

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
- High Efficiency up to 86%
- 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, TUV IEC / EN 60335-1, TUV IEC / EN 61558-2-16
- 3-Year Product Warranty

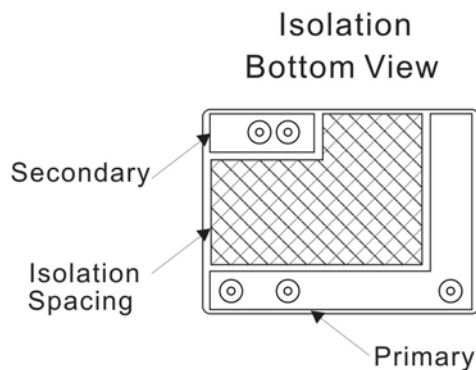
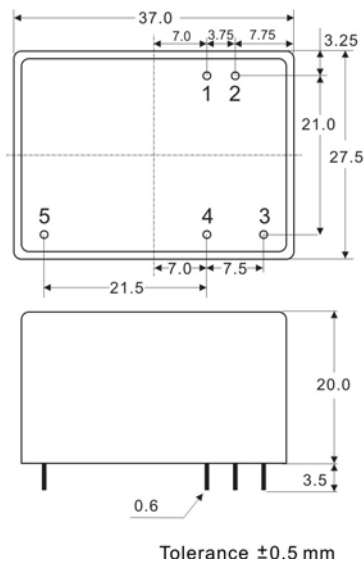
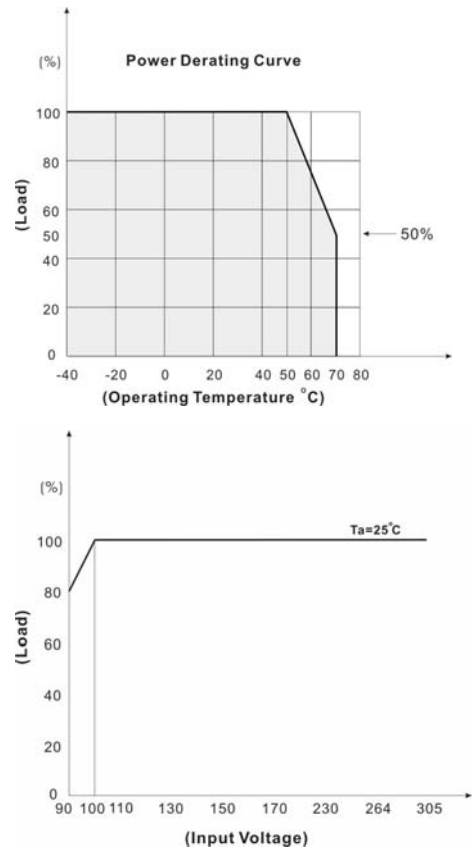

ELECTRICAL SPECIFICATIONS

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

Model No. (Single Output)	AOCH10-5S	AOCH10-12S	AOCH10-15S	AOCH10-24S
Max Output Wattage (W)	10W			
Input	Voltage			
	90-305 VAC or 120-430 VDC (N Connect +Vin ; L 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.				
External Fuse (mandatory)				
2 A slow blow type				
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	700uF	390uF	180uF	
Ripple & Noise (Vp-p) (max.)				
<150mV		<160mV		
Efficiency (at 230VAC)				
81%	85%	86%	86%	
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 (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 0.79 Inches (37.0 x 27.5 x 20.0 mm) Tolerance ±0.5 mm			
	Case Material			
	Plastic resin (flammability to UL 94V-0)			
Weight				
31 g				
Cooling Method				
Free air convection				
Safety	Agency Approvals			
	UL / IEC / EN 62368-1, IEC / EN 60950-1, TUV IEC / EN 60335-1, TUV IEC / EN 61558-2-16			
EMC	EMI (Conducted & Radiated Emission)			
	EN 55032 class B			
EMS (Noise Immunity)				
EN 55035				

NOTE

- Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
-  **SMPS** incorporating a short-circuit-proof safety isolating transformer (non-inherently)
-  **SMPS** (Switching mode power supply unit)
- A fuse 300V/2A is directly connected to the input and this fuse is 3.2mm min. away from each polarity.
- Please refer to our PDF file "AC-DC Application" on our website: www.archcorp.com.tw

MECHANICAL DIMENSIONS (Top View)

DERATING


PIN#	Single
1	+Vo
2	GND
3	AC IN (L)
4	AC IN (N)
5	NC CONNECT

BLOCK DIAGRAM

Single Output

