AQF360F SERIES 360 Watts

KEY FEATURES

- Enclosed Switching Power Supply
- Universal Input: 90-264 VAC
- With P.F.C. Function, PF>0.95
- Cooling by Built-in 12 VDC FAN
- 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: 7.8 x 3.2 x 1.7 Inches
- 2-Years Product Warranty



E199779 LEVEL3

ELECTRICAL SPECIFICATIONS

Model No.		AQF360F-12S	AQF360F-24S	AQF360F-36S	AQF360F-48S
Max Output Wattage (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	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.)	150mVp-p	200mVp-p		
	Efficiency (typ.)	89%	91%	92%	93%
	Hold-up Time	15 ms min.			
	Switching Frequency	75 kHz			
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			
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.			

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.

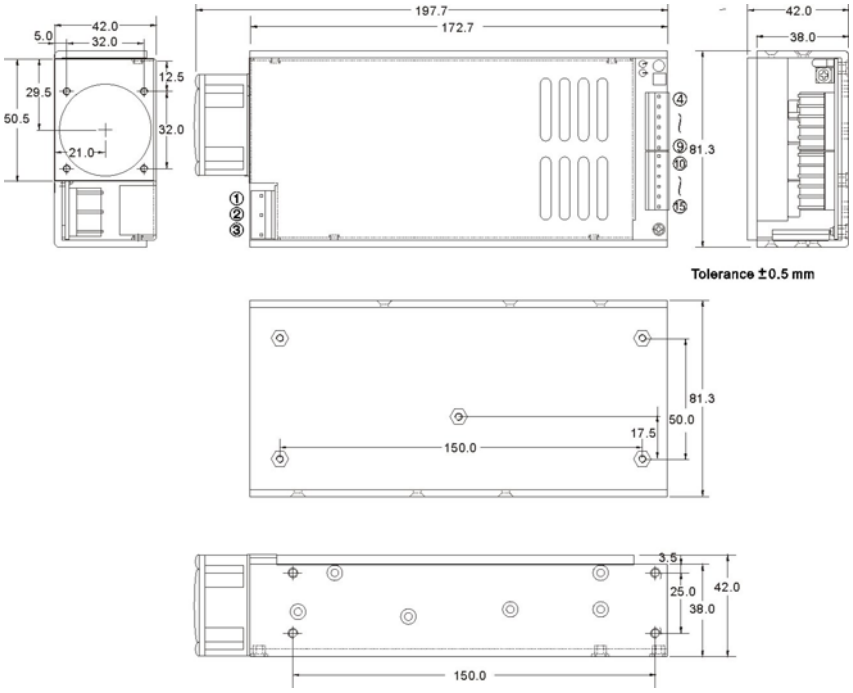
AQF360F SERIES 360 Watts

ELECTRICAL SPECIFICATIONS

Model No.		AQF360F-12S	AQF360F-24S	AQF360F-36S	AQF360F-48S
Physical	Dimension (L x W x H)	7.8 x 3.2 x 1.7 Inches (197.7 x 81.3 x 42.0 mm) Tolerance ±0.5 mm			
	Weight	746 g			
	Cooling Method	Cooling by Built-in DC 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)

