

KEY FEATURES

- Universal Input: 90-264 VAC
- With P.F.C. Function, PF>0.95
- Remote Sense Function
- Remote ON/OFF Function
- Current Share Function
- Power Good Function
- Protections: Over Load / Over Voltage / Over Temperature / Short Circuit All by Auto-recovery
- High Power Density
- RoHS Compliant Design
- 3-Years Product Warranty


ELECTRICAL SPECIFICATIONS

Model No.	AQF600-12S	AQF600-24S	AQF600-28S	AQF600-36S	AQF600-48S	AQF600-54S
Max Output Wattage (Convection) (W)	480W	600W	600W	600W	600W	600W
Input	Voltage					
	90-264 VAC or 120-370 VDC					
	Frequency (Hz)					
	47-63 Hz					
	Current (Full load)					
	< 0.8 A max. (115 VAC) / < 4.0 A max. (230 VAC)					
Input	Inrush Current (<2ms)					
	< 30 A max. (115 VAC) / < 60 A max. (230 VAC)					
	Leakage Current					
	< 3.5 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	28V	36V	48V	54V
	Trim					
	±5%					
	Voltage Accuracy					
	±2%					
	Current (Convection) (A) max					
	40	25	21.4	16.6	12.5	11.1
	Line Regulation (LL-HL) (typ.)					
	±1%					
	Load Regulation (5-100%) (typ.)					
	±1%					
Minimum Load						
5%						
Maximum Capacitive Load						
70,000 uF	60,000 uF	48,000 uF	30,000 uF	20,000 uF	10,000 uF	
Ripple & Noise (max.)						
< 1%						
Efficiency (typ.)						
90%	91%	92%	92%	93%	93%	
Hold-up Time						
12 ms min.						
Switching Frequency						
100 kHz						
Protection	Over Power Protection					
	Auto recovery					
	Over Voltage Protection					
	Auto recovery					
Protection	Over Temperature					
	Auto recovery					
	Short Circuit Protection					
	Auto-recovery					
Isolation	Input-Output (V.AC)					
	3000V					
	Input-FG (V.AC)					
1500V						
Isolation	Output-FG (V.AC)					
	500V					
	5V Stand by (18CFM FAN)					
5VSB: 5V@0.6A ; Tolerance ±10% , Ripple & Noise: 100m Vp-p (max.)						
Function	DC OK Signal					
	Turn ON: 4~6V ; Turn OFF: 0~1V					
	Remote Control					
	+RC / -RC: Power ON=open ; Power OFF=short					
Function	FAN Control					
	12VDC / 0.5A max.					
	Operating Temperature					
	-25°C...+70°C (with derating)					
Environment	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.						

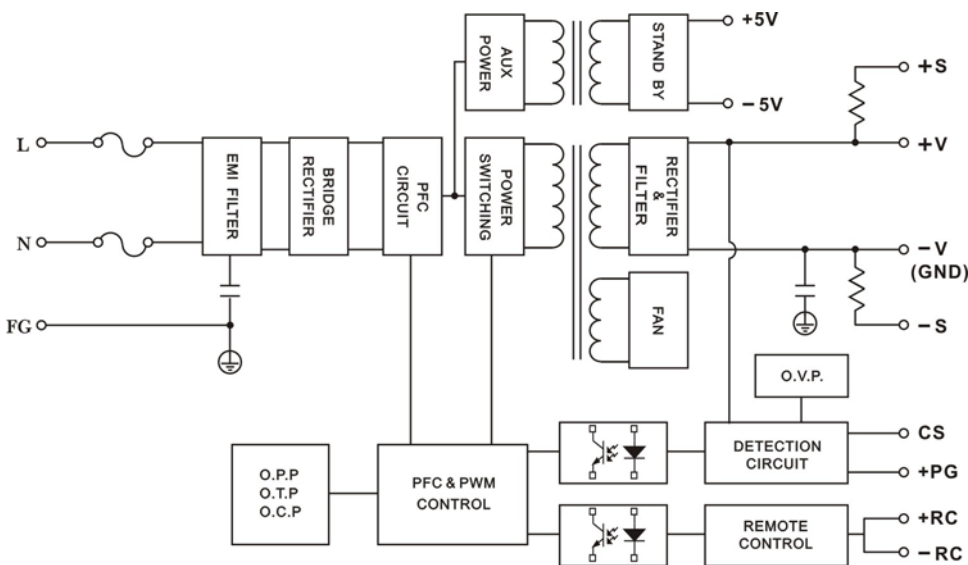
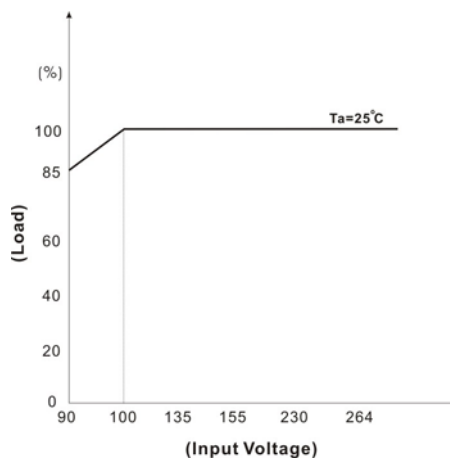
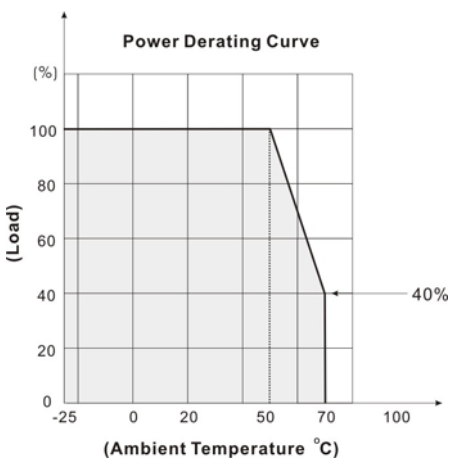
1. All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

2. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.

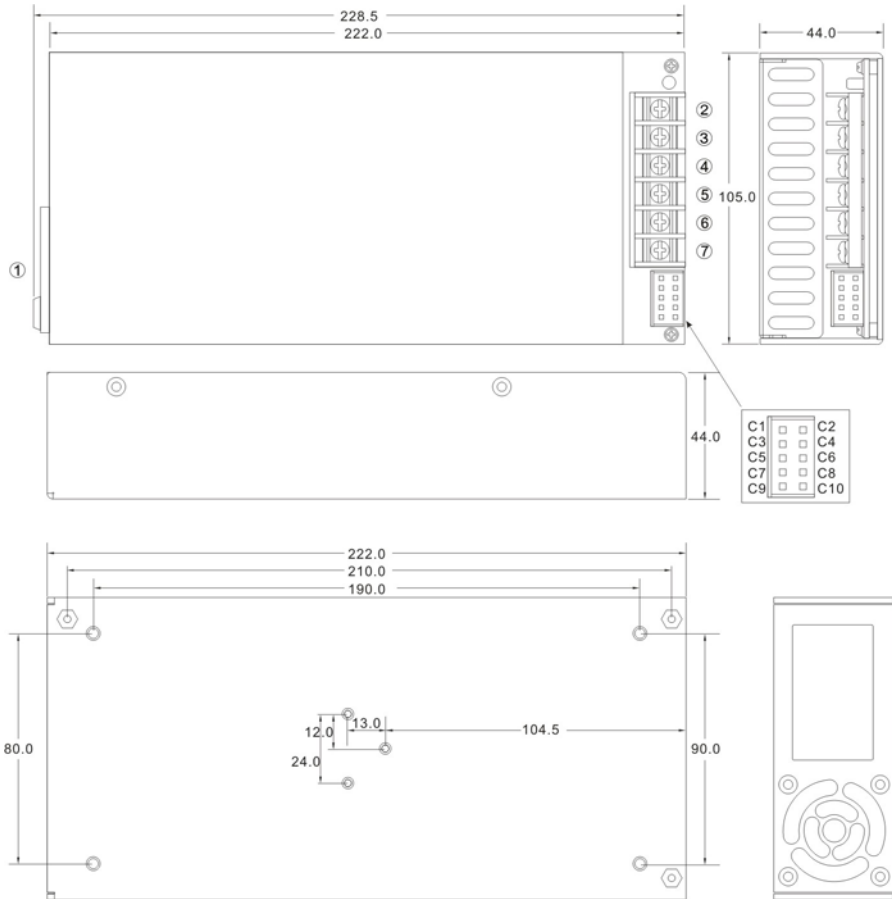
ELECTRICAL SPECIFICATIONS

Model No.	AQF600-12S	AQF600-24S	AQF600-28S	AQF600-36S	AQF600-48S	AQF600-54S	
Physical	Dimension (L x W x H)						
	9.0 x 4.13 x 1.72 Inches (228.5 x 105.0 x 44.0 mm) Tolerance ± 0.5 mm						
	Weight						
		1200 g					
		Cooling					
		Convection Cooled					
Safety	Agency Approvals						
		CE, UL60950 (Pending)					
EMC	EMI (Conducted & Radiated Emission)						
	EN 55022 class B, Radiated Class A (Pending)						
		EMS (Noise Immunity)					
		EN 55024 (Pending)					

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BLOCK DIAGRAM

DERATING


MECHANICAL DIMENSION



AC Input Terminal Pin	
PIN#	SINGLE
1	AC IN

DC Output Terminal Pin	
PIN#	SINGLE
2~4	+DC OUT
5~7	-DC OUT

Connector Pin (CN4)	
PIN#	SINGLE
C1	+S
C2	-S
C3	+RC
C4	-RC
C5	+PG
C6	GND
C7	+5V SB
C8	-5V SB
C9	N.C
C10	CS

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)

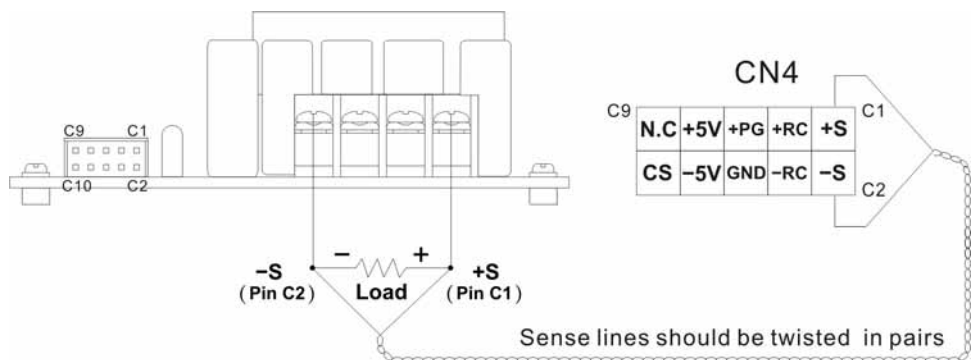
FUNCTION DESCRIPTION of CN4 :

Pin No.	Function	Description
