

**KEY FEATURES**

- U Bracket Switching Power Supply
- Universal Input: 90-264 VAC
- With P.F.C. Function, PF>0.95
- With 12 VDC FAN Supply
- 240W Convection without FAN
- Protections: Over Load / Over Voltage / Over Temperature / Short Circuit All by Auto-recovery
- Leakage Current <300uA
- High Power Density
- High Efficiency up to 93%
- RoHS Compliant Design
- Ultra Compact Size: 6.8 x 3.2 x 1.5 Inches
- 2-Years Product Warranty


**ELECTRICAL SPECIFICATIONS**

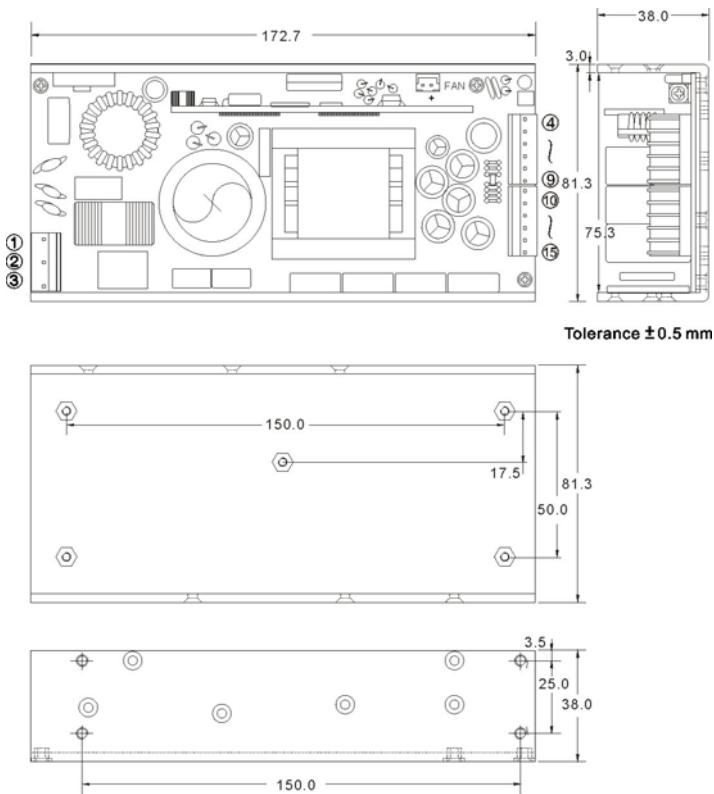
Model No.	AQF360U-12S	AQF360U-24S	AQF360U-36S	AQF360U-48S
Max Output Wattage (Convection) (W)	240W	240W	240W	240W
Max Output Wattage (18CFM FAN) (W)	360W	360W	360W	360W
Input	Voltage			
	90-264 VAC or 120-370 VDC			
	Frequency (Hz)			
	47-63 Hz			
	Current (Full load)			
	< 4.0 A max. (115 VAC) / < 2.0 A max. (230 VAC)			
Inrush Current (<2ms)				
< 30 A max. (115 VAC) / < 60 A max. (230 VAC)				
Leakage Current				
< 0.3 mA max.(240VAC 63Hz)				
Power Factor				
PF>0.99 (115 VAC) / PF>0.95 (230 VAC) at Full Load				
Output	Voltage (V.DC.)			
	12V	24V	36V	48V
	Voltage Accuracy			
	±2%			
	Current (Convection) (A) max			
	20	10	6.66	5
	Current (18CFM FAN) (A) max			
	30	15	10	7.5
	Line Regulation (LL-HL) (typ.)			
	±1%			
	Load Regulation (5-100%) (typ.)			
	±1%			
	Minimum Load			
0%				
Maximum Capacitive Load				
1000-40,000µF depending on model				
Ripple & Noise (max.)				
120mVp-p	200mVp-p			
Efficiency (typ.)				
90%	92%	93%	93%	
Hold-up Time				
15 ms min.				
Switching Frequency				
75 kHz				
FAN Supply				
12 VDC / 0.5A max.				
Protection	Over Power Protection			
	Auto recovery			
	Over Voltage Protection			
	Auto recovery			
Over Temperature				
Auto recovery				
Short Circuit Protection				
Auto-recovery				
Isolation	Input-Output (V.AC)			
	3000V			
	Input-FG (V.AC)			
1500V				
Output-FG (V.AC)				
500V				

