ZQF30 SERIES 30 Watts

KEY FEATURES

- Open Frame LED Power Supply
- With Constant Current & Constant Voltage (C.C+C.V mode)
- Dimming fuction:0~10VDC & PWM Duty Controlled
- 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
- 2-Years Product Warranty



ELECTRICAL SPECIFICATIONS

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

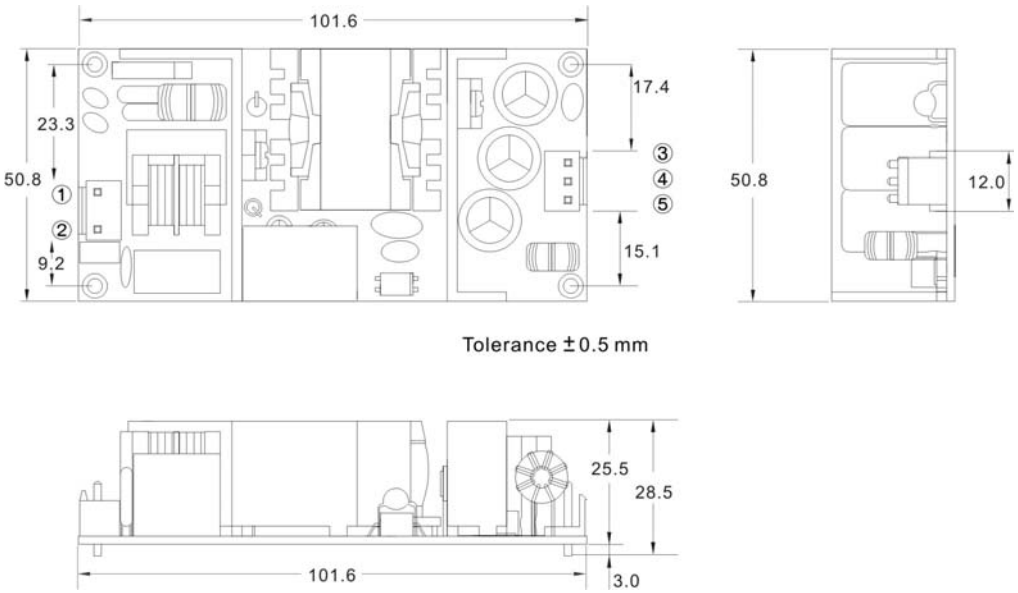
Model No.		ZQF30-13.5S	ZQF30-24S	ZQF30-48S
Max output wattage (W)		31.4W	33.6W	33.6W
Input	Voltage (Note2)	90-264 VAC		
	Frequency (Hz)	50 / 60 Hz		
	Power factor	PF>0.9 at Full load (115 VAC / 230 VAC)		
	Current (Full load)	0.4A max. (115 VAC) / 0.2A max. (230 VAC)		
	Inrush current	40 A max. (Cold Start at 230 VAC)		
	Leakage Current	< 0.7 mA max at 240 VAC / 63 Hz		
Output	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%		
	Current Adjustment Range (mA) (CC Mode)	1700 ~ 2330	1050 ~ 1400	525 ~ 700
	Minimum Load (mA)	1700	1050	525
	Line Regulation (115-230) (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		
	Short circuit protection	Auto recovery		
Isolation	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	Design refer to UL8750,EN61347-2-13 (Pending)		
EMC	EMI (Conducted & Radiated Emission)	Design refer to EN 55015 (Pending)		
	EMS (Noise Immunity)	Design refer to EN 61547 (Pending)		
	Harmonic Current	Design refer to EN 61000-3-2(at Full Load)、EN 61000-3-3 (Pending)		

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Note:

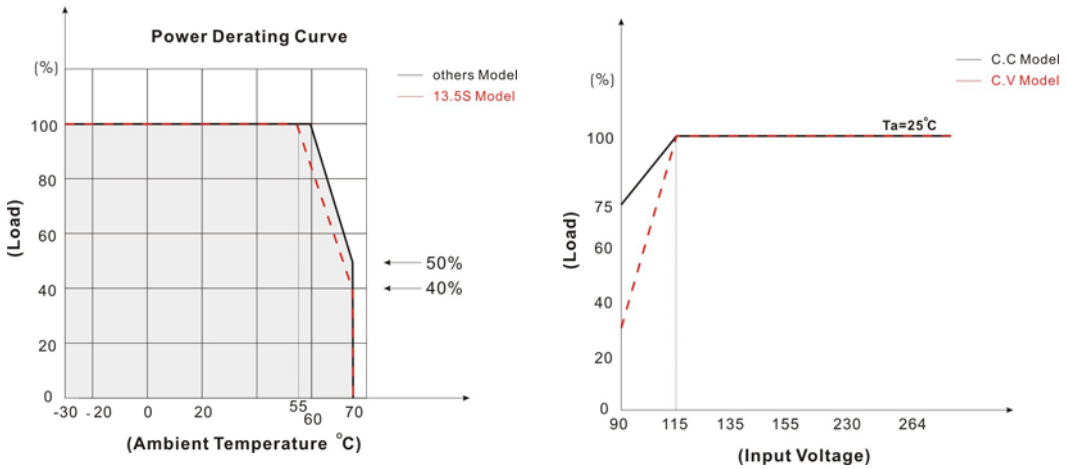
1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. Please check the derating curve for more details.
3. Input Voltage=115 / 230 VAC. This is the suitable operation region for LED related application.but please reconfirm special electrical requirements for some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

