

ARC60 SERIES

60 Watts

KEY FEATURES

- Ultra Compact Size: 2.92" x 1.85"
- Universal Input Range 90-264VAC, 47-440Hz
- I/O Isolation 4000VAC
- Operating Ambient Temperature Range -40°C to +85°C
- No Load Power Consumption < 0.1W
- High Efficiency up to 90%
- Operating altitude 5000m (UL / IEC / EN 62368-1)
- Screw Terminal for Option
- 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.		ARC60-12S	ARC60-15S	ARC60-24S
Max Output Wattage (W)		60W		
Input	Voltage	90-264 VAC or 120-370 VDC		
	Frequency (Hz)	47-440 Hz		
	Current (Full load)	1500 mA max. (115 VAC) / 1000 mA max. (230 VAC)		
	Inrush Current (<2ms)	45 A max. (115 VAC) / 90 A max. (230 VAC)		
	Leakage Current	0.25 mA max. (100-240 VAC)		
Output	Voltage (V.DC.)	12V	15V	24V
	Voltage Accuracy	±2%		
	Current (mA) max	5000	4000	2500
	Line Regulation (LL-HL) (typ.)	±2%		
	Load Regulation (0-100%) (typ.)	±2.5%		
	Minimum Load	0%		
	Maximum Capacitive Load	6000uF	5000uF	1200uF
	Ripple & Noise	120mV	150mV	240mV
	Efficiency (at 230 VAC)	90%	90%	89%
Protection	Hold-up Time (typ)	30 ms (at 230VAC)		
	Over Power Protection	Auto recovery		
	Over Voltage Protection	Zener diode clamp		
Isolation	Short Circuit Protection	Hiccup mode (automatic recovery)		
	Input-Output (V.AC)	4000V		
Environment	Operating Temperature (Note 4)	-40°C...+85°C (with derating)		
	Storage Temperature	-40°C...+85°C		
	Temperature Coefficient	±0.05%/°C		
	Altitude During Operation (UL / IEC / EN 62368-1)	5000m		
	Humidity	95% RH		
	MTBF	>300,000 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)	2.92 x 1.85 x 0.91 Inches (74.2 x 47.0 x 23.1 mm) Tolerance ±0.5 mm, Height Tolerance ±1 mm		
	Case Material	Plastic resin (flammability to UL 94V-0)		
	Weight	158 g		
	Cooling Method	Free air convection		
Safety	Agency Approvals	UL / IEC / EN 62368-1, IEC / EN 60950-1, IEC / EN 60335-1(A2 Series N/A), IEC / EN 61558-2-16(A2 Series N/A)		
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)

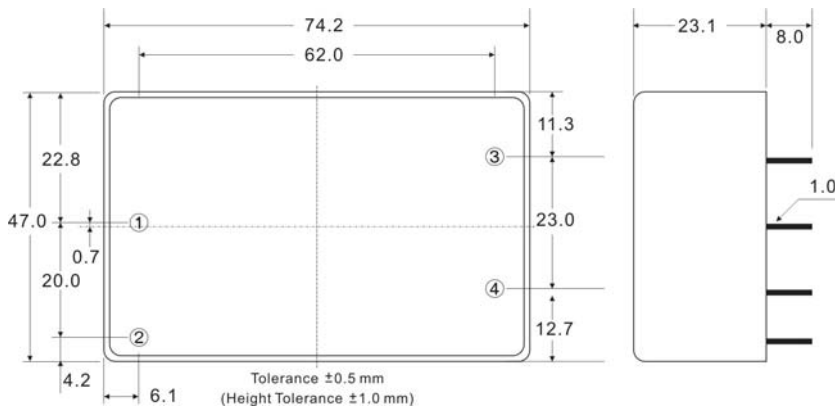
4. Due to varying customer application conditions, the product is tested for maximum operating temperature under full load only. For other regulatory requirements, please contact ARCH.

5. CAUTION: Double pole, neutral fusing. Disconnect mains before servicing.

(ATTENTION : 2 poles avec fusible sur le neutre. Deconnecter le secteur avant intervention.)

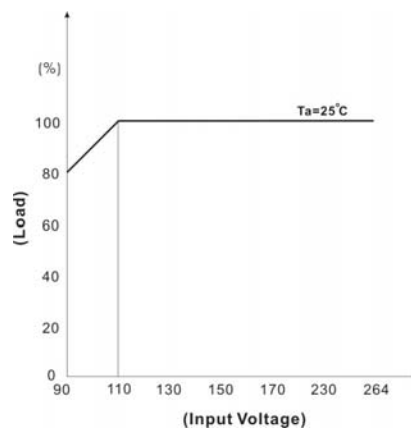
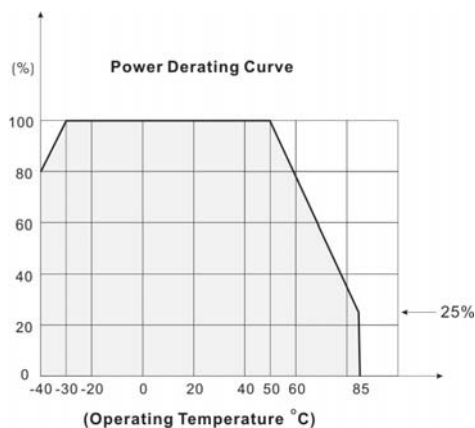
6. Please refer to our PDF file "AC-DC Application" on our website: www.archcorp.com.tw

MECHANICAL DIMENSIONS (Top View)



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

DERATING

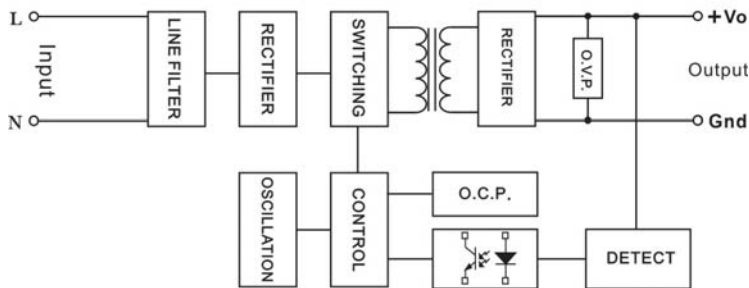


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BLOCK DIAGRAM

Single Output



SCREW TERMINAL

ARC60-A2



PIN#	Single
1	NO CONNECT
2	AC IN (N)
3	AC IN (L)
4	NO CONNECT
5	-DC OUT
6	NO CONNECT
7	+DC OUT
8	NO CONNECT

