

ANCH50 SERIES

50 Watts

KEY FEATURES

- Ultra Compact Size: 2.92" x 1.85"
- 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 89%
- 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

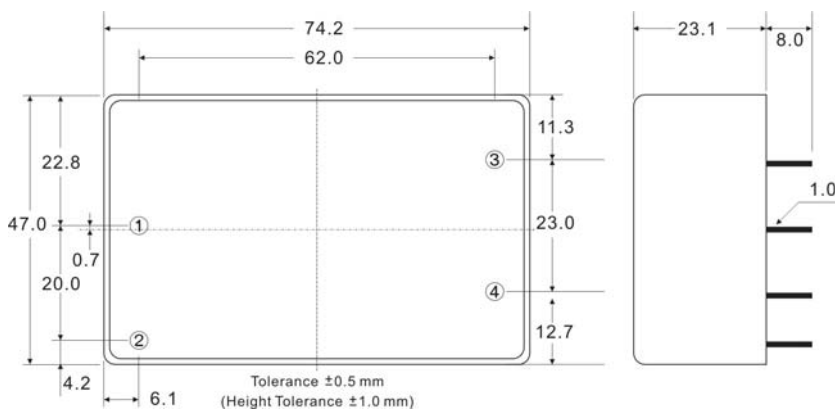
All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No.		ANCH50-12S		ANCH50-15S		ANCH50-24S	
Max Output Wattage (W)		50W					
Input	Voltage	90-305 VAC or 120-430 VDC					
	Frequency (Hz)	47-440 Hz					
	Current (Full load)	1000 mA max. (115 VAC) / 600 mA max. (230 VAC)					
	Inrush Current (Cold star)	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	4167		3333		2083	
	Line Regulation (LL-HL) (typ.)	±2%					
	Load Regulation (0-100%) (typ.)	±2.5%.					
	Minimum Load	0%					
	Maximum Capacitive Load	3500µF		3000µF		2200µF	
	Ripple & Noise (Vp-p) (max.)	120mV		150mV		240mV	
	Efficiency (at 230 VAC)	89%		88%		88%	
	Hold-up Time (typ)	30 ms (at 230VAC)					
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 4)	-40°C...+70°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

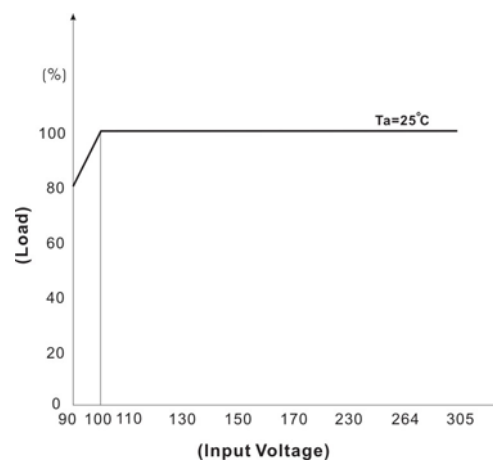
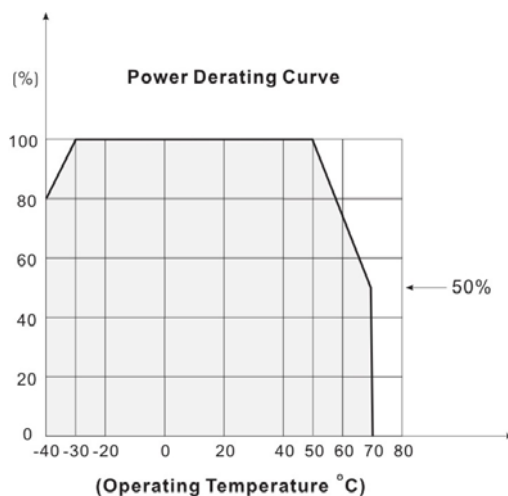
1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2.  **SMPS** incorporating a short-circuit-proof safety isolating transformer (non-inherently)
3.  **SMPS** (Switching mode power supply unit)
4. Due to varying customer application conditions, the product is tested 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

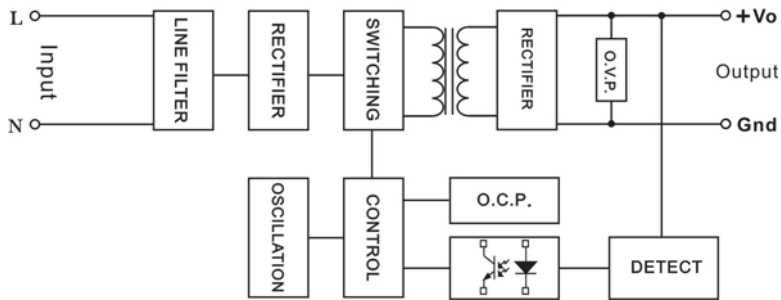


ANCH50 SERIES

50 Watts

BLOCK DIAGRAM

Single Output



SCREW TERMINAL

ANCH50-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

