

KEY FEATURES

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC, 47-440 Hz
- Single and Dual Output
- Regulated Output and Low Ripple and Low Noise
- Isolation Class II
- Maximum No-Load Watts < 0.3W
- Small Size as AHC 5Watt with 8Watt Higher Power
- Screw Terminal For Optional
- CE, UL Approval
- 2-Years Product Warranty


ELECTRICAL SPECIFICATIONS

Model No. (Single Output)	AHC08 -3.3S	AHC08 -3.8S	AHC08 -5S	AHC08 -8S	AHC08 -9S	AHC08 -12S	AHC08 -14S	AHC08 -15S	AHC08 -24S											
Max Output Wattage (W)	6.6W	8W	8W	8W	8W	8W	8W	8W	8W											
Input	Voltage										90-264 VAC or 120-370 VDC									
	Frequency (Hz)										47-440 Hz									
	Current (Full load)										180 mA max. (115 VAC) / 110 mA max. (230 VAC)									
	Inrush Current (<500us)										25 A max. (115 VAC) / 45 A max. (230 VAC)									
	Leakage Current										0.3 mA max.									
	External Fuse (recommend)										2 A slow blow type									
Output	Voltage (V.DC.)		3.3V	3.8V	5V	8V	9V	12V	14V	15V	24V									
	Voltage Accuracy										±2%									
	Current (mA) max		2000	2100	1600	1000	888	666	571	533	333									
	Line Regulation (LL-HL) (typ.)										±0.2%									
	Load Regulation (10-100%) (typ.)						±1%.				±0.5%.									
	Minimum Load										0%									
	Maximum Capacitive Load		26000uF	25000uF	6000uF	2500uF	2300uF	1050uF	500uF	440uF	180uF									
	Ripple					3.3S~15S : <100mV max (Vp-p)					24S : <150mV max (Vp-p)									
	Noise					3.3S~15S : <150mV max (Vp-p)					24S : <200mV max (Vp-p)									
	Efficiency		72%	74%	75%	79%	79%	79%	80%	80%	81%									
	Hold-up Time										10 ms min.									
Switching Frequency										132±8 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									
Environment	Operating Temperature										-40°C...+70°C (with derating)									
	Storage Temperature										-40°C...+125°C									
	Temperature Coefficient										±0.02%/°C									
	Humidity										95% RH									
	MTBF										>350,000 h @ 25°C (MIL-HDBK-217F)									
Physical	Dimension (L x W x H)										2.0 x 1.0 x 0.75 Inches (50.8 x 25.4 x 19.0 mm) Tolerance ±0.5 mm									
	Case Material										Plastic resin with Fiberglass (flammability to UL 94V-0)									
	Weight										35 g									
	Cooling Method										Free air convection									
Safety	Agency Approvals										UL , cUL , CE (Pending)									
EMC	EMI (Conducted & Radiated Emission)										EN 55022 class B (Pending)									
	EMS (Noise Immunity)										EN 55024 (Pending)									

