

# AQF250E Series

250 W AC/DC Switching Power Supply – Enclosed

CoolPower  
Solutions

- Enclosed Switching Power Supply
- Universal Input: 90-264 VAC
- 3.3 VDC to 48 VDC Single Output
- 3000 VAC Input to Output Isolation
- 250Watt with 18CFM FAN
- Size: 7.0 x 4.2 x 1.6 Inches
- 2-Years Product Warranty



## Electrical specifications

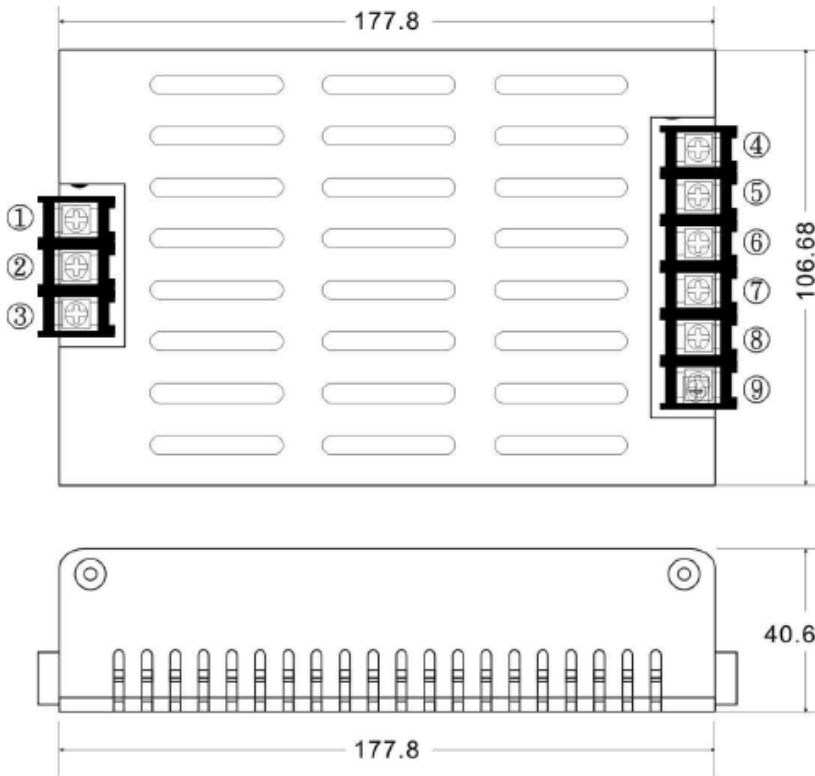
Model No.	AQF250E-3.3S	AQF250E-5S	AQF250E-12S	AQF250E-15S	AQF250E-24S	AQF250E-48S		
Max Output Wattage - Convection (W)	80W	120W	162W	162W	162W	162W		
Max Output Wattage – 18CFM Fan (W)	132W	200W	250W	250W	250W	250W		
Input	Voltage						90-264 VAC or 120-370 VDC	
	Frequency (Hz)						47-63 Hz	
	Current (Full load)						4 A max. (115 VAC) / 2 A max. (230 VAC)	
	Inrush Current (<2ms)						40 A max. (115 VAC) / 80 A max. (230 VAC)	
	Leakage Current						3.5 mA max.	
	Power Factor						PF>0.97 (115 VAC) / PF>0.93 (230 VAC) at Full Load	
Output	Voltage (V.DC.)		3.3V	5V	12V	15V	24V	48V
	Voltage Accuracy		±2%					
	Current Conv (A) max		24.24	24	13.5	10.8	6.75	3.375
	Current 18CFM (A)max		40	40	20.83	16.66	10.4	5.2
	Line Regulation		±1% (LL-HL) (typ.)					
	Load Regulation		±1% (5-100%) (typ.)					
	Minimum Load		0%					
	Max Capacitive Load		470-23,000µF depending on model					
	Ripple & Noise (Vp-p)		100 mV max	100 mV max.	1% max	1% max	1% max	1% max
	Efficiency		69%	75%	80%	80%	80%	80%
	Hold-up Time		18 ms min.					
	Switching Frequency		67 kHz					
Protection	Over Power Protection		Auto recovery					
	Over Voltage Protectio		Zener diode clamp					
	Short Circuit Protection		Auto recovery					
Isolation	Input-Output (V.AC)		3000V					
	Input-FG (V.AC)		1500V					
	Output-FG (V.AC)		500V					
Environment	Operating Temperature		-25°C...+70°C (with derating)					
	Storage Temperature		-40°C...+85°C					
	Temperature Coefficien		±0.02%/°C					
	Humidity		95% RH					
	MTBF		>50,000 h @ 25°C (MIL-HDBK-217F)					
	Vibration		10~500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes.					
Physical	Dimension (L x W x H)		7.0 x 4.2 x 1.6 Inches ( 177.8 x 106.68 x 40.64 mm ) Tolerance ±0.5 mm					
	Weight		823 g					
	Cooling Method		Free air convection / 18CFM Forced Air					
Safety	Agency Approvals		CE, UL					
EMC	EMI		EN 55022 class B (Conducted & Radiated Emission)					
	EMS (Noise Immunity)		EN 55024					

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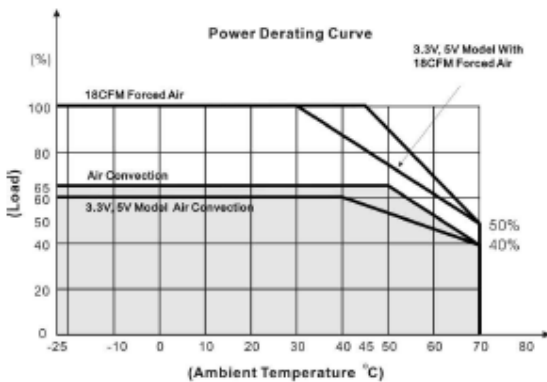
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## Mechanical Specifications (top view)

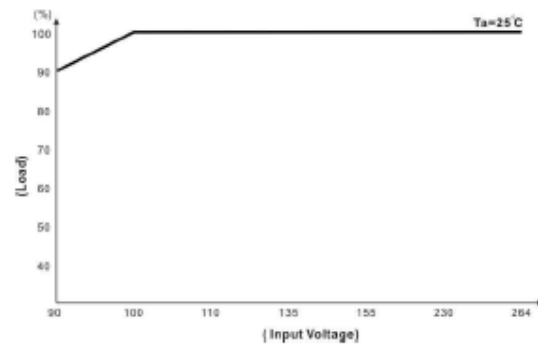


Pin no:	Single
1	FG
2	AC IN (N)
3	AC IN (L)
4	+DC OUT
5	+DC OUT
6	+DC OUT
7	-DC OUT
8	-DC OUT
9	-DC OUT

## DERATING



## STATIC CHARACTERISTICS



## BLOCK DIAGRAM

