

KEY FEATURES

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC, 47-63 Hz
- No-Load Watts < 0.1W
- Ultra Compact Size: 1.62" x 1.07" x 0.75" Inches
- Isolation Class II
- CE, CB, 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.

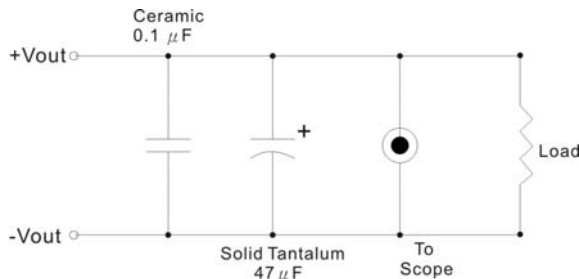
Model No. (Single Output)		AVC-5S	AVC-12S	AVC-15S	AVC-24S
Max Output Wattage (W)		13.5W	15W		
Input	Voltage	90-264 VAC or 120-370 VDC (N Connect +Vin ; L Connect –Vin)			
	Frequency (Hz)	47-63 Hz			
	Current (Full load)	340 mA max. (115 VAC) / 220 mA max. (230 VAC)			
	Inrush Current	25 A max. (115 VAC) / 45 A max. (230 VAC)) (cold start)			
	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	2700	1250	1000	625
	Line Regulation (LL-HL) (typ.)	±0.5%			
	Load Regulation (10-100%) (typ.)	±1%.			
	Minimum Load	0%			
	Maximum Capacitive Load	7000uF	1500uF	1000uF	470uF
	Ripple & Noise (typ.)	100mV (Vp-p)	120mV (Vp-p)	150mV (Vp-p)	240mV (Vp-p)
	Efficiency (at 230 VAC)	80%	84%	84%	85%
	Hold-up Time (at 230 VAC)	35 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 (Note 6)	-40°C...+70°C (with derating)			
	Storage Temperature	-40°C...+85°C			
	Temperature Coefficient	±0.05%/°C			
	Humidity	95% RH			
	MTBF	>450,000 h @ 25°C (MIL-HDBK-217F)			
Physical	Dimensions (L x W x H)	1.62 x 1.07 x 0.75 Inches (41.2 x 27.2 x 19.1 mm) Tolerance ±0.5 mm			
	Case Material	Plastic resin (flammability to UL 94V-0)			
	Weight	40 g			
	Cooling Method	Free air convection			
Safety	Agency Approvals	IEC / EN 60950, UL / IEC / EN 62368-1			
EMC	EMI (Conducted & Radiated Emission)	EN 55032 class B			
	EMS (Noise Immunity)	EN 55024			

NOTE

1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. It's recommend Varistor 14S471K at L / N input side in parallel.
3. It's recommend 10R / 8φ thermistor at L input side in series connection.
4. Safety approvals cover frequency 47-63 Hz.
5. That "natural convection" is about 20LFM but is not equal to still air (0 LFM).
6. Due to varying customer application conditions, the product is tested for maximum operating temperature under full load only. For other regulatory requirements, please contact ARCH.
7. Please refer to our PDF file "AC-DC Application" on our website: www.archcorp.com.tw

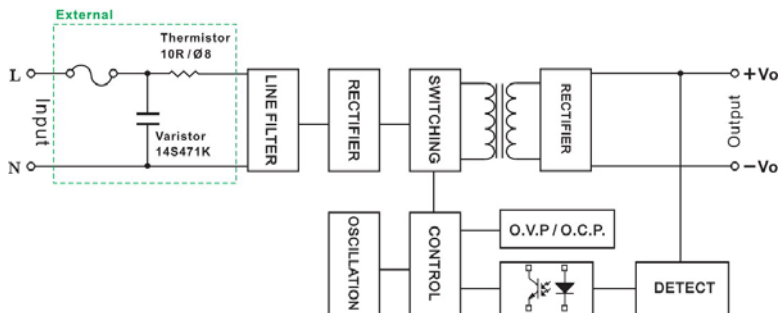
OUTPUT NOISE

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

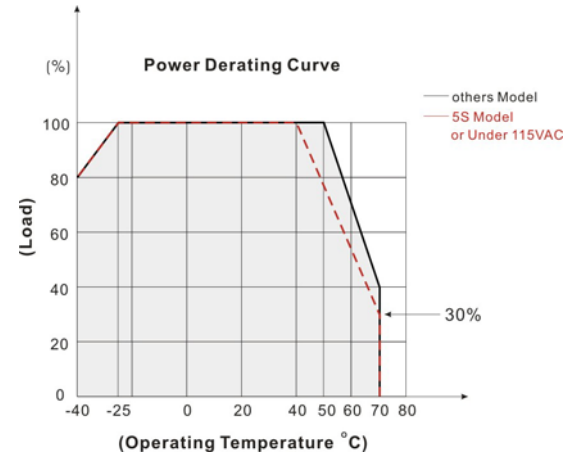


BLOCK DIAGRAM

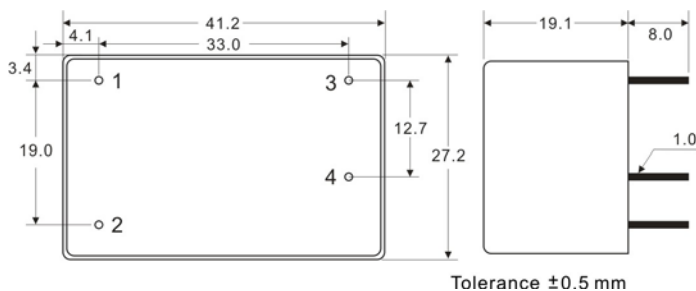
Single Output



DERATING



MECHANICAL DIMENSIONS (Top View)



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

