

ATCW40 SERIES

40 Watts

KEY FEATURES

- Universal Input Range 90-330VAC, 47-440 Hz
- I/O Isolation 5700VAC
- Operating Ambient Temperature Range -40°C to +70°C
- No Load Power Consumption < 0.1W (except 48S)
- Over-Voltage Category OVC IV
- High Efficiency up to 89%
- Isolation Class II
- EMC Compliant without External Components
- Safety Approval to UL / IEC / EN 62368-1
- 3-Year Product Warranty



ELECTRICAL SPECIFICATIONS

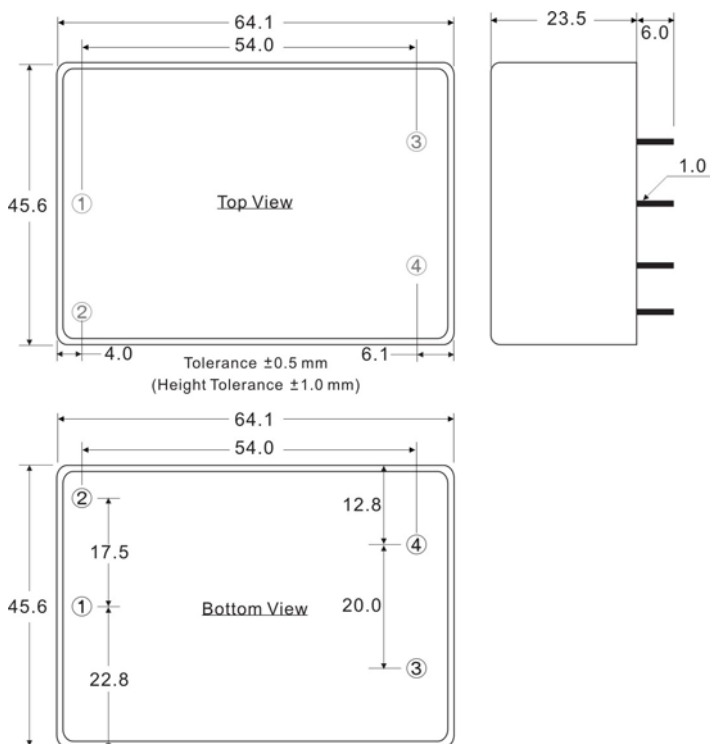
All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No.		ATCW40-5S	ATCW40-12S	ATCW40-15S	ATCW40-24S	ATCW40-48S
Max Output Wattage (W)		35W	40W			
Input	Voltage	90-330 VAC or 120-450 VDC				
	Frequency (Hz)	47-440 Hz				
	Current (Full load)	1000 mA max. (115 VAC) / 500 mA max. (230 VAC)				
	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 (115 / 230 VAC)	< 0.1W				< 0.15W
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%				
	Minimum Load	0%				
	Maximum Capacitive Load	8000 uF	6000 uF	5000 uF	1200 uF	330 uF
	Ripple & Noise (Full Load)	120mV		150mV	240mV	480mV
	Efficiency (at 230 VAC)	87%	89%	89%	88%	88%
	Hold-up Time (typ)	30 ms (at 230VAC)				
Protection	Over Power Protection	Auto recovery				
	Over Voltage Protection	Zener diode clamp				
	Short Circuit Protection	Hiccup mode (automatic recovery)				
Isolation	Input-Output (V.AC)	5700V				
Environment	Operating Temperature (Note 2)	-40°C...+70°C (with derating)				
	Storage Temperature	-40°C...+70°C				
	Temperature Coefficient	±0.05%/°C				
	Altitude During Operation (UL / IEC / EN 62368-1)	2000m				
	Humidity	95% RH				
	MTBF	>300,000 h @ 25°C (MIL-HDBK-217F)				
	Over Voltage Category	IV: Compliance to EN 62368.				
	Vibration	IEC60068-2-6 (10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes)				
Physical	Shock	IEC60068-2-27				
	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, Height Tolerance ±1 mm				
	Case Material	Plastic resin (flammability to UL 94V-0)				
	Weight	125 g				
Safety	Cooling Method	Free air convection				
	Approval	UL / IEC / EN 62368-1				
EMC	EMI (Conducted & Radiated Emission)	EN 55032 class B				
	EMS (Noise Immunity)	EN 55035				

NOTE

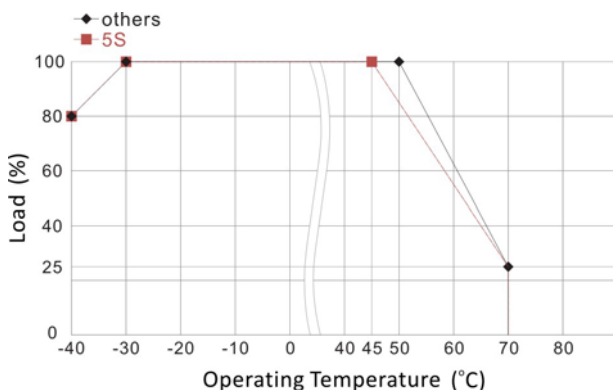
1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. Due to varying customer application conditions, the product is tested for maximum operating temperature under full load only. For other regulatory requirements, please contact ARCH.
3. CAUTION: Double pole, neutral fusing. Disconnect mains before servicing.
(ATTENTION : 2 poles avec fusible sur le neutre. Deconnecter le secteur avant intervention.)
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



Derating Load versus Input Voltage