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

ELECTRICAL SPECIFICATIONS

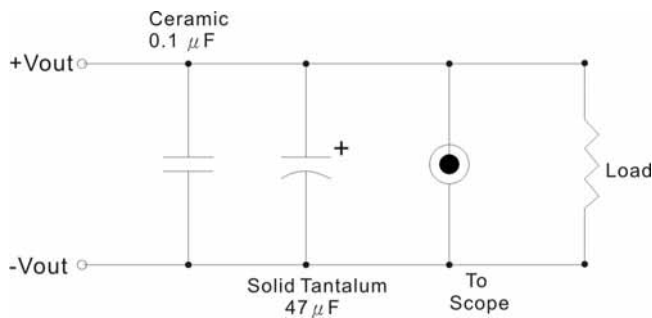
Model No. (Dual Output)	AHC08-5S3.3S	AHC08-8S5S	AHC08-12S5S	AHC08-12S7.5S			
Max Output Wattage (W)	9W	8.75W	9W	8.6W			
Input	Voltage						
	90-264 VAC or 120-370 VDC						
	Frequency (Hz)						
	47-440 Hz						
	Current (Full load)						
	200 mA max. (115 VAC) / 125 mA max. (230 VAC)						
Inrush Current (<500us)							
25 A max. (115 VAC) / 45 A max. (230 VAC)							
Leakage Current							
0.3 mA max.							
External Fuse (recommend)							
2 A slow blow type							
Output	Voltage (V.DC.)		Vo : 5V Vr : 3.3V	Vo : 8V Vr : 5V	Vo : 12V Vr : 5V	Vo : 12V Vr :7.5V	
	Voltage Accuracy		Vo : ±2% Vr : ±15%	Vo : ±2% Vr : ±5%			
	Current (mA) max		1600 / 300	1000 / 150	666 / 200	560 / 250	
	Line Regulation (LL-HL) (typ.)		Vo : ±0.2% Vr : ±3%				
	Load Regulation (10-100%) (typ.)		Vo : ±0.5% Vr : ±5%				
	Minimum Load		0%	Vo : 0% Vr : 1%			
	Maximum Capacitive Load		Vo : 1200uF Vr : 1000uF	Vo : 800uF Vr :3800uF	Vo : 260 uF Vr : 3800uF	Vo : 260 uF Vr : 4000uF	
	Ripple		<100mV max (Vp-p)				
	Noise		<150mV max (Vp-p)				
	Efficiency		74%	77%	78%	78%	
	Hold-up Time		10 ms min.				
	Switching Frequency		132±8 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				
Environment	Operating Temperature		-40°C...+70°C (with derating)				
	Storage Temperature		-40°C...+125°C				
	Temperature Coefficient		±0.02%/°C				
	Humidity		95% RH				
	MTBF		>350,000 h @ 25°C (MIL-HDBK-217F)				
Physical	Dimension (L x W x H)		2.0 x 1.0 x 0.75 Inches (50.8 x 25.4 x 19.0 mm) Tolerance ±0.5 mm				
	Case Material		Plastic resin with Fiberglass (flammability to UL 94V-0)				
	Weight		35 g				
	Cooling Method		Free air convection				
Safety	Agency Approvals		UL , cUL , CE				
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.

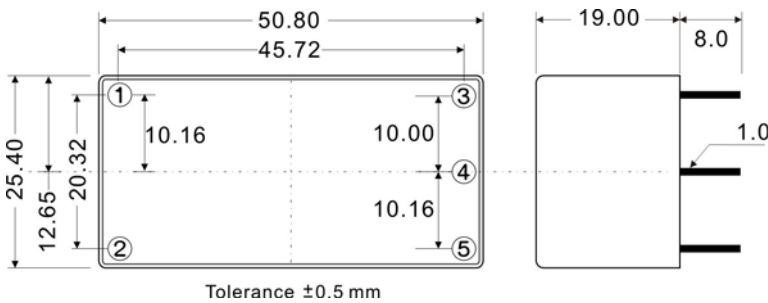
Vo : Measured with 47µF 25V Ceramic Cap. Cross to output.

OUTPUT NOISE

The output noise is measured with 47μF tantalum capacitor and 0.1μF ceramic capacitor across output.

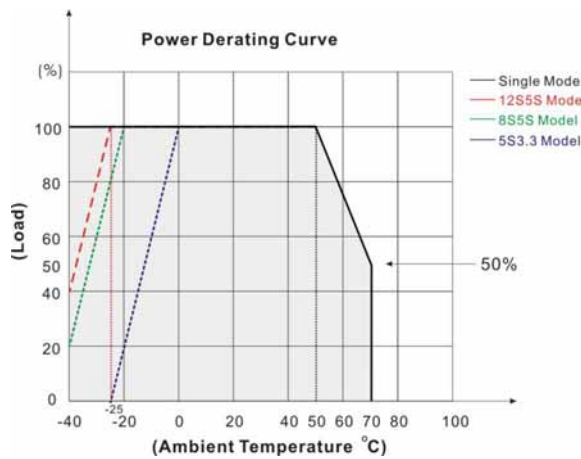


MECHANICAL DIMENSION (Top View)



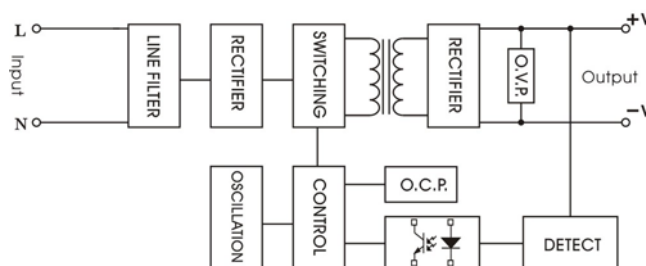
PIN#	SINGLE	Dual
1	AC IN (N)	AC IN (N)
2	AC IN (L)	AC IN (L)
3	+DC OUT	+DC OUT
4	-DC OUT	-DC OUT
5	NO PIN	VR

