

AHCH10 SERIES
10 Watts
KEY FEATURES

- Ultra Compact Size: 2.1" x 1.1"
- 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
- High Efficiency up to 86%
- 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)	AHCH10-5S	AHCH10-12S	AHCH10-15S	AHCH10-24S	
Max Output Wattage (W)	10W				
Input	Voltage	90-305 VAC or 120-430 VDC (L Connect +Vin ;N Connect -Vin)			
	Frequency (Hz)	47-440 Hz			
	Current (Full load)	230 mA max. (115 VAC) / 140 mA max. (230 VAC)			
	Inrush Current	30 A max. (115 VAC) / 60 A max. (230 VAC)			
	Leakage Current	0.25 mA max.			
Output	Voltage (V.DC.)	5V	12V	15V	24V
	Voltage Accuracy	±2%			
	Current (mA) max	2000	833	667	417
	Line Regulation (LL-HL) (typ.)	±0.2%			
	Load Regulation (0-100%) (typ.)	±1%		±0.5%	
	Maximum Capacitive Load	3,500uF	630uF	470uF	180uF
	Ripple & Noise (Vp-p) (max.)	<100mV		<150mV	
	Efficiency (at 230VAC)	80.5%	85%	86%	85.5%
Hold-up Time (at 230VAC)	30 ms min.				
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) 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)	2.055 x 1.055 x 0.75 Inches (52.2 x 26.8 x 19.0 mm) Tolerance ±0.5 mm			
	Case Material	Plastic resin (flammability to UL 94V-0)			
	Weight	37 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			

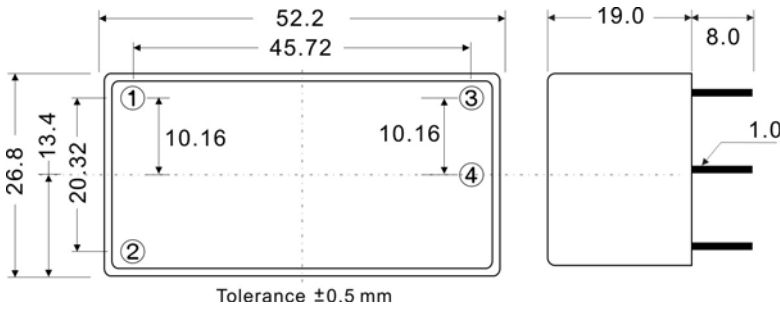
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NOTE

1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.

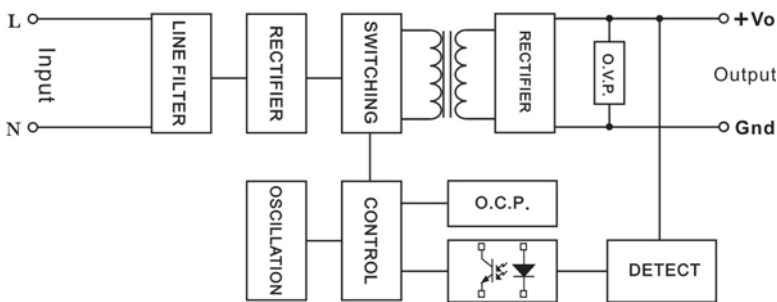
MECHANICAL DIMENSIONS (Top View)



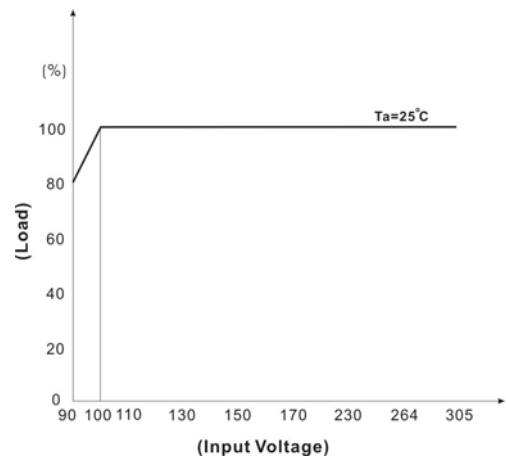
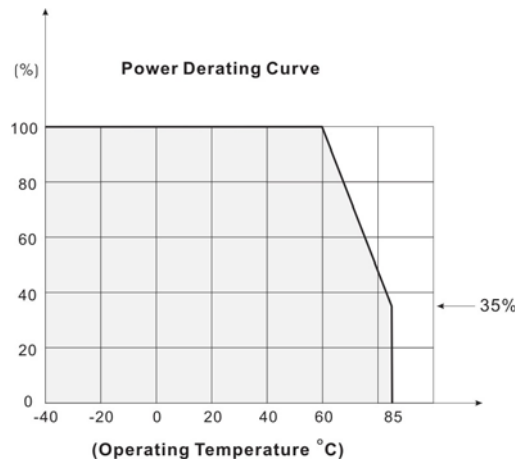
PIN#	Single
1	AC IN (N)
2	AC IN (L)
3	+DC OUT
4	-DC OUT

BLOCK DIAGRAM

Single Output



DERATING



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SCREW TERMINAL

AHCH10-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

