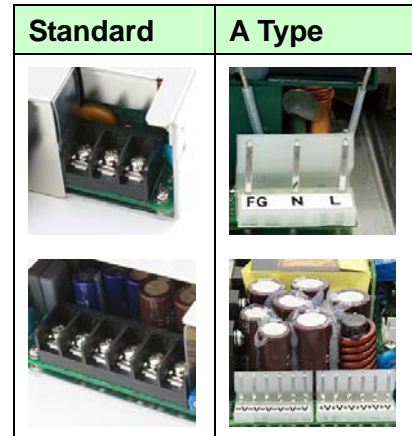


KEY FEATURES

- 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 1.6 Inches
- 3-Years Product Warranty


ELECTRICAL SPECIFICATIONS

Model No.	AQF360F-12S	AQF360F-24S	AQF360F-36S	AQF360F-48S	AQF360F-54S	
Max Output Wattage (W)	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)					
Output	Inrush Current (<2ms)					
	< 30 A max. (115 VAC) / < 60 A max. (230 VAC)					
	Leakage Current					
	< 0.3 mA max.(240VAC 63Hz)					
	Power Factor					
	PF>0.98 (115 VAC) / PF>0.93 (230 VAC) at Full Load					
	Output	Voltage (V.DC.)				
		12V	24V	36V	48V	54V
		Trim				
		10.8 ~ 13.2V	21.6 ~ 26.4V	32.7 ~ 39.6V	44 ~ 51V	51.3 ~ 56.7V
		Voltage Accuracy				
		±2%				
		Current (Convection) (A) max				
		30	15	10	7.5	6.66
Line Regulation (LL-HL) (typ.)						
±1%						
Load Regulation (5-100%) (typ.)						
±1%						
Minimum Load						
1%						
Maximum Capacitive Load						
85000 uF	48000 uF	21000 uF	13000 uF	7000 uF		
Ripple & Noise (max.)						
150mVp-p	200mVp-p					
Efficiency (typ.)						
89%	91%	92%	93%	93%		
Hold-up Time						
12 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						
>120,000 h @ 25°C (MIL-HDBK-217F)						
Vibration						
10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes.						

1. All specifications valid at normal 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.		AQF360F-12S	AQF360F-24S	AQF360F-36S	AQF360F-48S	AQF360F-54S
Physical	Dimension (L x W x H)	7.8 x 3.2 x 1.57 Inches (197.7 x 81.3 x 40.0 mm) Tolerance ± 0.5 mm				
	Weight	746 g				
	Cooling Method	Cooling by Built-in DC FAN				
Safety	Agency Approvals	CE, UL60950, CB				
EMC	EMI (Conducted & Radiated Emission)	EN 55022 class B				
	EMS (Noise Immunity)	EN 55024				

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

MECHANICAL DIMENSION (Top View)