1. All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.
2. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.

**ELECTRICAL SPECIFICATIONS**

Model No.	AQF360U-12S	AQF360U-24S	AQF360U-36S	AQF360U-48S
Environment	Operating Temperature	-10°C...+70°C (with derating)		
	Storage Temperature	-25°C...+85°C		
	Temperature Coefficient	±0.03%/°C ( 0~50°C )		
	Humidity	95% RH		
	MTBF	>50,000 h @ 25°C (MIL-HDBK-217F)		
	Vibration	10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes.		
Physical	Dimension (L x W x H)	6.8 x 3.2 x 1.5 Inches (172.7 x 81.3 x 38.0 mm) Tolerance ±0.5 mm		
	Weight	668 g		
	Cooling Method	240W Convection without FAN		
Safety	Agency Approvals	CE, UL60950 (Pending)		
EMC	EMI (Conducted & Radiated Emission)	EN 55022 class B (Pending)		
	EMS (Noise Immunity)	EN 55024 (Pending)		

1. All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.
2. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.

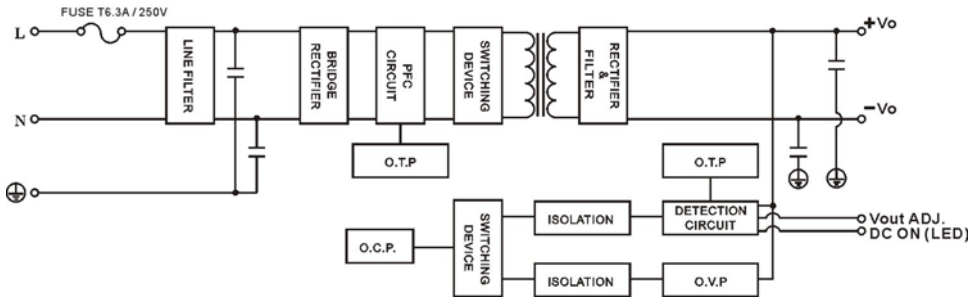
**MECHANICAL DIMENSION ( Top View )**


PIN#	SINGLE
1	FG
2	AC IN (N)
3	AC IN (L)
4 ~ 9	+DC OUT
10 ~ 15	-DC OUT
FAN	WAFER(2.5)

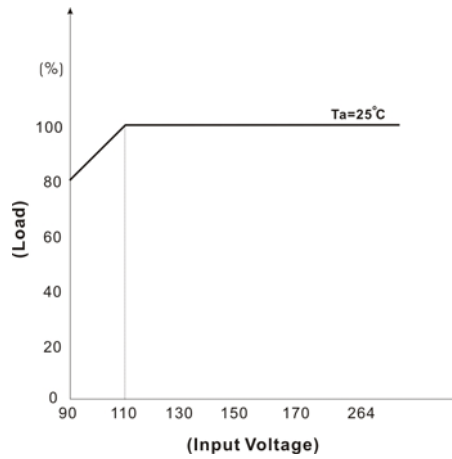
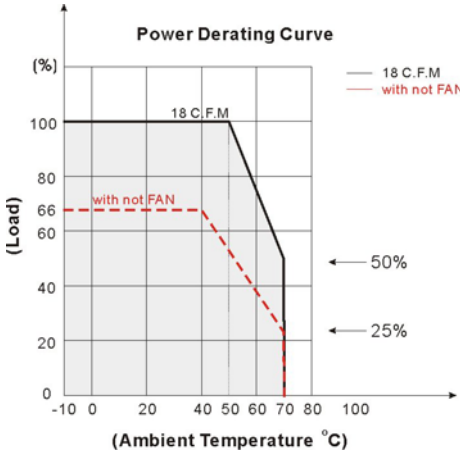


