

## KEY FEATURES

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC, 47-440 Hz
- Single and Dual Output
- Low Ripple and Noise
- Isolation Class II
- Maximum No-Load Watts < 0.3W
- CE, CB and UL Approval
- 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 )	AOC-33S	AOC-5S	AOC-8S	AOC-9S	AOC-12S	AOC-14S	AOC-15S	AOC-24S		
Max Output Wattage (W)	3.96W	4W	4W	4W	4W	4W	4W	4W		
Input	Voltage									
	90-264 VAC or 120-370 VDC									
	Frequency (Hz)									
	47-440 Hz									
	Current (Full load)									
	110 mA max. (115 VAC) / 70 mA max. (230 VAC)									
Output	Inrush Current (<500us)									
	15 A max. (115 VAC) / 25 A max. (230 VAC)									
	Leakage Current									
	0.25 mA max.									
	External Fuse (recommend)									
	3.15 A slow blow type									
Output	Voltage (V.DC.)									
	3.3V	5V	8V	9V	12V	14V	15V	24V		
	Voltage Accuracy									
	±2%									
	Current (mA) max									
	1200	800	500	444	333	286	267	167		
	Line Regulation (LL-HL) (typ.)									
	±0.2%									
	Load Regulation (0-100%) (typ.)									
	±1%					±0.5%				
Minimum Load										
0%										
Output	Maximum Capacitive Load (at 230VAC)									
	14000uF	8000uF	2700uF	2400uF	1000uF	750uF	700uF	220uF		
	Ripple & Noise (Vp-p) max									
	<250mV			<200mV		<150mV		<100mV		
	Efficiency									
	68%	72%	74%	75%	76%	76%	76%	77%		
	Hold-up Time									
	15 ms min.									
	Protection	Over Power Protection								
		Hiccup technique, auto-recovery								
Protection	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...+85°C									
	Temperature Coefficient									
±0.02%/°C										
Physical	Humidity									
	95% RH									
	MTBF									
	>450,000 h @ 25°C (MIL-HDBK-217F)									
	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										
Physical	Case Material									
	Plastic resin (flammability to UL 94V-0)									
	Weight									
26 g										
Safety	Cooling Method									
	Free air convection									
EMC	Agency Approvals									
	IEC / EN 60950, UL / IEC / EN 62368-1									
EMC	EMI (Conducted & Radiated Emission)									
	EN 55032 class B									
EMC	EMS (Noise Immunity)									
	EN 55035									

