

AQF120U Series

120 W AC/DC Switching Power Supply – U Bracket

CoolPower
Solutions

- U Bracket Switching Power Supply
- Universal Input: 90-264 VAC
- With P.F.C. Function
- Free Air Convection
- Ultra Compact Size: 5.0 x 3.24 x 1.5 Inches
- 2-Years Product Warranty



Electrical specifications

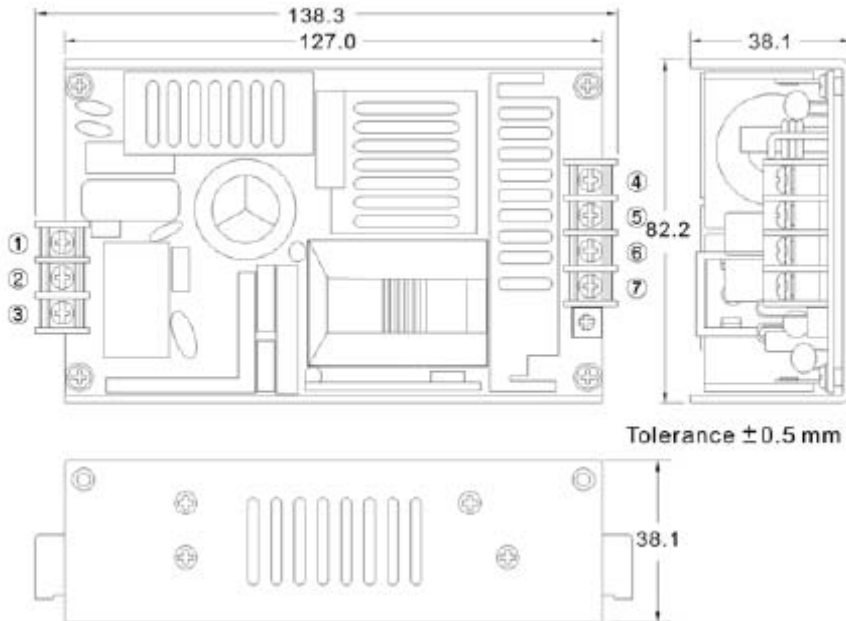
Model No.	AQF120U-12S	AQF120U-24S	AQF120U-48S
Max Output Wattage (W)	120W	120W	120W
Input	Voltage		
	90-264 VAC or 120-370 VDC		
	Frequency (Hz)		
	47-63 Hz		
	Current (Full load)		
	<2.0 A max. (115 VAC) / <1.0 A max. (230 VAC)		
Inrush Current (<2ms)			
< 30 A max. (115 VAC) / < 60 A max. (230 VAC)			
Leakage Current			
< 0.5 mA max.			
Power Factor			
PF>0.98 (115 VAC) / PF>0.94 (230 VAC) at Full Load			
Output	Voltage (V.DC.)		12V
			24V
			48V
	Voltage Accuracy		
	±2%		
	Current (Convection) (A) max		10
			5
			2.5
	Line Regulation		
	±1%		
	Load Regulation		
±1%			
Minimum Load			
0%			
Maximum Capacitive Load			
470-23,000µF depending on model			
Ripple & Noise			
1% max.			
Efficiency (typ.)		90%	91%
		92%	
Hold-up Time			
20 ms min.			
Switching Frequency			
100 kHz			
Protection	Over Power Protection		
	Auto recovery		
	Over Voltage Protection		
Latch Off			
Short Circuit Protection			
Latch Off			
Isolation	Input-Output (V.AC)		
	4000V		
	Input-FG (V.AC)		
2000V			
Output-FG (V.AC)			
500V			
Environment	Operating Temperature		
	-10°C...+70°C (with derating)		
	Storage Temperature		
	-25°C...+85°C		
	Temperature Coefficient		
	±0.03%/°C (0~50°C)		
Humidity			
95% RH			
MTBF			
>50,000 h @ 25°C (MIL-HDBK-217F)			
Vibration			
10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes.			
Physical	Dimension (L x W x H)		
	5.0 x 3.24 x 1.5 Inches (127.0 x 82.2 x 38.1 mm) Tolerance ±0.5 mm		
	Weight		
382 g			
Cooling Method			
Free convection			
Safety	Agency Approvals		
CE, UL60950			
EMC	EMI (Conducted & Radiated Emission)		
	EN 55022 class B		
EMS (Noise Immunity)			
EN 55024			

1. All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.
2. Ripple & Noise are measured at 20MHz of bandwidth with 0.1µF & 47µF parallel capacitor.

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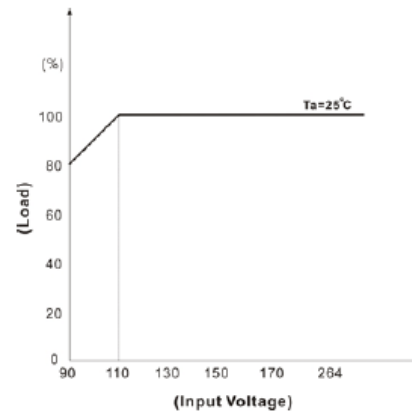
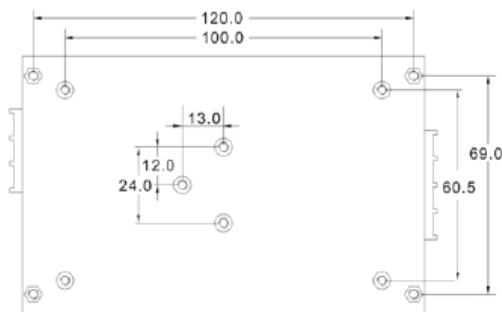
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Mechanical Specifications (top view)



Pin no:	Single
1	AC IN (L)
2	AC IN (N)
3	FG
4	+DC OUT
5	+DC OUT
6	-DC OUT
7	-DC OUT

DERATING



BLOCK DIAGRAM