**BLOCK DIAGRAM**

Single Output



**DERATING**

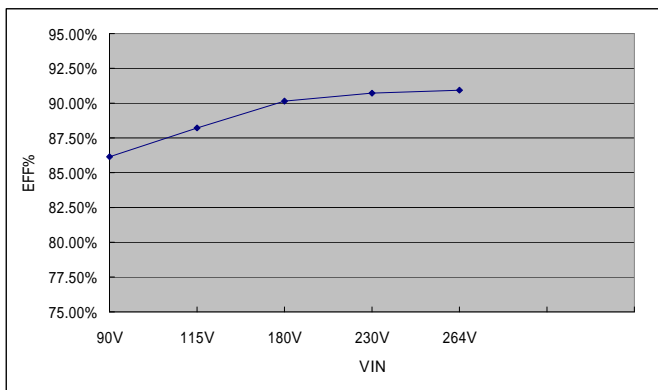


**EFFICIENCY VERSUS LOAD**

**AQF360F-12S**

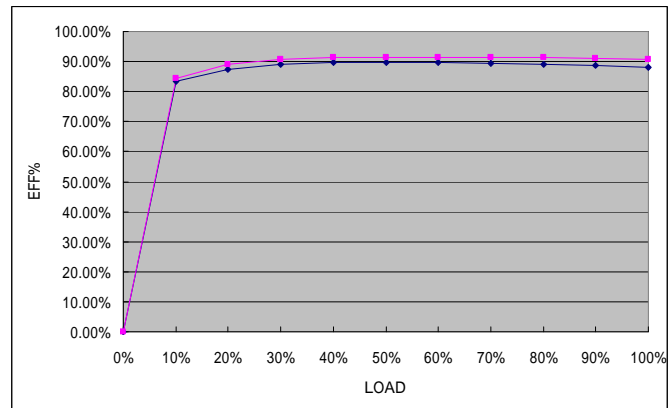
VIN VS Efficiency

Input Voltage (V)	90	115	180	230	264
Efficiency (%)	86.12	88.20	90.15	90.69	90.95



LOAD VS Efficiency

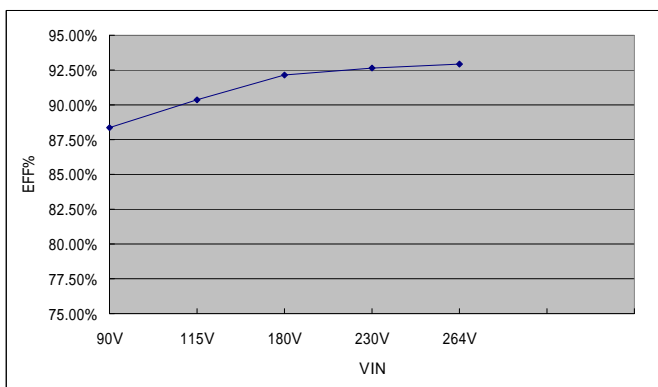
Load (%)	0	10	20	30	40	50
115V (%)	0	83.25	87.43	89.02	89.67	89.80
230V (%)	0	84.38	88.94	90.75	91.24	91.49
Load (%)	60	70	80	90	100	
115V (%)	89.64	89.39	89.00	88.65	88.20	
230V (%)	91.46	91.38	91.22	91.02	90.09	



**AQF360F-24S**

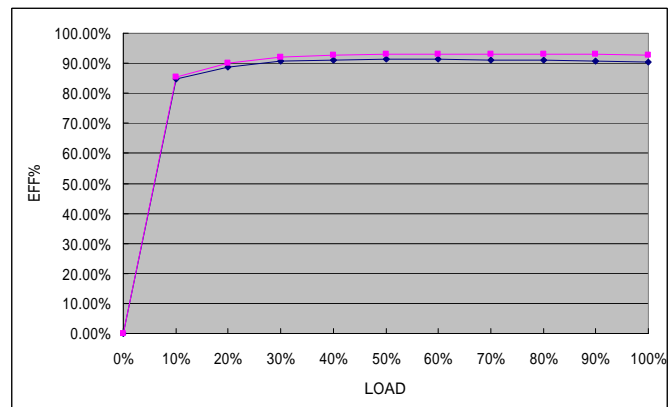
VIN VS Efficiency

Input Voltage (V)	90	115	180	230	264
Efficiency (%)	88.36	90.35	92.13	92.67	92.96