Standard

PIN#	Single
1	FG
2	AC IN (N)
3	AC IN (L)
4~6	+DC OUT
7~9	-DC OUT

A Type

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

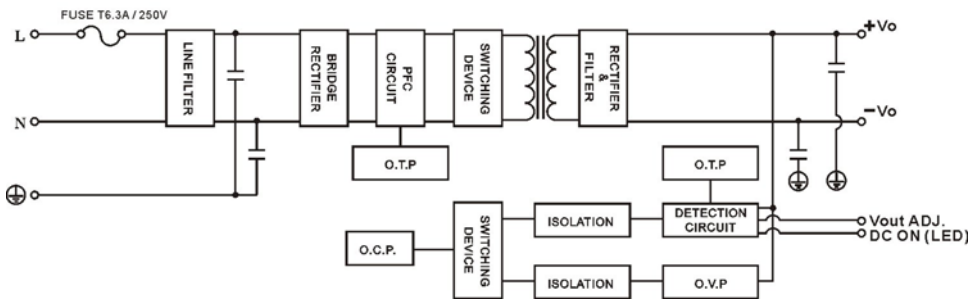
ASSEMBLY INSTRUCTIONS

*U Case T=2.0mm

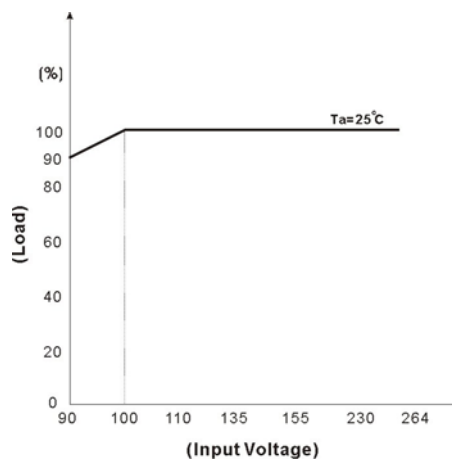
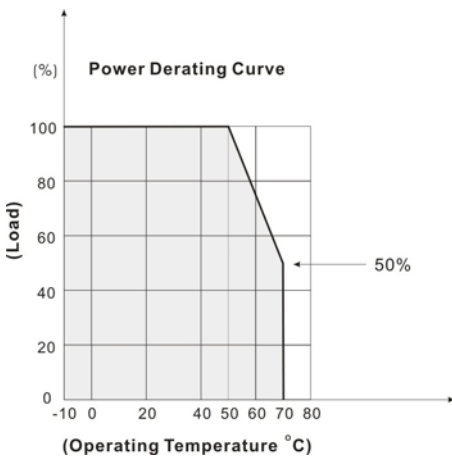
Customer screws into the length of the case no higher than 0.5mm
(Namely screw length for load plate thickness plus 2.5mm)