DERATING



BLOCK DIAGRAM

Single Output

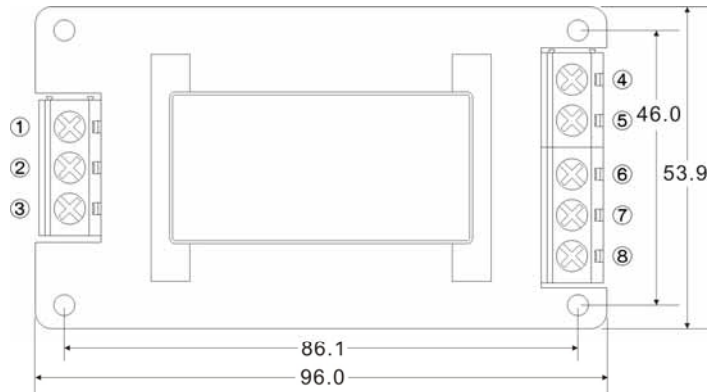


SCREW TERMINAL

AHC08-A2



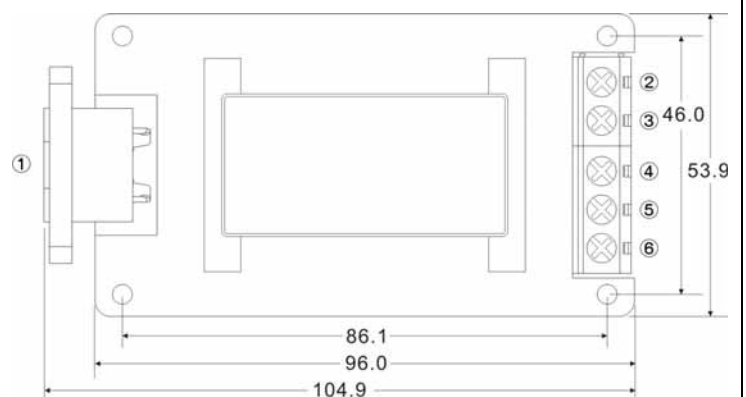
PIN#	Single	Dual
1	NO CONNECT	NO CONNECT
2	AC IN (N)	AC IN (N)
3	AC IN (L)	AC IN (L)
4.	NO CONNECT	NO CONNECT
5	+DC OUT	+DC OUT
6	-DC OUT	-DC OUT
7	NO CONNECT	VR
8	NO CONNECT	NO CONNECT



AHC08-A3



PIN#	Single	Dual
1	AC IN	AC IN
2	NO CONNECT	NO CONNECT
3	+DC OUT	+DC OUT
4.	-DC OUT	-DC OUT
5	NO CONNECT	VR
6	NO CONNECT	NO CONNECT

