

**KEY FEATURES**

- Open Frame LED Power Supply
- Dimming function: 0~10VDC & PWM Duty Controlled
- Universal Input: 90-305 VAC or 120-430 VDC
- Built-in active PFC function, PF>0.95
- Low Cost & High reliability
- With Constant Current & Constant Voltage
- LED Power Application
- Ultra Compact Size: 6.3 x 2.0 x 1.14 Inches
- 2-Years Product Warranty

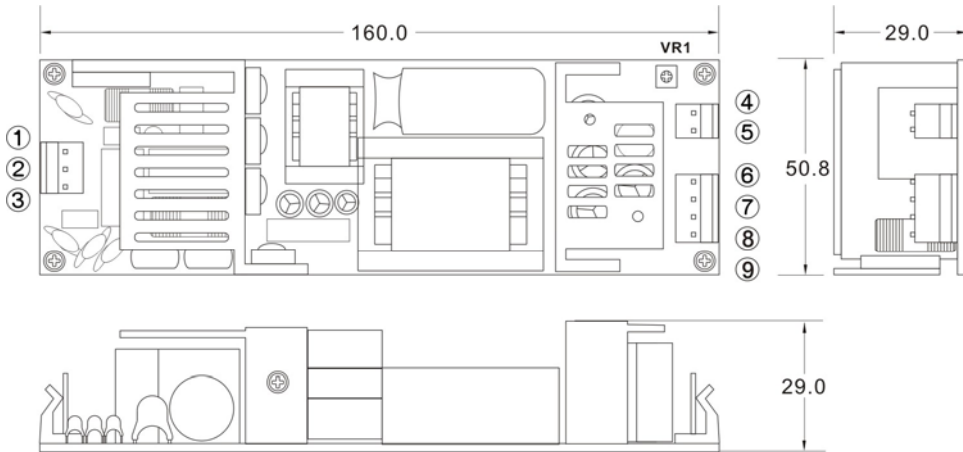

**ELECTRICAL SPECIFICATIONS**

Model No.	ZQF100-12S	ZQF100-24S	ZQF100-36S	ZQF100-48S	ZQF100-54S
Max Output Wattage (W)	100W				
Input	Voltage				
	90-305 VAC or 120-430 VDC				
	Frequency (Hz)				
	47-63 Hz				
	Current (Full load)				
	2 A max. (115 VAC) / 1 A max. (230 VAC) / 0.9 A max. (277 VAC)				
Output	Inrush Current (<2ms)				
	40 A max. (115 VAC) / 60 A max. (230 VAC)				
	Leakage Current				
	<0.75 mA max.				
	Power Factor				
	PF>0.97 (115 VAC) / PF>0.95 (230 VAC) / PF>0.9 (277 VAC) at Full Load				
	Voltage (V.DC.)				
	12V      24V      36V      48V      54V				
	Constant Current Range (V.DC.)				
	6 ~ 12V      12 ~ 24V      18 ~ 36V      24 ~ 48V      27 ~ 54V				
	Voltage Accuracy				
	±2%				
	Current (Convection) (mA) max				
	8333      4166      2777      2083      1852				
Current ADJ Range (mA)					
4166 ~ 8333      2083 ~ 4166      1388 ~ 2777      1041 ~ 2083      926 ~ 1852					
Voltage ADJ Range (V.DC.)					
10.8 ~ 13.2V      21.6 ~ 26.4V      32.4 ~ 39.6V      43.2 ~ 50.4V      48.6 ~ 56.7V					
Line Regulation					
±1%					
Load Regulation					
±1%					
Minimum Load					
0%					
Maximum Capacitive Load					
100,000 uF      50,000 uF      33,000 uF      6,000 uF      6,000 uF					
Ripple & Noise (max.)					
100mVp-p      100mVp-p      100mVp-p      200mVp-p      200mVp-p					
Efficiency (typ.)					
90.5%      92%      92%      92%      92%					
Hold-up Time					
25 ms min.					
Switching Frequency					
100 kHz					
Protection	Over Power Protection				
	Auto recovery				
	Over Voltage Protection				
	Auto recovery				
Isolation	Overt Temperature Protection				
	Auto recovery				
	Short Circuit Protection				
	Auto recovery				
Environment	Input-Output (V.AC)				
	3750V				
	Input-FG (V.AC)				
Physical	1880V				
	Output-FG (V.AC)				
	500V				
	Operating Temperature				
	-30°C...+70°C (with derating)				
	Storage Temperature				
Safety	-40°C...+85°C				
	Temperature Coefficient				
	±0.02%/°C ( 0~50°C )				
	Humidity				
	95% RH				
EMC	MTBF				
	>100,000 h @ 25°C (MIL-HDBK-217F)				
	Vibration				
10~500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes.					
Safety	Dimension (L x W x H)				
	6.3 x 2.0 x 1.14 Inches (160.0 x 50.8 x 29.0 mm) Tolerance ±0.5 mm				
	Weight				
EMC	250 g				
	Cooling Method				
	Free air convection				
EMC	Agency Approvals				
	Design refer to UL60950-1, CE, Class I (Pending)				
EMC	EMI (Conducted & Radiated Emission)				
	Design refer to EN 55015, EN 55022, Class B (Pending)				
EMC	EMS (Noise Immunity)				
	Design refer to EN 55024 (Surge 4KV) (Pending)				

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

2. Ripple &amp; Noise are measured at 20MHz of bandwidth with 0.1uF &amp; 47uF parallel capacitor.

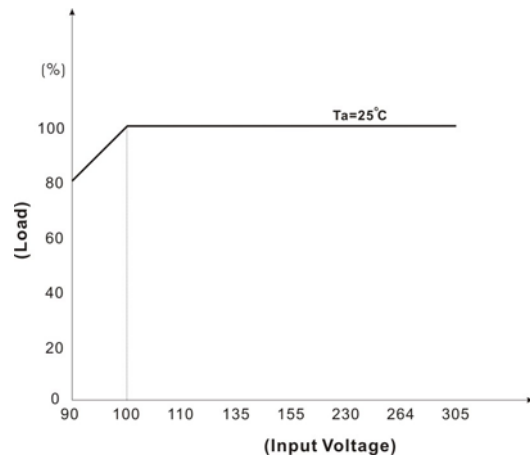
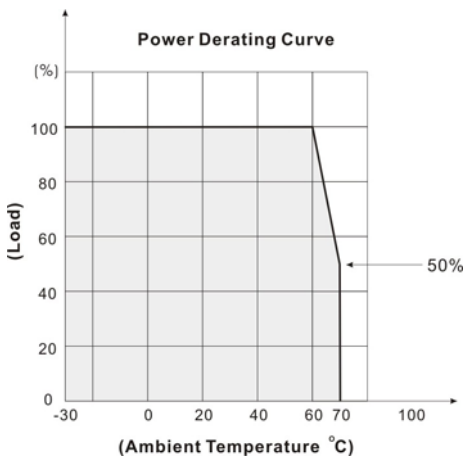
**MECHANICAL DIMENSION ( Top View )**



PIN#	SINGLE
1	FG
2	AC IN (N)
3	AC IN (L)
4	+Dim
5	-Dim
6-7	+DC OUT
8-9	-DC OUT
VR1	VO Adj.

Tolerance  $\pm 0.5$  mm

**DERATING**



**BLOCK DIAGRAM**

