

**AHCH05 SERIES**

**5 Watts**

**KEY FEATURES**

- Ultra Compact Size: 2.04" x 1.04"
- Universal Input Range 90-305VAC, 47-440Hz
- I/O Isolation 4000VAC
- Operating Ambient Temperature Range -40°C to +85°C
- No Load Power Consumption < 0.1W
- Operating attitude 5000m (UL / IEC / EN 62368-1)
- Screw Terminal for Option
- EMC Compliant without External Components
- Safety Approval to UL / IEC / EN 62368-1, IEC / EN 60950-1
- Meet IEC / EN 60335-1, IEC / EN 61558-2-16
- 3-Year Product Warranty



**ELECTRICAL SPECIFICATIONS**

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

Model No. (Single Output)	AHCH05-3.3S	AHCH05-5S	AHCH05-12S	AHCH05-24S	
Max Output Wattage (W)	5W		5.04W		
Input	Voltage				
	90-305 VAC or 127-430 VDC				
	Frequency (Hz)				
	47-440 Hz				
	Current (Full load)				
150 mA max. (115 VAC) / 90 mA max. (230 VAC)					
Inrush Current (<500us)					
30 A max. (115 VAC) / 60 A max. (230 VAC)					
Leakage Current					
0.25 mA max.					
Output	Voltage (V.DC.)				
	3.3V	5V	12V	24V	
	Voltage Accuracy				
	±2%				
	Current (mA) max				
	1515	1000	420	210	
	Line Regulation (LL-HL) (typ.)			±0.1%	
	Load Regulation (0-100%) (typ.)			±0.5%	
	Maximum Capacitive Load		3,500uF	2,200uF	330uF
Ripple & Noise (Vp-p) (max.)			<100mV	<150mV	<200mV
Efficiency (at 115VAC)					
73%	76%	80%	82%		
Hold-up Time (at 230VAC)					
15 ms min.					
Protection	Over Power Protection				
	Hiccup technique, auto-recovery ≥ 115% Io				
	Over Voltage Protection				
Zener diode clamp					
Short Circuit Protection					
Hiccup mode, indefinite (automatic recovery)					
Isolation	Input-Output (V.AC)				
4000V					
Environment	Operating Temperature				
	-40°C...+85°C ( with derating )				
	Storage Temperature				
	-40°C...+85°C				
	Temperature Coefficient				
	±0.02%/°C				
	Altitude During Operation (UL / IEC / EN 62368-1)				
	5000m				
Humidity					
95% RH					
MTBF					
>450,000 h @ 25°C (MIL-HDBK-217F)					
Vibration					
IEC60068-2-6 (10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes)					
Shock					
IEC60068-2-27					
Physical	Dimensions (L x W x H)				
	2.04 x 1.04 x 0.65 Inches ( 51.82 x 26.42 x 16.51 mm ) Tolerance ±0.5 mm				
	Case Material				
	Plastic resin (flammability to UL 94V-0)				
Weight					
30 g					
Cooling Method					
Free air convection					
Safety	Agency Approvals				
	UL / IEC / EN 62368-1, IEC / EN 60950-1				
Meet					
IEC / EN 60335-1, IEC / EN 61558-2-16					
EMC	EMI (Conducted & Radiated Emission)				
	EN 55032 class B				
EMS (Noise Immunity)					
EN 55035					

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**NOTE**

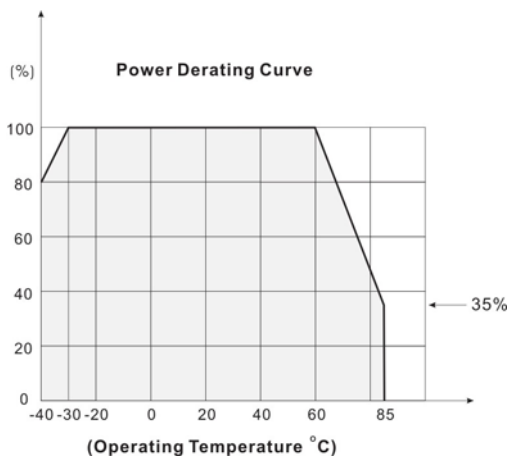
1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. Please refer to our PDF file "AC-DC Application" on our website: [www.archcorp.com.tw](http://www.archcorp.com.tw)

**MECHANICAL DIMENSIONS ( Top View )**



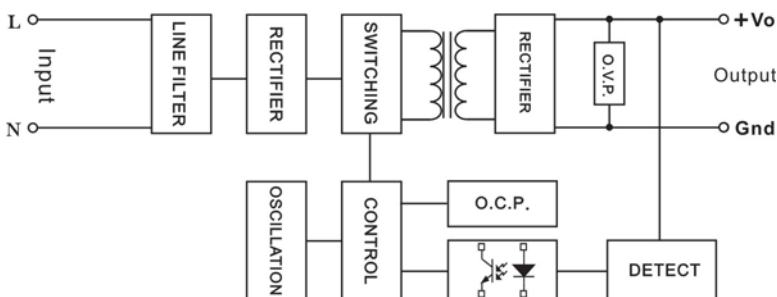
PIN#	Single
1	AC IN (N)
2	AC IN (L)
3	+DC OUT
4	-DC OUT

**DERATING**



**BLOCK DIAGRAM**

Single Output



We reserve the right to make alterations in the product materials and specifications without prior notification and consent to improve reliability, function or design or otherwise.

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**SCREW TERMINAL**

**AHCH05-A2**



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

