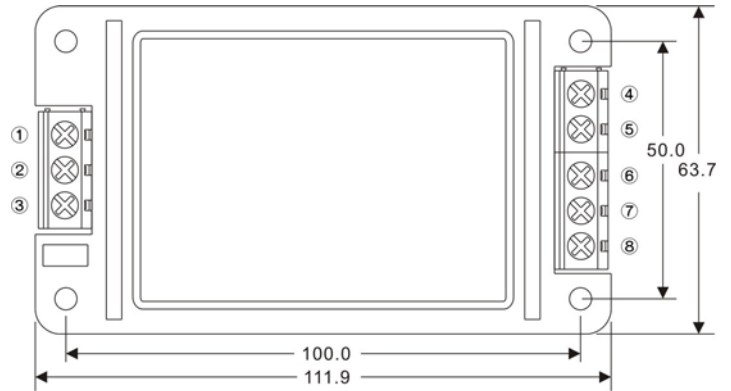
PIN#	SINGLE	Dual	Triple
1	FG	FG	FG
2	AC IN (N)	AC IN (N)	AC IN (N)
3	AC IN (L)	AC IN (L)	AC IN (L)
4	NO PIN	NO PIN	-DC OUT
5	-DC OUT	-DC OUT	COMMON
6	NO PIN	COMMON	+DC OUT
7	+DC OUT	+DC OUT	+5V RTN
8	NO PIN	NO PIN	+5V OUT

**BLOCK DIAGRAM**

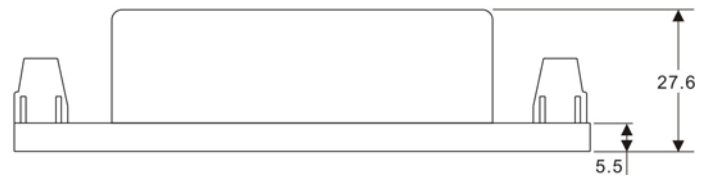
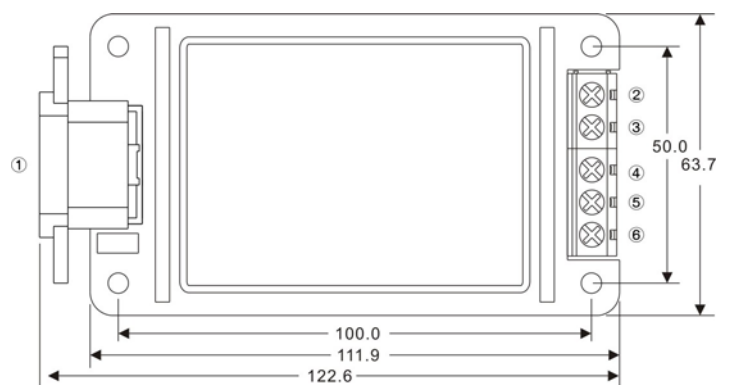


**DERATING**

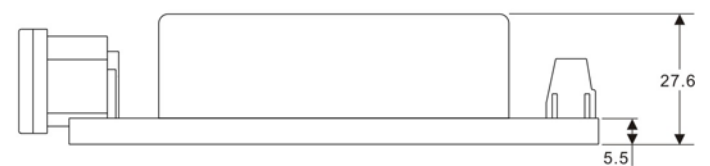


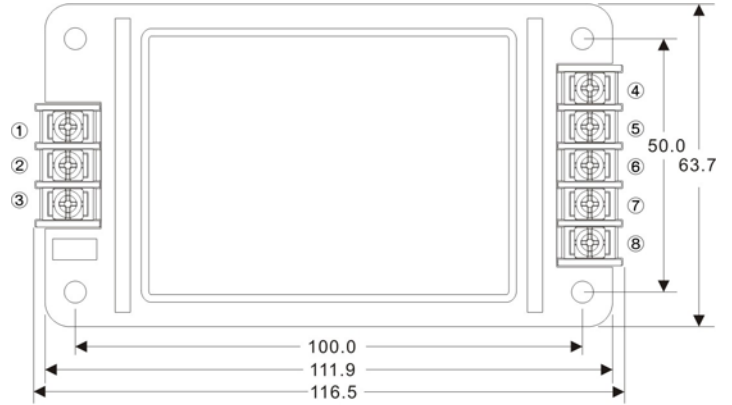
**SCREW TERMINAL**
**ANC-A2**


PIN#	Single	Dual	Triple
1	FG	FG	FG
2	AC IN (N)	AC IN (N)	AC IN (N)
3	AC IN (L)	AC IN (L)	AC IN (L)
4	NO CONNECT	NO CONNECT	-DC OUT
5	-DC OUT	-DC OUT	COMMON
6	NO CONNECT	COMMON	+DC OUT
7	+DC OUT	+DC OUT	+5V RTN
8	NO CONNECT	NO CONNECT	+5V OUT

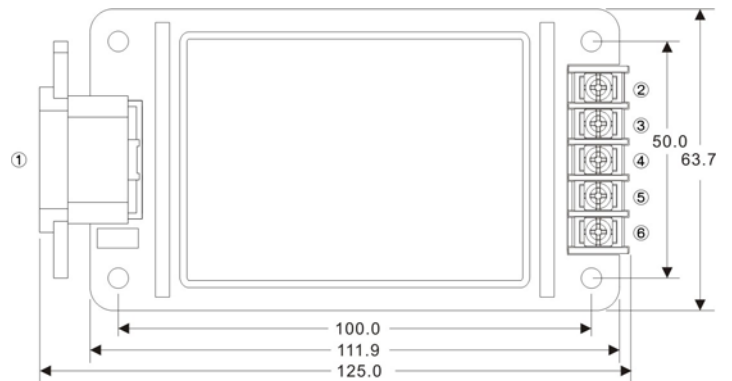

**ANC-A4**


PIN#	Single	Dual	Triple
1	AC IN	AC IN	AC IN
2	NO CONNECT	NO CONNECT	-DC OUT
3	-DC OUT	-DC OUT	COMMON
4	NO CONNECT	COMMON	+DC OUT
5	+DC OUT	+DC OUT	+5V RTN
6	NO CONNECT	NO CONNECT	+5V OUT



**ANC-A5**


PIN#	Single	Dual	Triple
1	FG	FG	FG
2	AC IN (N)	AC IN (N)	AC IN (N)
3	AC IN (L)	AC IN (L)	AC IN (L)
4	NO CONNECT	NO CONNECT	-DC OUT
5	-DC OUT	-DC OUT	COMMON
6	NO CONNECT	COMMON	+DC OUT
7	+DC OUT	+DC OUT	+5V RTN
8	NO CONNECT	NO CONNECT	+5V OUT

**ANC-A7**


PIN#	Single	Dual	Triple
1	AC IN	AC IN	AC IN
2	NO CONNECT	NO CONNECT	-DC OUT
3	-DC OUT	-DC OUT	COMMON
4	NO CONNECT	COMMON	+DC OUT
5	+DC OUT	+DC OUT	+5V RTN
6	NO CONNECT	NO CONNECT	+5V OUT