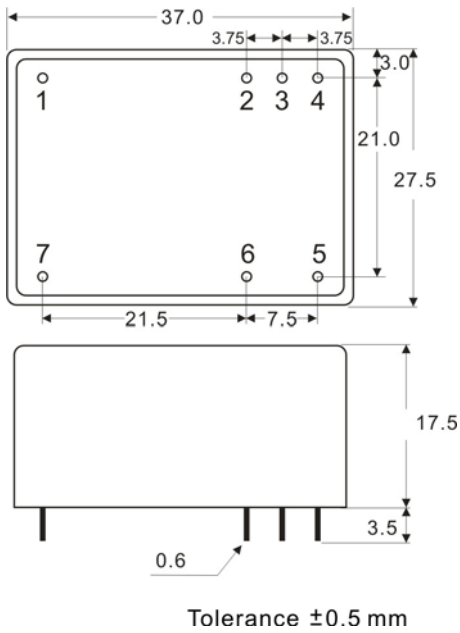
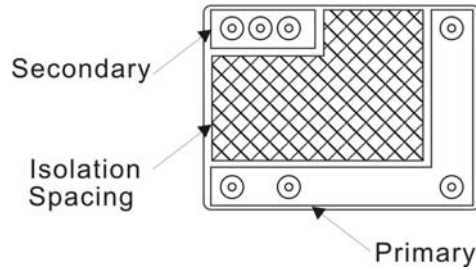
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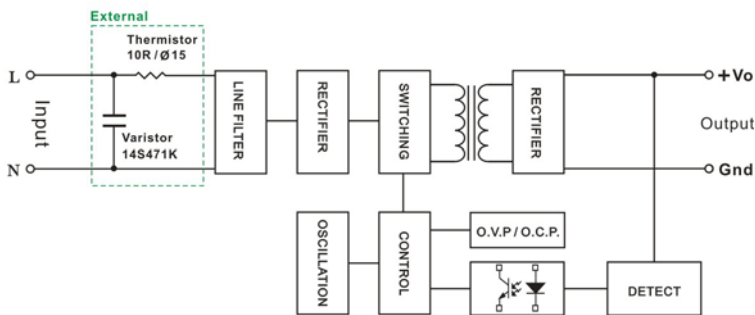
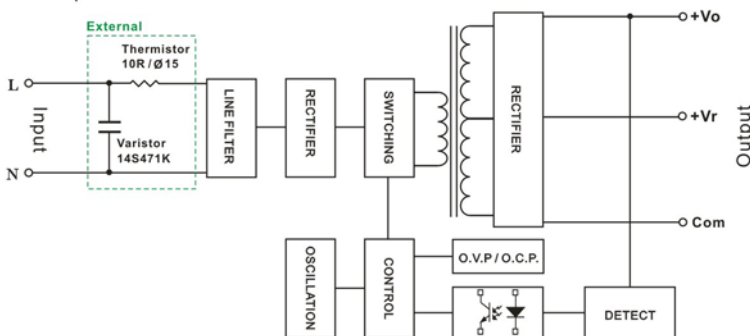
Model No. ( Dual Output )	AOC-5S3.3S	AOC-8S5S	AOC-12S5S
Max Output Wattage (W)	3.5W	3.6W	3.6W
Input	Voltage		
	90-264 VAC or 120-370 VDC		
	Frequency (Hz)		
	47-440 Hz		
	Current (Full load)		
	110 mA max. (115 VAC) / 70 mA max. (230 VAC)		
Inrush Current (<500us)			
15 A max. (115 VAC) / 25 A max. (230 VAC)			
Leakage Current			
0.25 mA max.			
External Fuse (recommend)			
3.15 A slow blow type			
Output	Voltage (V.DC.)		Vo : 5V Vr : 3.3V
	Vo : 8V Vr : 5V		Vo : 12V Vr : 5V
	Voltage Accuracy		
	Vo : ±2% Vr : ±5%		
	Current (mA) max		600 / 150
	375 / 120		250 / 120
	Line Regulation (LL-HL) (typ.)		
	Vo : ±0.2% Vr : ±3%		
	Load Regulation (25-100%) (typ.)		
	Vo : ±0.5% Vr : ±5%		
Minimum Load			
25%			
Maximum Capacitive Load (at 230VAC)		Vo : 5600uF Vr : 4700uF	Vo : 1000uF Vr : 4700uF
Vo : 330uF Vr : 4700uF			
Ripple & Noise (Vp-p) max			
<200mV		<150mV	
<100mV			
Efficiency			
72%		74%	
75%			
Hold-up Time			
15 ms min.			
Protection	Over Power Protection		
	Hiccup technique, auto-recovery		
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...+85°C		
	Temperature Coefficient		
±0.02%/°C			
Humidity			
95% RH			
MTBF			
>450,000 h @ 25°C (MIL-HDBK-217F)			
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			
26 g			
Cooling Method			
Free air convection			
Safety	Agency Approvals		
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	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. It's necessary Varistor 14S471K at L / N input side in parallel.
3. It's necessary 10R / 15φ thermistor at L input side in series connection.
4. 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 )**

**Isolation Bottom View**


PIN#	Single	Dual
1	NC	NC
2	+Vo	+Vo
3	GND	COM
4	NC	+Vr
5	AC IN (L)	AC IN (L)
6	AC IN (N)	AC IN (N)
7	NC	NC

**BLOCK DIAGRAM**
**Single Output**

**Dual Output**

**DERATING**