MECHANICAL DIMENSION (Top View)

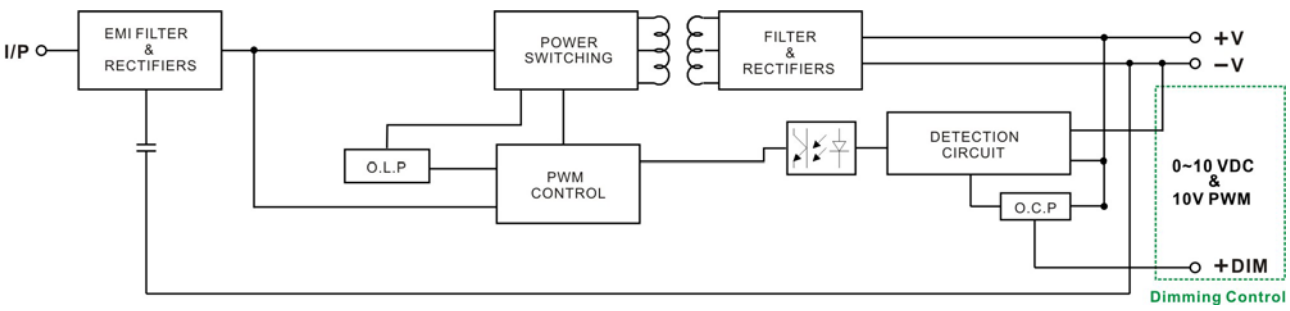


PIN#	SINGLE
1	AC IN (N)
2	AC IN (L)
3	+Dim
4	+DC OUT
5	-DC OUT

DERATING

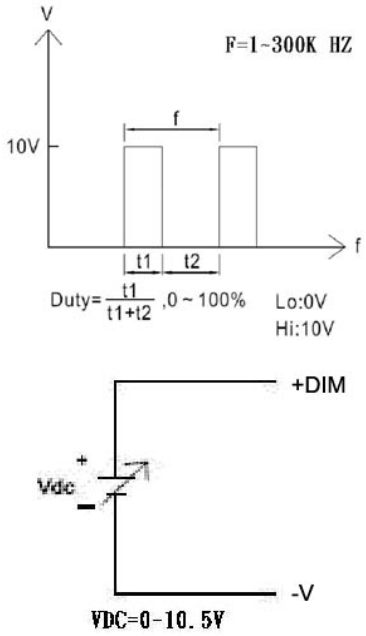


BLOCK DIAGRAM

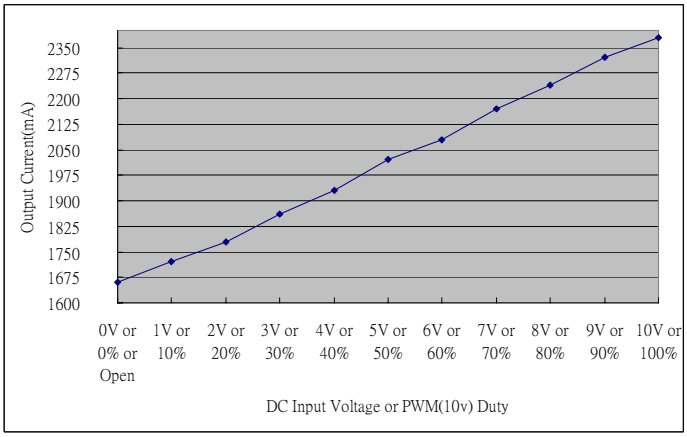


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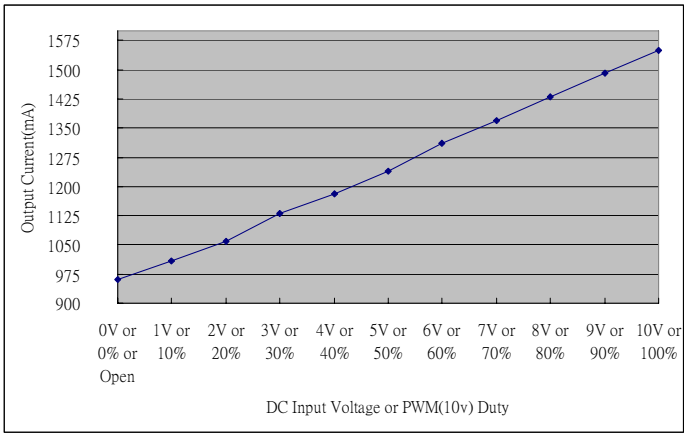
DIMMING CONTROL (CC Mode) (at 230VAC)



ZQF30-13.5



ZQF30-24S



ZQF30-48S

