

KEY FEATURES

- Open Frame LED Power Supply
- With Constant Current & Constant Voltage (C.C+C.V mode)
- Universal Input: 100-240 VAC
- With P.F.C. Function, PF>0.9
- Free Air Convection
- Protections: Over Load / Over Voltage / Short Circuit
- High Reliability & Double Layered PCB
- Ultra Compact Size: 4.0 x 2.0 x 1.12 Inches
- 3-Years Product Warranty



ELECTRICAL SPECIFICATIONS

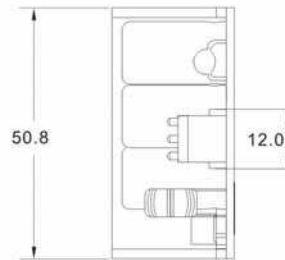
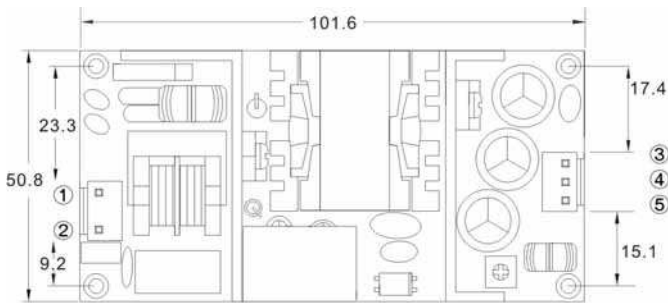


All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

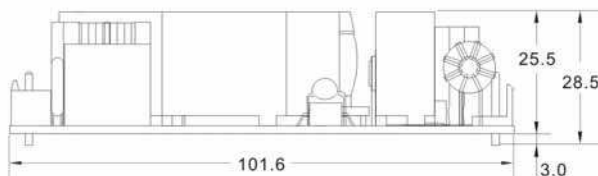
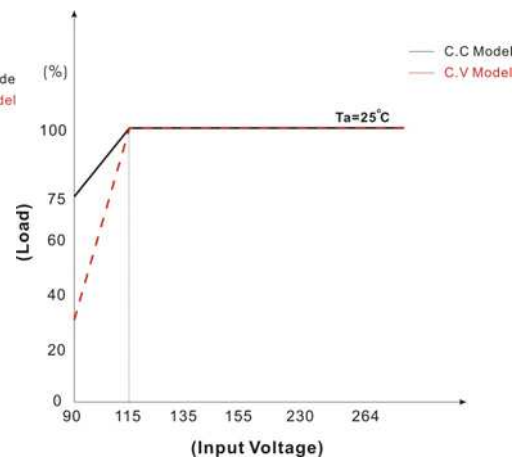
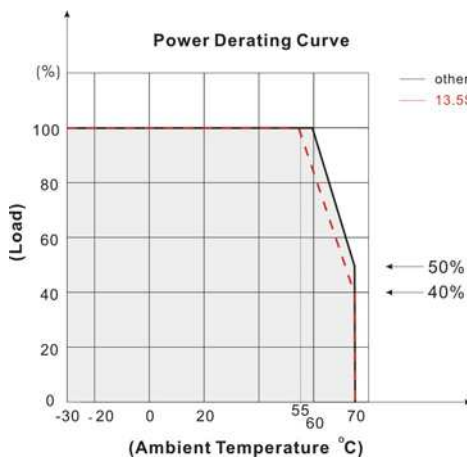
Model No.	ZQF30(R)-13.5S	ZQF30(R)-24S	ZQF30(R)-48S
Max output wattage (W)	31.4W	33.6W	33.6W
Input	Voltage (Note2)		
	90-264 VAC		
	Frequency (Hz)		
	50 / 60 Hz		
	Power factor		
	PF>0.9 at Full load (115 VAC / 230 VAC)		
Output	Current (Full load)		
	0.4A max. (115 VAC) / 0.2A max. (230 VAC)		
	Inrush current		
	40 A max. (Cold Start at 230 VAC)		
	Leakage Current		
	< 0.7 mA max at 240 VAC / 63 Hz		
	Voltage (V.DC.)		
	13.5V		
	24V		
	48V		
	Constant Current Operation Voltage (max) (CC Mode) (Note3)		
	11~13.5VDC		
18~ 24VDC			
36~ 48VDC			
Voltage Tolerance			
±10%			
Preset Current (mA) (CC Mode)			
2100			
1400			
700			
Current Adjustment Range (mA) (CC Mode)			
1700 ~ 2330			
1050 ~ 1400			
525 ~ 700			
Minimum Load (mA)			
1700			
1050			
525			
Line Regulation (115-230VAC) (typ.)			
±4%			
Load Regulation (Min-Max) (typ.)			
±5%			
Ripple & Noise (max)			
2.4Vp-p			
2.4Vp-p			
4.8Vp-p			
Efficiency (at 230VAC.)(typ)			
85%			
88%			
89%			
Protection	Over current protection		
	Auto recovery		
	Over voltage protection		
Zener diode clamp			
Isolation	Short circuit protection		
	Auto recovery		
	Input-Output (V.AC)		
3750V			
Input-FG (V.AC)			
1880V			
Output-FG (V.AC)			
500V			
Environment	Operating temperature		
	-30°C...+70°C (with derating)		
	Storage temperature		
	-40°C...+85°C		
	Temperature coefficient		
0.02%/°C			
Humidity			
95% RH			
MTBF			
>583,000 h @ 25°C (MIL-HDBK-217F)			
Physical	Dimension (L x W x H)		
	4.0 x 2.0 x 1.12 Inches (101.6 x 50.8 x 28.5 mm) Tolerance ±0.5 mm		
	Weight		
165 g			
Cooling method			
Free air convection			
Safety	Agency Approvals		
IEC / EN 61347-2-13 · IEC / EN 61347-1			
EMC	EMI (Conducted & Radiated Emission)		
	EN 55015		
	EMS (Noise Immunity)		
EN 61547			
Harmonic Current			
EN 61000-3-2(at Full Load) · EN 61000-3-3			

Note:

1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. Please check the derating curve for more details.
3. Input Voltage=115 / 230 VAC. This is the suitable operation region for LED related application. but please reconfirm special electrical requirements for some specific system design.
4. CV mode only available in 115/230 VAC Input

MECHANICAL DIMENSION (Top View)

 Tolerance ± 0.5 mm

PIN#	SINGLE
1	AC IN (N)
2	AC IN (L)
3	NC
4	+DC OUT
5	-DC OUT


DERATING

BLOCK DIAGRAM
