ARCH ELECTRONICS CORP.

AC-DC Power Module

AUC SERIES 7 Watts

KEY FEATURES

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC, 50 / 60 Hz
- No-Load Watts < 0.1W
- Ultra Compact Size: 1.08” x 1.08” x 0.736” Inches
- Isolation Class II
- CE, CB, UL Approval
- 3-Year Product Warranty



E199779 LEVEL3

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)		AUC-5S	AUC-12S	AUC-15S	AUC-24S
Max Output Wattage (W)		6.3W	7W		
Input	Voltage	90-264 VAC or 120-370 VDC, “ N ” to DC “ + “ ; “L ” to DC “ - “			
	Frequency (Hz)	50 / 60 Hz			
	Current (Full load)	180 mA max. (115 VAC) / 110 mA max. (230 VAC)			
	Inrush Current (Note 4.)	20 A max. (115 VAC) / 40 A max. (230 VAC)			
	Leakage Current	0.25 mA max. (at <240 VAC).			
	External Fuse (mandatory)	2 A slow blow type			
Output	Voltage (V.DC.)	5V	12V	15V	24V
	Voltage Accuracy	±2%			
	Current (mA) max	1260	583	466	292
	Line Regulation (LL-HL) (typ.)	±0.5%			
	Load Regulation (10-100%) (typ.)	±1%.			
	Minimum Load	0%			
	Maximum Capacitive Load	3300uF	1000uF	470uF	68uF
	Ripple	<100mV (Vp-p)			<200mV (Vp-p)
	Noise	<150mV (Vp-p)			<200mV (Vp-p)
	Efficiency (at 230 VAC)	77%	80%	80%	80%
	Hold-up Time (at 230 VAC)	30 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	>500,000 h @ 25°C (MIL-HDBK-217F)			
Physical	Dimension (L x W x H)	1.08 x 1.08 x 0.736 Inches (27.4 x 27.4 x 18.7 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	CE, UL, cUL			
EMC	EMI (Conducted & Radiated Emission)	EN 55022 class B			
	EMS (Noise Immunity)	EN 55024			

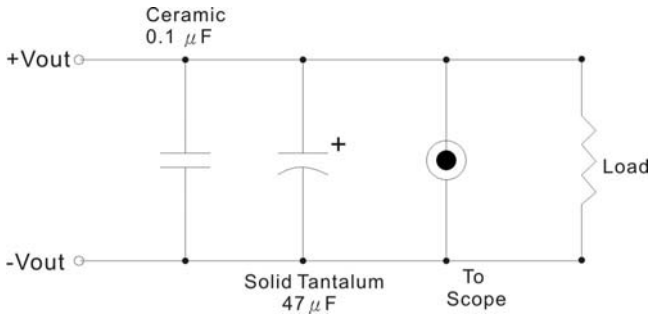
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NOTE

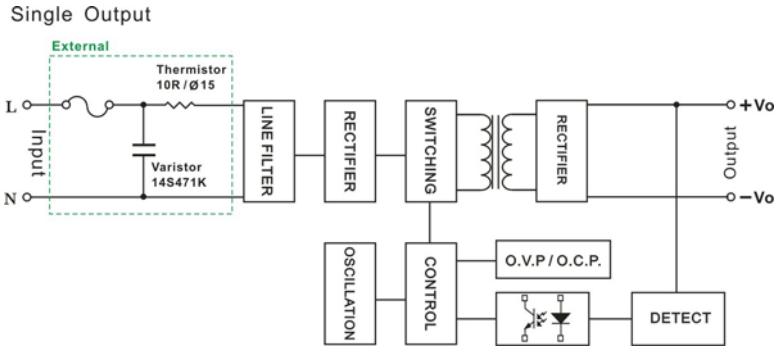
1. All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.
2. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
3. It's necessary Varistor 14S471K at L / N input side in parallel.
4. It's necessary 10R / 15φ thermistor at L input side in series connection.
5. Please refer to our PDF file "AC-DC Application" on our website: www.archcorp.com.tw

OUTPUT NOISE

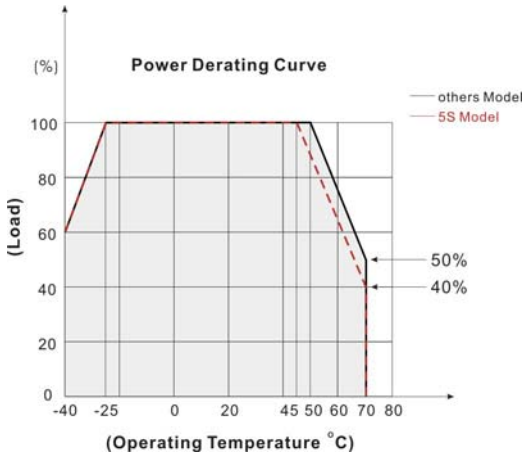
The output noise is measured with 47μF tantalum capacitor and 0.1μF ceramic capacitor across output.



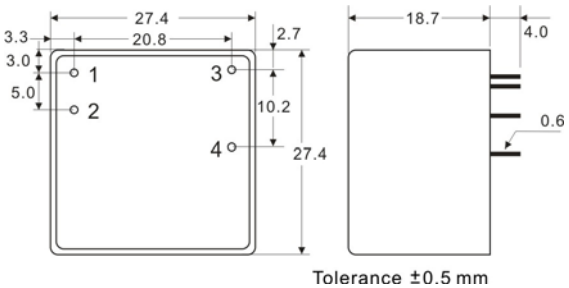
BLOCK DIAGRAM



DERATING



MECHANICAL DIMENSION (Top View)



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

Customer is recommended to reserve pad points of 1.0mm in diameter for AC IN (L) and AC IN (N)

