

KEY FEATURES

- Ultra Compact Size: 1.46" x 1.08"
- Universal Input Range 90-305VAC, 47-440Hz
- I/O Isolation 4000VAC
- Operating Ambient Temperature Range -40°C to +70°C
- No Load Power Consumption < 0.1W
- Operating attitude 5000m (UL / IEC / EN 62368-1)
- EMC Compliant without External Components
- Safety Approval to UL / IEC / EN 62368-1, IEC / EN 60950-1, 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.

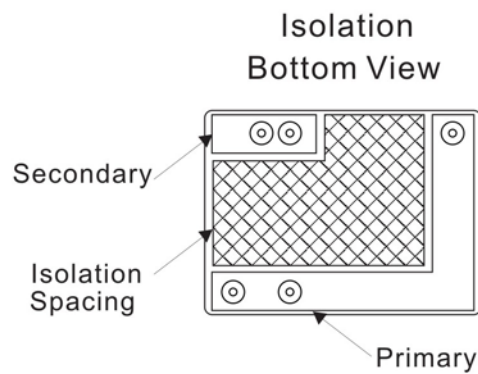
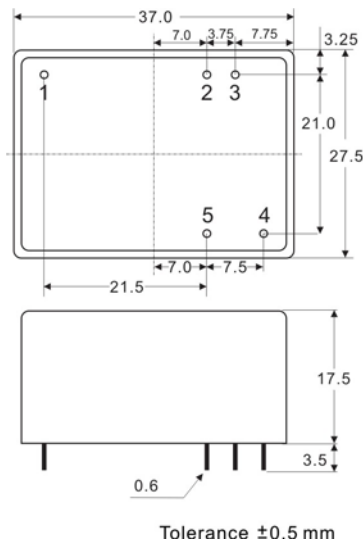
Model No. (Single Output)	AOCH05-3.3S	AOCH05-5S	AOCH05-12S	AOCH05-24S	
Max Output Wattage (W)	5W		5.04W		
Input	Voltage				
	90-305 VAC or 120-430 VDC				
	Frequency (Hz)				
	47-440 Hz				
	Current (Full load)				
150 mA max. (115 VAC) / 90 mA max. (230 VAC)					
Inrush Current (<500us)					
30 A max. (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		470uF	150uF	
Ripple & Noise (Vp-p) (max.)		<150mV	<200mV		
Efficiency (at 115VAC)		72%	77%	81%	83%
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...+70°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)				
	1.46 x 1.08 x 0.69 Inches (37.0 x 27.5 x 17.5 mm) Tolerance ±0.5 mm				
	Case Material				
	Plastic resin (flammability to UL 94V-0)				
Weight					
24 g					
Cooling Method					
Free air convection					
Safety	Agency Approvals				
UL / IEC / EN 62368-1, IEC / EN 60950-1, IEC / EN 60335-1, IEC / EN 61558-2-16					
EMC	EMI (Conducted & Radiated Emission)				
	EN 55032 class B				
EMS (Noise Immunity)					
EN 55035					

NOTE

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


 2. **SMPS** incorporating a short-circuit-proof safety isolating transformer (non-inherently)

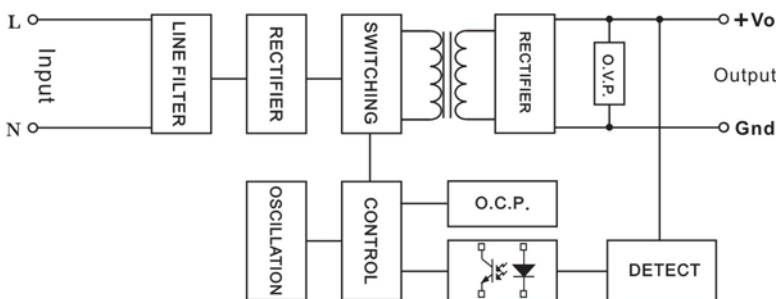
 3. **SMPS** (Switching mode power supply unit)

 4. Please refer to our PDF file "AC-DC Application" on our website: www.archcorp.com.tw
MECHANICAL DIMENSIONS (Top View)


PIN#	Single
1	NO CONNECT
2	+Vo
3	GND
4	AC IN (L)
5	AC IN (N)

BLOCK DIAGRAM

Single Output


DERATING