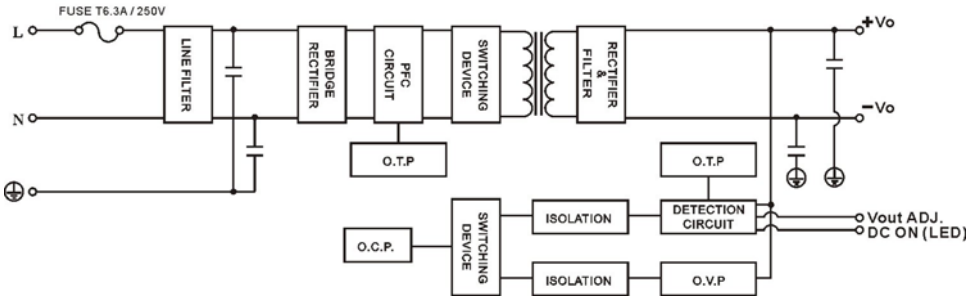


PIN#	SINGLE
1	FG
2	AC IN (N)
3	AC IN (L)
4 ~ 9	+DC OUT
10 ~ 15	-DC OUT

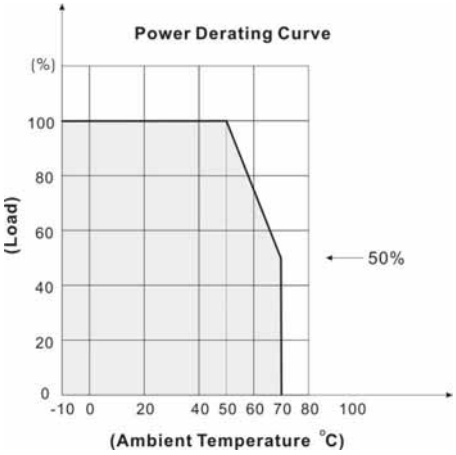
AQF360F SERIES 360 Watts

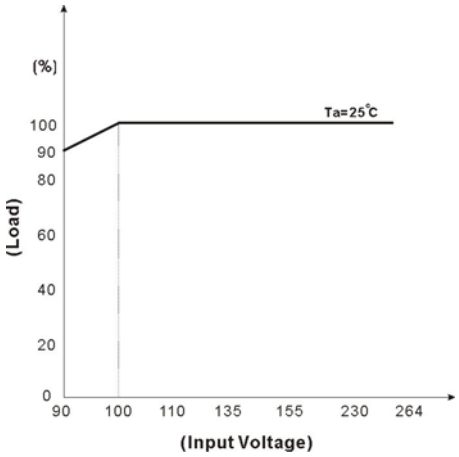
BLOCK DIAGRAM

Single Output



DERATING



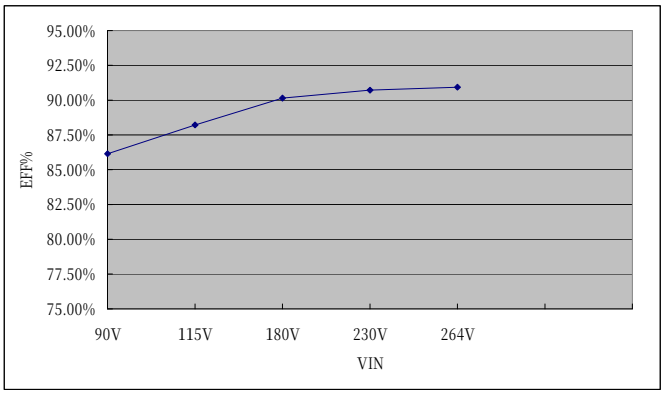


EFFICIENCY VERSUS LOAD

AQF360F-12S

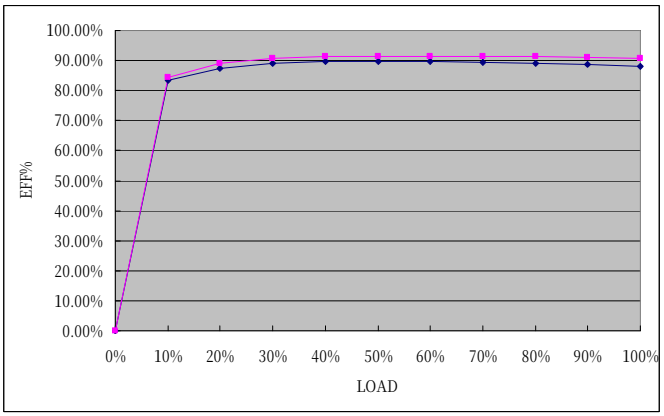
VIN VS Efficiency

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



LOAD VS Efficiency

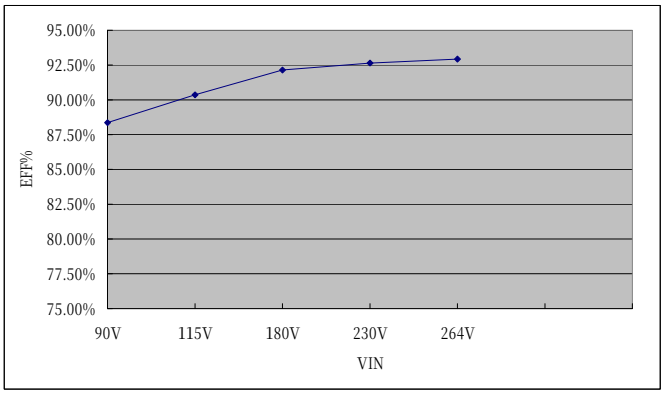
Load (%)	0	10	20	30	40	50
115V (%)	0	83.25	87.43	89.02	89.67	89.80
230V (%)	0	84.38	88.94	90.75	91.24	91.49
Load (%)	60	70	80	90	100	
115V (%)	89.64	89.39	89.00	88.65	88.20	
230V (%)	91.46	91.38	91.22	91.02	90.09	