BLOCK DIAGRAM

Single Output

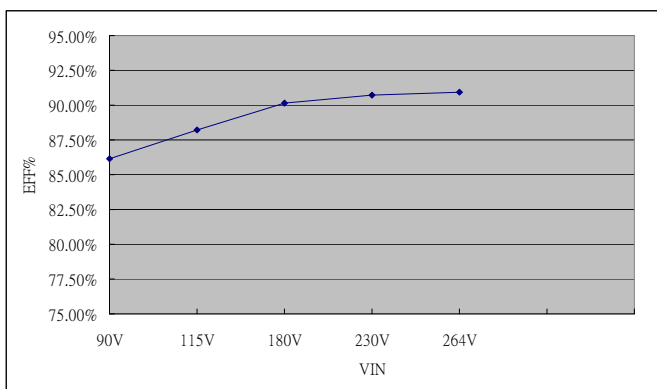


DERATING

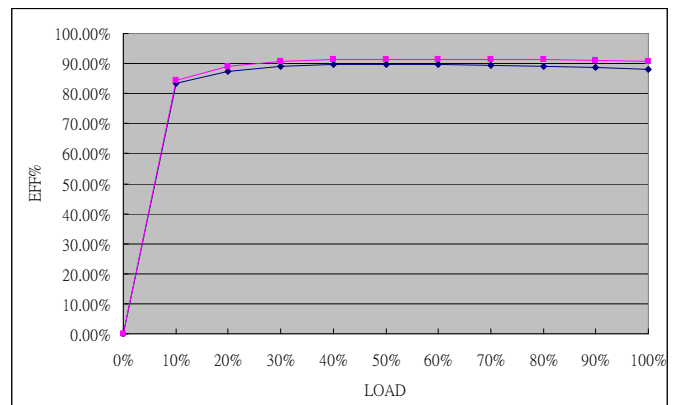


EFFICIENCY VERSUS LOAD
AQF360F-12S
VIN VS Efficiency

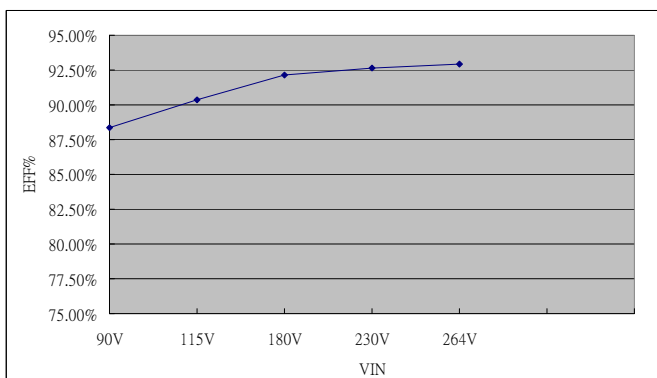
Input Voltage (V)	90	115	180	230	264
Efficiency (%)	86.12	88.20	90.15	90.69	90.95


LOAD VS Efficiency

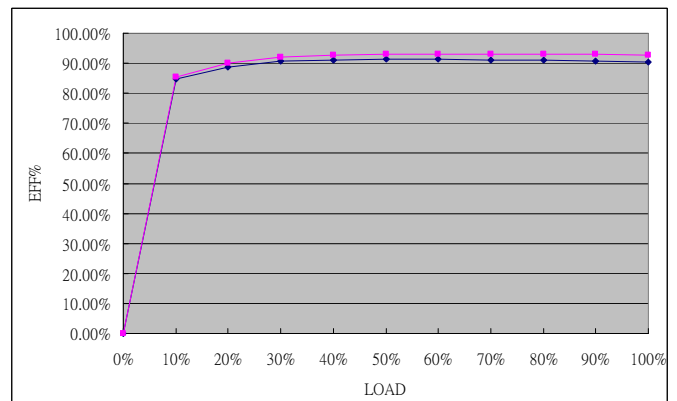
Load (%)	0	10	20	30	40	50
115V (%)	0	83.25	87.43	89.02	89.67	89.80
230V (%)	0	84.38	88.94	90.75	91.24	91.49
Load (%)	60	70	80	90	100	
115V (%)	89.64	89.39	89.00	88.65	88.20	
230V (%)	91.46	91.38	91.22	91.02	90.09	


