

ATCV40 SERIES

40 Watts

KEY FEATURES

- Universal Input Range 90-305VAC, 47-440 Hz
- I/O Isolation 4300VAC
- Operating Ambient Temperature Range -40°C to +85°C
- No Load Power Consumption < 0.1W
- 5000m Altitude Application
- Over-Voltage Category OVC III (New Edition)
- High Efficiency up to 90%
- Isolation Class II
- EMC Compliant without External Components
- Safety Approval to UL / IEC / EN 62368-1
- Design meet IEC / EN 61558-1, IEC / EN 61558-2-16, IEC / EN 60335-1
- 3-Year Product Warranty



ELECTRICAL SPECIFICATIONS

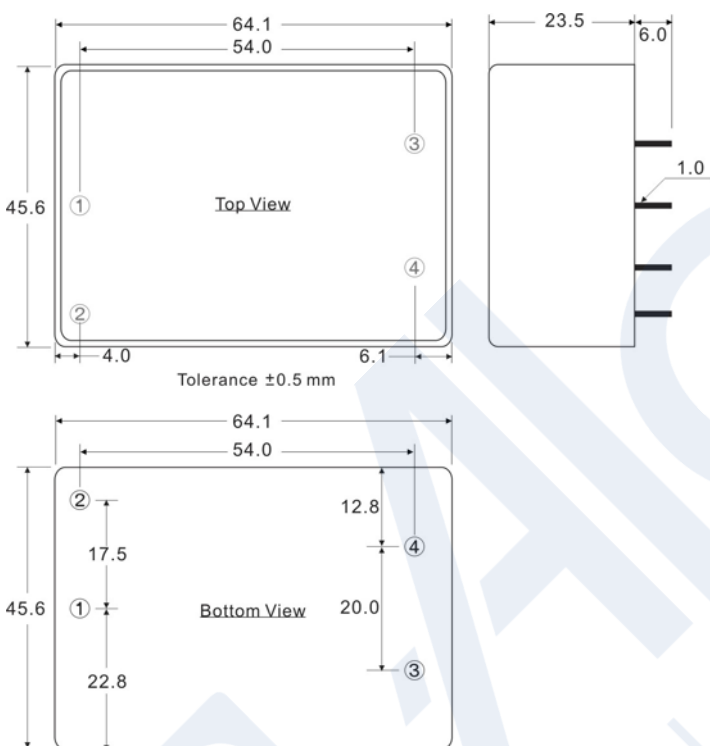
All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No.	ATCV40-5S	ATCV40-12S	ATCV40-15S	ATCV40-24S	ATCV40-48S
Max Output Wattage (W)	35W	40W			
Input	Voltage				
	90-305 VAC or 120-430 VDC				
	Frequency (Hz)				
	47-440 Hz				
	Current (Full load)				
	1000 mA max. (115 VAC) / 500 mA max. (230 VAC)				
Output	Inrush Current (<2ms)				
	60 A max. (115 VAC) / 100 A max. (230 VAC)				
	Leakage Current				
	0.25 mA max. (100-240 VAC)				
	No Load Power Consumption				
	< 0.1W (115/230 VAC)				
Output	Voltage (V.DC.)				
	5V	12V	15V	24V	48V
	Voltage Accuracy				
	±2%				
	Current (mA) max				
	7000	3333	2666	1666	833
	Line Regulation (LL-HL) (typ.)				
	±0.5%				
	Load Regulation (0-100%) (typ.)				
	±1%				
Output	Minimum Load				
	0%				
	Maximum Capacitive Load				
	8000 uF	6000 uF	5000 uF	1200 uF	820 uF
	Ripple & Noise (Full Load)				
	120mV		150mV		240mV
	Efficiency (at 230 VAC)				
	87%	90%	90%	89%	89%
	Hold-up Time (typ)				
	30 ms (at 230VAC)				
Protection	Over Power Protection				
	Auto recovery				
	Over Voltage Protection				
Zener diode clamp					
Protection	Short Circuit Protection				
	Hiccup mode (automatic recovery)				
Isolation	Input-Output (V.AC)				
4300V					
Environment	Operating Temperature				
	-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					
Physical	MTBF				
	>300,000 h @ 25°C (MIL-HDBK-217F)				
	Over Voltage Category				
	III: Compliance to EN 61558; altitude up to 2000 meters.				
	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)				
	2.52 x 1.8 x 0.93 Inches (64.1 x 45.6 x 23.5 mm) Tolerance ±0.5 mm				
	Case Material				
	Plastic resin (flammability to UL 94V-0)				
Physical	Weight				
	125 g				
Physical	Cooling Method				
	Free air convection				
Safety	Approval				
	UL / IEC / EN 62368-1 (In Progress)				
Safety	Meet				
	IEC / EN 61558-1, IEC / EN 61558-2-16, IEC / EN 60335-1 (In Progress)				
EMC	EMI (Conducted & Radiated Emission)				
	EN 55032 class B (In Progress)				
EMC	EMS (Noise Immunity)				
	EN 55035 (In Progress)				

NOTE

1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. **CAUTION: Double pole, neutral fusing. Disconnect mains before servicing.**
(ATTENTION : 2 poles avec fusible sur le neutre. Deconnecter le secteur avant intervention.)
3. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).
4. 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

