

### KEY FEATURES

- IP66/67 Design for Indoor or LED Outdoor Installations
- With Constant Current & Constant Voltage (C.C+C.V mode)
- With P.F.C. Function, PF>0.9
- High Efficiency up to 89%
- Free Air Convection
- Protections: Over Load / Over Voltage / Short Circuit
- High Reliability & Double Layered PCB
- Suitable for LED lighting and moving sign applications
- Ultra Compact Size: 4.76 x 2.36 x 1.38 Inches
- 3-Years Product Warranty



IP66/67 CE

### ELECTRICAL SPECIFICATIONS

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

Model No.	QLF60-24S	QLF60-36S	QLF60-48S	QLF60-54S	
Max output wattage ( W )	60W				
Input	Voltage (Note2)		90-295 VAC		
	Frequency (Hz)		50 / 60 Hz		
	Power factor		PF>0.9 at Full load (115 VAC / 230 VAC)		
	Current (Full load)		0.8A (115 VAC) / 0.4A (230 VAC)		
	Inrush current		45 A max.		
	Leakage Current		< 0.7 mA max at 240 VAC		
Output	Voltage (V.DC.)	24V	36V	48V	54V
	Voltage ADJ Range Setup (CV Mode)	22 ~ 27V	33 ~ 40V	44 ~ 52V	49 ~ 56V
	Constant Current Operation Voltage (max) (CC Mode) (Note3)	15.6~ 24 VDC	23.4~36 VDC	36~48 VDC	35.1~54 VDC
	Voltage Tolerance	±10%			
	Preset Current (mA) (at IP66) (CC Mode) (at 230 VAC)	2450	1750	1050	1050
	Current Adjustment Range (mA) (CC Mode)	2000~2500	1350~1750	1000~1300	900~1150
	Preset Current (mA) (at IP67) (CC Mode) (fixed) (Note4) (at 230 VAC)	2450 (2000~2500)	1750 (1350~1750)	1050 (1000~1300)	1050 (900~1150)
	Minimum Load (mA)	2000	1350	1000	900
	Line Regulation (typ.)	±4%			
	Load Regulation (Min-Max) (typ.)	±5%			
	Ripple & Noise (typ.) (Note1)	2.7Vp-p	5Vp-p		
Efficiency (at 230VAC / Full Load)(typ)	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	>450,000 h @ 25°C (MIL-HDBK-217F)			
Physical	Dimension (L x W x H)	4.76 x 2.36 x 1.38 Inches (120.9 x 60.0 x 35.0 mm) Tolerance ±2mm			
	Weight	600 g			
	Cooling method	Free air convection			

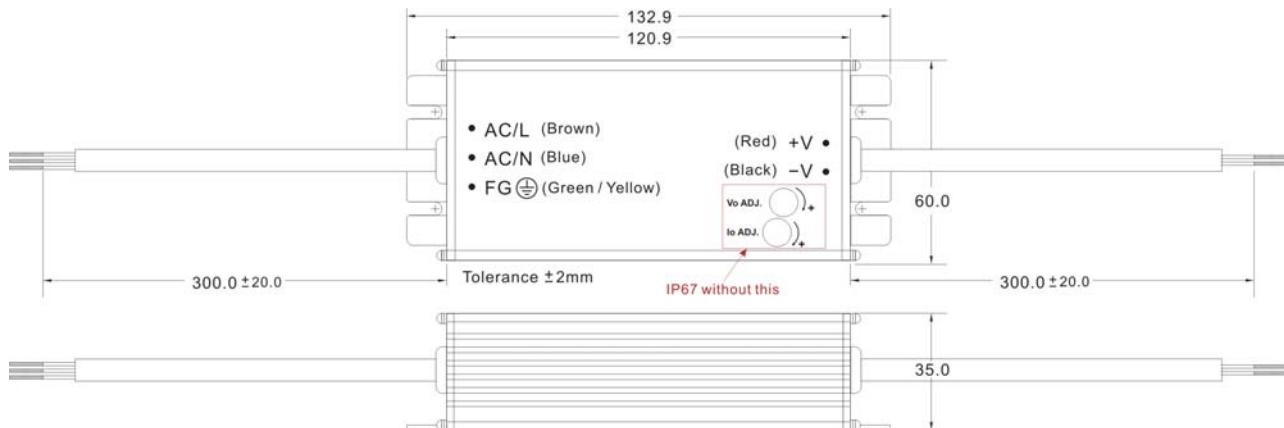
Model No.		QLF60-24S	QLF60-36S	QLF60-54S
Safety	Agency Approvals	UL8750、IEC / EN 61347-2-13、IEC / EN 61347-1 (Pending)		
EMC	EMI (Conducted & Radiated Emission)	EN 55015 (Pending)		
	EMS (Noise Immunity)	EN 61547 (Pending)		
	Harmonic Current	EN 61000-3-2(at Full Load)、EN 61000-3-3 (Pending)		
	Surge	2KV L-N, 4KV L N-FG		

- 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 or 230 VAC. This is the suitable operation region for LED related application.but please reconfirm special electrical requirements for some specific system design.
  - 4.Please contact us for more information.

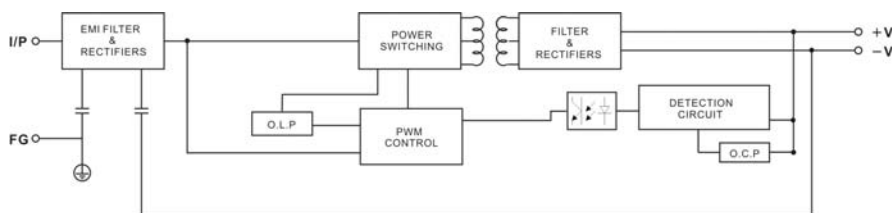
This series has IP66 and IP67, when you place order, please be noted as ordering Part No.

Model No.		QLF60-24S	QLF60-36S	QLF60-48S	QLF60-54S
Ordering Part No	IP66	QLF60-24S-IP66	QLF60-36S-IP66	QLF60-48S-IP66	QLF60-54S-IP66
	IP67	QLF60-24S-IP67	QLF60-36S-IP67	QLF60-48S-IP67	QLF60-54S-IP67

**MECHANICAL DIMENSION ( Top View )**



**BLOCK DIAGRAM**



**ASSEMBLY INSTRUCTIONS**

- \*U Case T=2.0mm
- Customer screws into the length of the case no higher than 0.5mm
- (Namely screw length for load plate thickness plus 2.5mm)

**DERATING**

If the output is not connected LEDs, the input voltage must be greater than 180VAC.