AQF360F-24S
VIN VS Efficiency

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

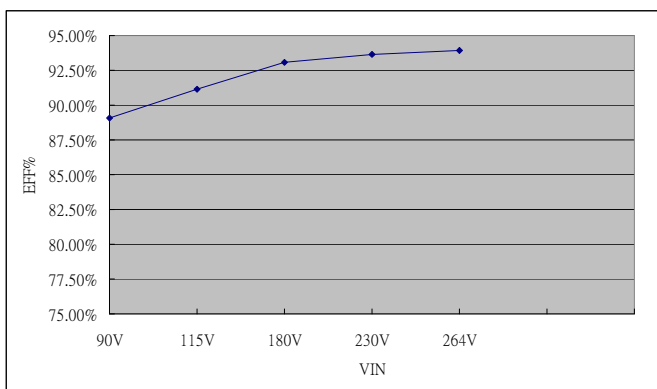

LOAD VS Efficiency

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	

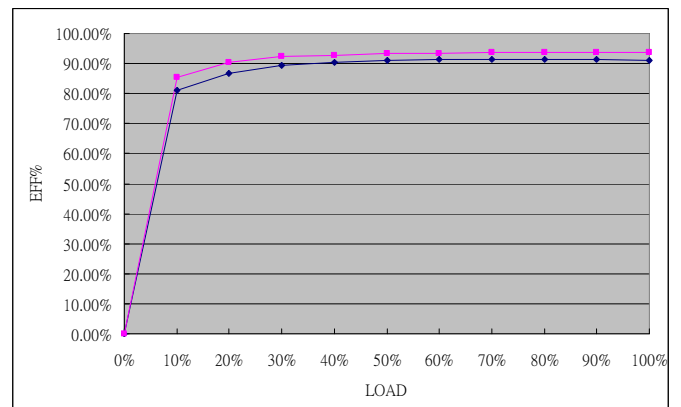


EFFICIENCY VERSUS LOAD
AQF360F-36S
VIN VS Efficiency

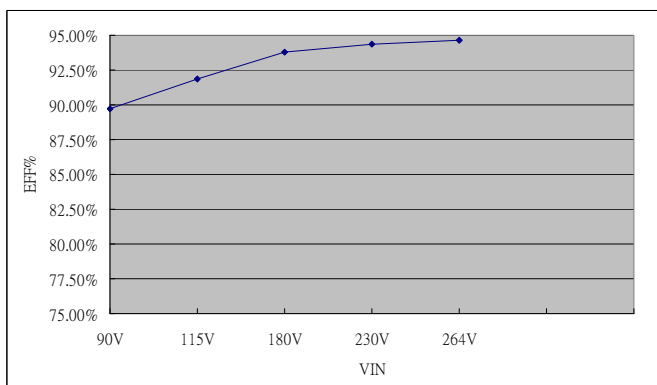
Input Voltage (V)	90	115	180	230	264
Efficiency (%)	89.04	91.17	93.06	93.64	93.93


LOAD VS Efficiency

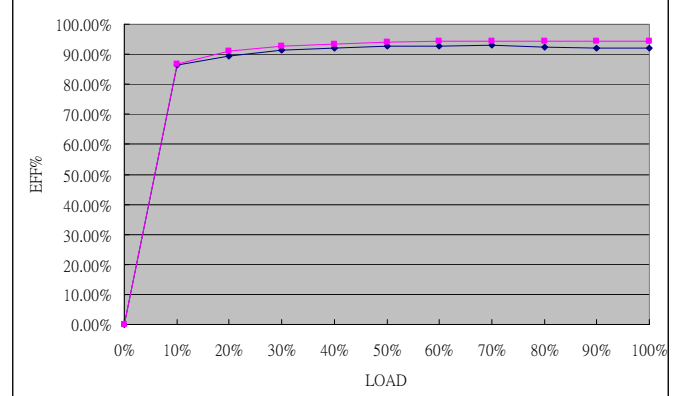
Load (%)	0	10	20	30	40	50
115V (%)	0	80.96	86.76	89.39	90.51	91.01
230V (%)	0	85.51	90.25	92.24	92.82	93.39
Load (%)	60	70	80	90	100	
115V (%)	91.21	91.36	91.37	91.31	91.17	
230V (%)	93.46	93.68	93.76	93.68	93.64	


AQF360F-48S
VIN VS Efficiency

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

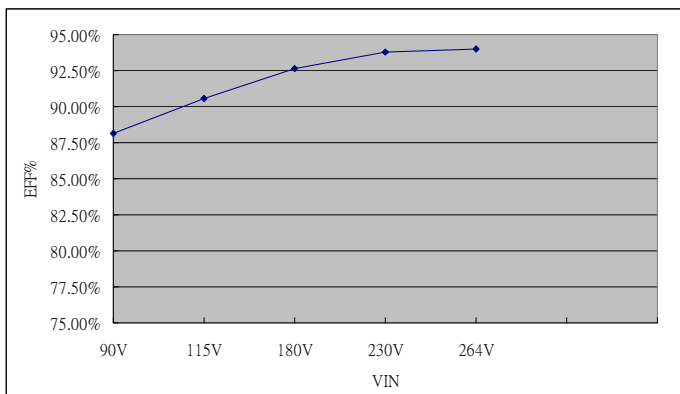

LOAD VS Efficiency

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	



EFFICIENCY VERSUS LOAD
AQF360F-54S
VIN VS Efficiency

Input Voltage (V)	90	115	180	230	264
Efficiency (%)	88.12	90.58	92.65	93.79	93.99


LOAD VS Efficiency

Load (%)	0	10	20	30	40	50
115V (%)	0.00	86.37	88.87	89.82	90.28	90.91
230V (%)	0.00	88.59	91.67	92.80	93.35	93.66
Load (%)	60	70	80	90	100	
115V (%)	90.98	90.96	90.95	90.87	90.58	
230V (%)	93.79	93.83	93.86	93.80	93.79	