C1	+S	Positive sensing. The +S signal should be connected to the positive terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V. (max.)
C2	-S	Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V. (max.)
C3	+RC	Turns the output on and off by electrical or dry contact between pin C4 (-RC), Short: Power OFF, Open: Power ON.
C4	-RC	Remote control ground.
C5	DC-OK	DC-OK Signal is a DC output, referenced to pinC6(DC-OK GND).
C6	GND	This pin connects to the negative terminal(-V). Return for DC-OK signal output.
C7	+5V SB	Stand by voltage output ground 4.5~5.5V, referenced to pin C8(-5V SB). The maximum load current is 0.6A.
C8	-5V SB	Stand by voltage output ground.
C9	N.C	No Pin
C10	CS	Current Share Function Pin

FUNCTION MANUAL :

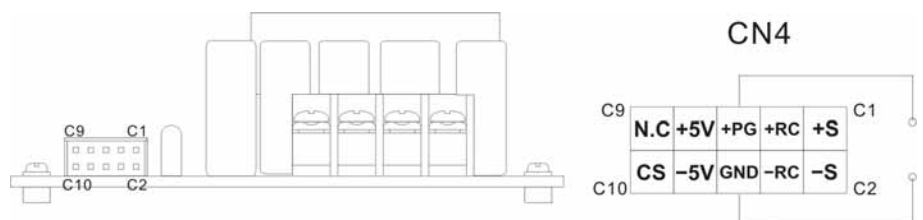
1. Remote Sense

The remote sensing compensates voltage drop on the load wiring up to 0.5V. (max.)



2. DC-OK Signal

Between DC-OK(pinC5) and GND(pinC6)	Output Status
4~6V	ON
0~1V	OFF



3. Remote Control

It can be turned ON/OFF by using the "Remote Control" function.

Between RC+(pinC3) and RC-(pinC4)	Output Status
SW ON (Short)	OFF
SW OFF (Open)	ON