AQF360F-24S

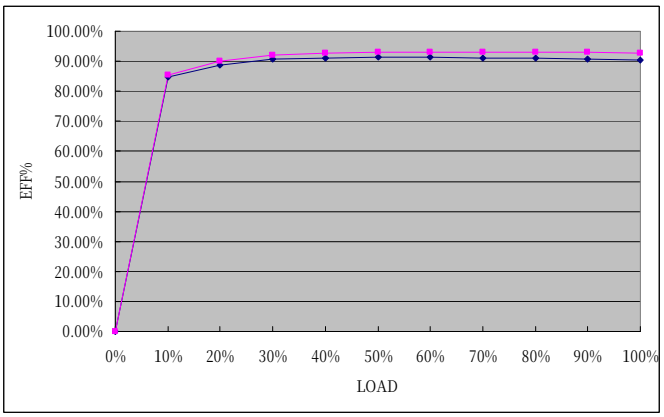
VIN VS Efficiency

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	

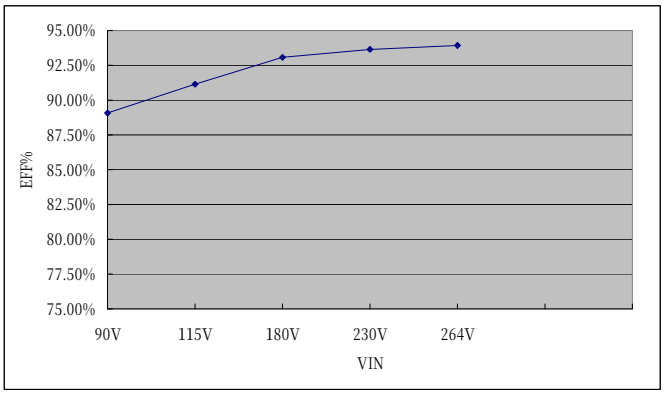


EFFICIENCY VERSUS LOAD

AQF360F-36S

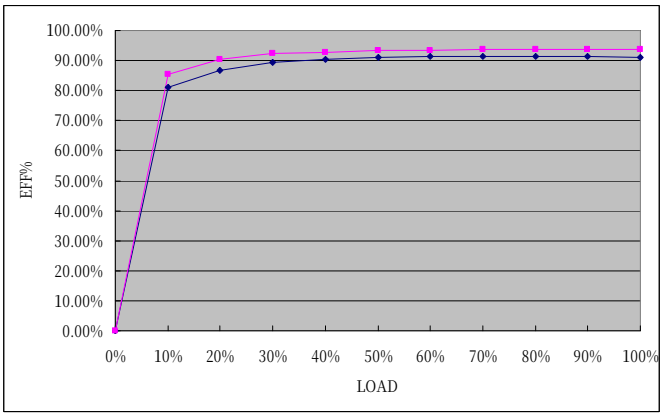
VIN VS Efficiency

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



LOAD VS Efficiency

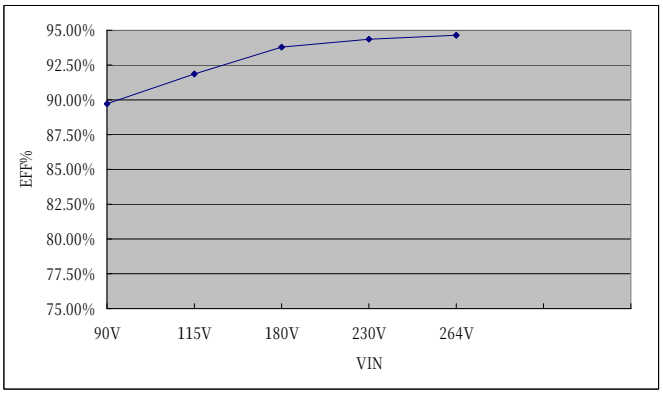
Load (%)	0	10	20	30	40	50
115V (%)	0	80.96	86.76	89.39	90.51	91.01
230V (%)	0	85.51	90.25	92.24	92.82	93.39
Load (%)	60	70	80	90	100	
115V (%)	91.21	91.36	91.37	91.31	91.17	
230V (%)	93.46	93.68	93.76	93.68	93.64	



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	9143	92.17	92.58
230V (%)	0	8680	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	

