

KEY FEATURES

- Open Frame ITE Switching Power Supply
- Universal Input Range 90-264VAC, 47-63 Hz
- Operating Ambient Temperature Range -40°C to +80°C
- I/O Isolation 3000VAC
- No Load Power Consumption < 0.1W
- High Efficiency up to 90%
- Ultra Compact Size: 3.0 x 1.5 x 0.87 Inches
- Safety Approval to UL / IEC / EN 62368-1
- 3-Year Product Warranty



ELECTRICAL SPECIFICATIONS

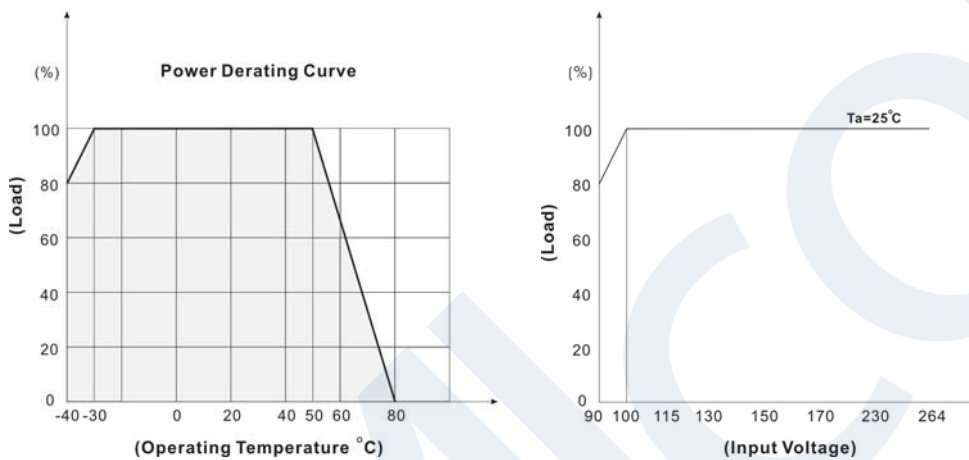
All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

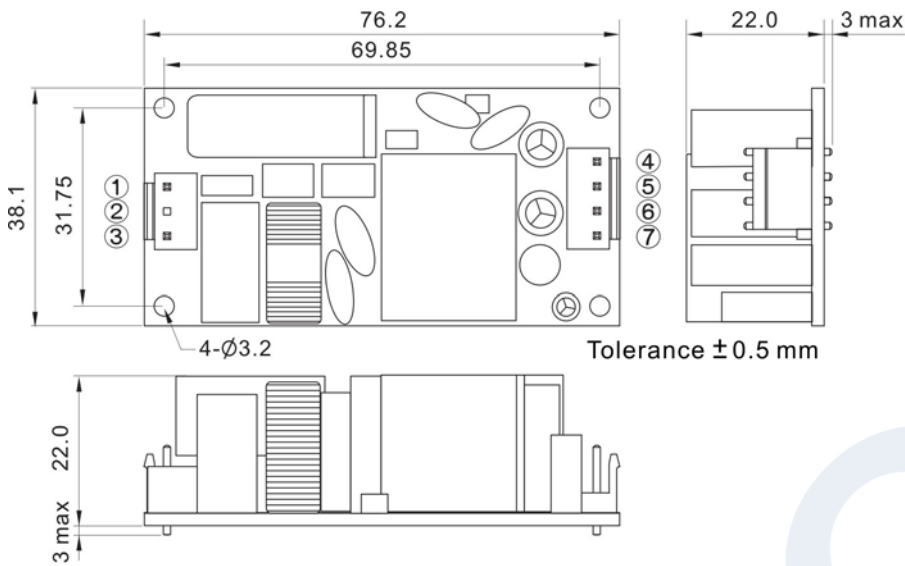
Model No.	AQF40-12S		AQF40-24S	
Max Output Wattage (W)	40W			
Input	Voltage (Note 3)	90-264 VAC or 120-370 VDC		
	Frequency (Hz)	47-63 Hz		
	Current (Full load)	1000 mA max. (115 VAC) / 500 mA max. (230 VAC)		
	Inrush Current (<2ms) (Cold Start)	50 A max. (115 VAC) / 100 A max. (230 VAC)		
	Leakage Current	0.25 mA max. (100-240 VAC)		
	No Load Power Consumption	< 0.1W (115/230 VAC)		
Output	Voltage (V.DC.)	12V	24V	
	Voltage Accuracy	±2%		
	Current (mA) (max.)	3333	1666	
	Line Regulation (LL-HL) (typ.)	±1%		
	Load Regulation (0-100%) (typ.)	±1%		
	Maximum Capacitive Load	6000uF	1200uF	
	Ripple & Noise (Full Load)	120mV	240mV	
	Efficiency (at 230 VAC)	90%	89%	
	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)	3000VAC or 4242VDC		
Environment	Operating Temperature	-40°C...+80°C (with derating)		
	Storage Temperature	-40°C...+85°C		
	Temperature Coefficient	±0.05%/°C		
	Altitude During Operation (UL / IEC / EN 62368-1)	2000m		
	Humidity	60% RH		
	MTBF	>330,000 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)	3.0 x 1.5 x 0.87 Inches (76.2 x 38.1 x 22.0 mm) Tolerance ±0.5 mm		
	Weight	58 g		
	Cooling Method	Free air convection		
Safety	Approval	UL / IEC / EN 62368-1 (In Progress)		
EMC	EMI (Conducted & Radiated Emission)	EN 55032 class B (In Progress)		
	EMS (Noise Immunity)	EN 55035 (In Progress)		

NOTE

1. Ripple & Noise are measured at 20MHz of bandwidth by using a 6" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
2. Strongly recommend to conduct this test with DC Voltage. If customer wishes to test with AC Voltage, please disconnect all Y-Capacitors from Arch power supply.
3. Derating may be needed under low input voltages. Please check the derating curve for more details.
4. Please refer to our PDF file "AC-DC Application" on our website: www.archcorp.com.tw

DERATING



MECHANICAL DIMENSIONS (Top View)


Brands		Alex		JST	
PIN#	Single	Mating Housing	Terminal	Mating Housing	Terminal
1	AC IN (N)	9396-3	96T series	VHR-3N	SVH-41T-P1.1
2	NO PIN				
3	AC IN (L)				
4~5	+DC OUT	9396-4	96T series	VHR-4N	SVH-41T-P1.1
6~7	-DC OUT				