LOAD VS Efficiency

Load (%)	0	10	20	30	40	50
115V (%)	0	84.77	88.62	90.54	91.14	91.33
230V (%)	0	85.54	90.08	92.06	92.62	92.99
Load (%)	60	70	80	90	100	
115V (%)	91.32	91.18	90.98	90.70	90.35	
230V (%)	93.08	93.08	93.02	92.91	92.67	

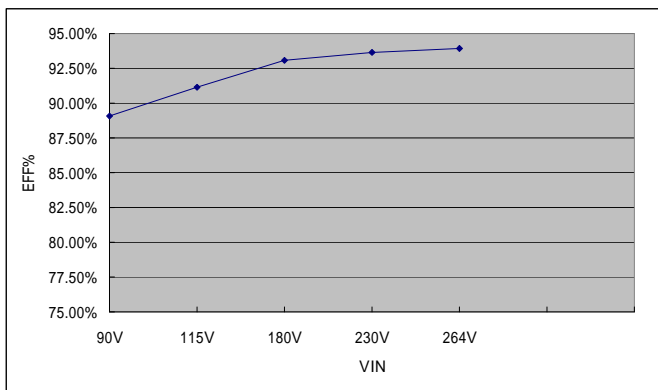


**EFFICIENCY VERSUS LOAD**

**AQF360F-36S**

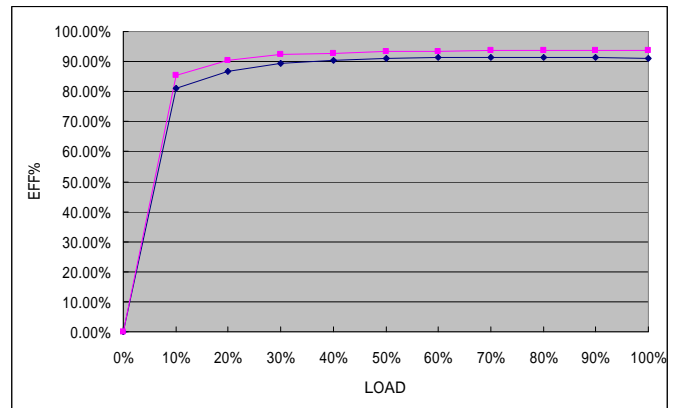
VIN VS Efficiency

Input Voltage (V)	90	115	180	230	264
Efficiency (%)	98.04	91.17	93.06	93.64	93.93



LOAD VS Efficiency

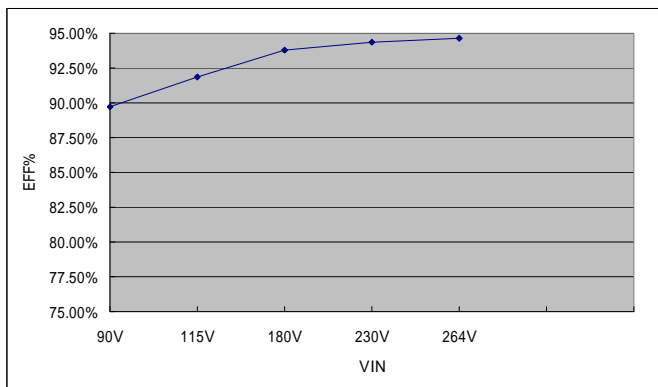
Load (%)	0	10	20	30	40	50
115V (%)	0	80.96	86.76	89.39	90.51	91.01
230V (%)	0	85.51	90.25	92.24	92.82	93.39
Load (%)	60	70	80	90	100	
115V (%)	91.21	91.36	91.37	91.31	91.17	
230V (%)	93.46	93.68	93.76	93.68	93.64	



**AQF360F-48S**

VIN VS Efficiency

Input Voltage (V)	90	115	180	230	264
Efficiency (%)	89.75	91.89	93.79	94.36	94.67



LOAD VS Efficiency

Load (%)	0	10	20	30	40	50
115V (%)	0	86.43	89.33	91.43	92.17	92.58
230V (%)	0	86.80	90.87	92.74	93.47	94.02
Load (%)	60	70	80	90	100	
115V (%)	92.58	93.00	92.38	92.18	91.89	
230V (%)	94.02	94.23	94.24	94.40	94.36	