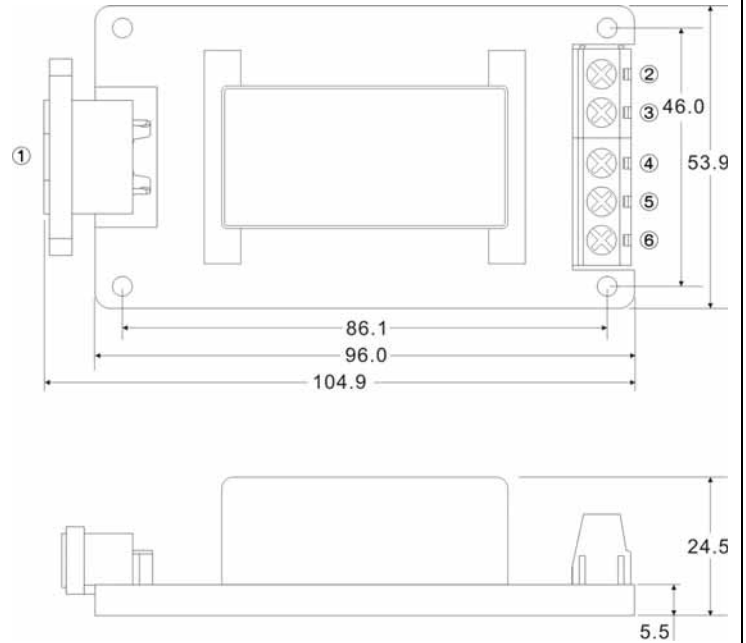


AHC08 SERIES**8 Watts**

AHC08-A4



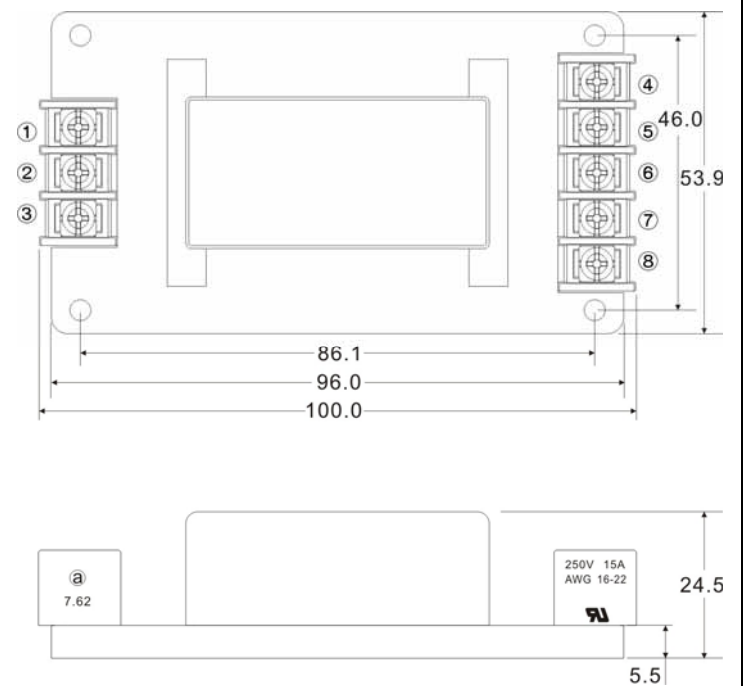
PIN#	Single	Dual
1	AC IN	AC IN
2	NO CONNECT	NO CONNECT
3	+DC OUT	+DC OUT
4.	-DC OUT	-DC OUT
5	NO CONNECT	VR
6	NO CONNECT	NO CONNECT



AHC08-A5



PIN#	Single	Dual
1	NO CONNECT	NO CONNECT
2	AC IN (N)	AC IN (N)
3	AC IN (L)	AC IN (L)
4.	NO CONNECT	NO CONNECT
5	+DC OUT	+DC OUT
6	-DC OUT	-DC OUT
7	NO CONNECT	VR
8	NO CONNECT	NO CONNECT



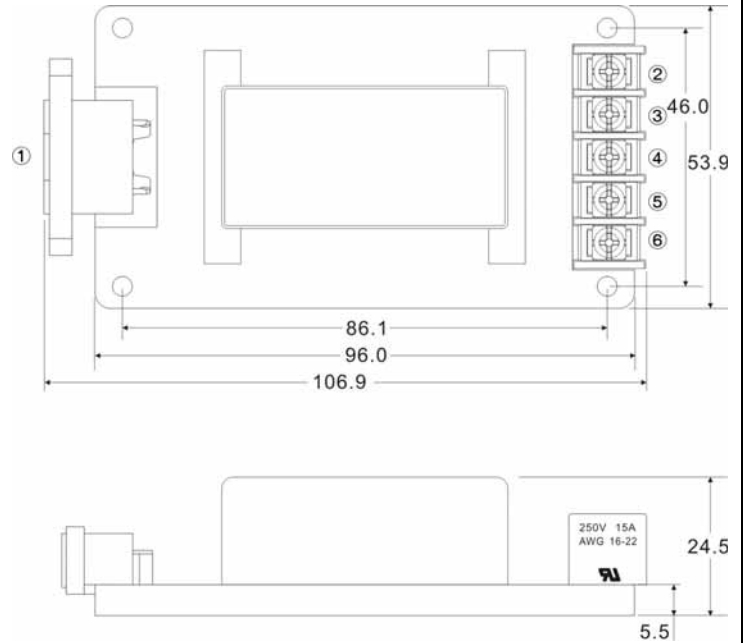
AHC08 SERIES

8 Watts

AHC08-A6



PIN#	Single	Dual
1	AC IN	AC IN
2	NO CONNECT	NO CONNECT
3	+DC OUT	+DC OUT
4.	-DC OUT	-DC OUT
5	NO CONNECT	VR
6	NO CONNECT	NO CONNECT



AHC08-A7



PIN#	Single	Dual
1	AC IN	AC IN
2	NO CONNECT	NO CONNECT
3	+DC OUT	+DC OUT
4.	-DC OUT	-DC OUT
5	NO CONNECT	VR
6	NO CONNECT	NO CONNECT

