AC-DC ITE Switching Power Supply







AQF240U SERIES 240 Watts

EY FEATURES

U Bracket Switching Power Supply

Universal Input: 90-264 VAC

With P.F.C. Function, PF>0.95

High Efficiency up to 93%

RoHS Compliant Design

Ultra Compact Size: 6.0 x 4.18 x 1.38 Inches

3-Year Product Warranty



only, actual product may vary.

ELECTRICAL SPECIFICATIONS

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

Model No.		AQF240 U-5S	AQF240 U-12S	AQF240 U-15S	AQF240 U-24S	AQF240 U-28S	AQF240 U-36S	AQF240 U-32S	AQF240 U-48S
Max Output Wattage (W)		180W	240W						
	Voltage (Note 3)	90-264 VAC or 120-370 VDC							
Input	Frequency (Hz)	47-63 Hz							
	Current (Full load)	<3.0 A max. (115 VAC) / <1.5 A max. (230 VAC)							
	Inrush Current (<2ms)	< 30 A max. (115 VAC) / < 60 A max. (230 VAC)							
	Leakage Current	< 0.5 mA max.							
	Power Factor	PF>0.98 (115 VAC) / PF>0.95 (230 VAC) at Full Load							
	Voltage (V.DC.)	5V	12V	15V	24V	28V	36V	32V	48V
	Trim	±5% Output Voltage							
	Voltage Accuracy	±2%							
	Current (Convection) (A) max	36	20	16	10	8.57	6.66	7.5	5
	Line Regulation	±1%							
Output	Load Regulation	±1%							
	Minimum Load	5%	2%						
	Maximum Capacitive Load	470-23,000μF depending on model							
	Ripple & Noise (max.)	150mVp-p	120mVp-p	200mVp-p					
	Efficiency (at 230VAC)	87%	90%	90%	92%	92%	92%	92%	93%
	Hold-up Time	10 ms min.							
	Over Power Protection	Auto recovery							
Duntantina	Over Voltage Protection	Latch Off							
Protection	01 101 115 111	Protection level 1 (nominal) : Continuous, Auto recovery							
	Short Circuit Protection	Protection level 2 (instantaneous high current) : Latch							
	Input-Output (V.AC)	4000VAC or 5656VDC							
Isolation	Input-FG (V.AC)	2000V							
	Output-FG (V.AC)	500V							
	Operating Temperature	-10°C+70°C (with derating)							
	Storage Temperature	-25°C+85°C							
Environment	Temperature Coefficient	±0.03%/°C	(0~50°C)						
Environment	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.							
Physical	Dimensions (L x W x H)	5S: 6.0 x 4.18 x 1.46 Inches (150.0 x 106.0 x 37.0 mm) Tolerance ±0.5 mm							
		Others: 6.0 x 4.18 x 1.38 Inches (150.0 x 106.0 x 35.0 mm) Tolerance ±0.5 mm							
	Weight	580 g							
	Cooling Method	Free convection or 18CFM							
Safety	Agency Approvals	IEC / EN 60950(5S,15S, 28S, 36S N/A), UL/ IEC / EN 62368-1(5S,15S, 28S, 36S N/A)							
EMC	EMI (Conducted & Radiated Emission)	EN 55032 class B							
	EMS (Noise Immunity)	EN 55024							

update: 2021.09.29

VER : D_4





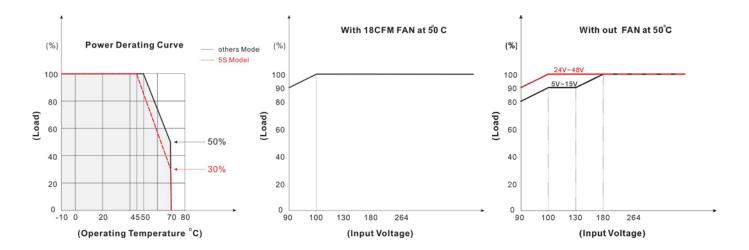
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NOTE

- 1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
- 2. Strongly recommend to conduct this test with DC Voltage. If customer wishes to test with AC Voltage, please disconnect all Y-Capacitors from Arch power supply.
- 3. Derating may be needed under low input voltages. Please check the derating curve for more details.
- 4. CAUTION: Double pole, neutral fusing. Disconnect mains before servicing.

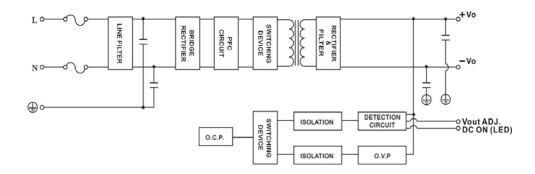
(ATTENTION: 2 poles avec fusible sur le neutre. Deconnecter le secteur avant intervention.)

DERATING



BLOCK DIAGRAM

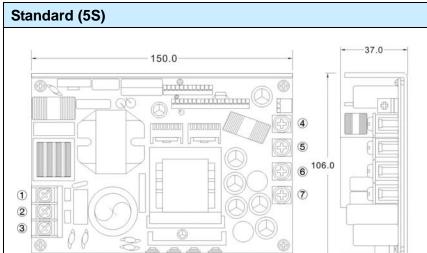
Single Output





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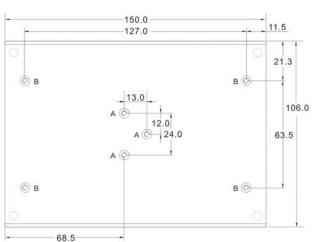
MECHANICAL DIMENSIONS (Top View)



Tolerance ± 0.5 mm



Brands		Terminal			
PIN#	Single				
1	AC IN (L)	ANYTEK DG28S-B-03P			
2	AC IN (N)	ANTIER DG285-B-03P			
3	FG				
4~5	+DC OUT	M5 Pan HD screw in 2 positions			
6~7	-DC OUT	Torque to 8 lbs-in(90 cNm) max.			

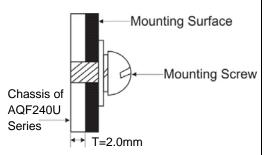


A= For fixture to chassis only A=M3x0.5P B=For fixture to pcb/chassis only B=M3x0.5P

Torque:3±0.5 Kgf.cm

ASSEMBLY INSTRUCTIONS

*U Case T=2.0mm Customer is advised to screw into the threads no more than 2.0mm









Please refer to the types of terminal block; the pictures shown are for illustration purpose only, actual product may vary.

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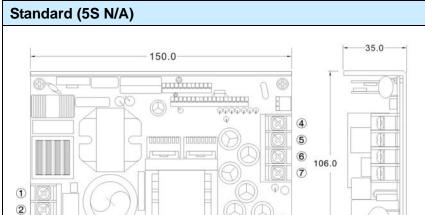


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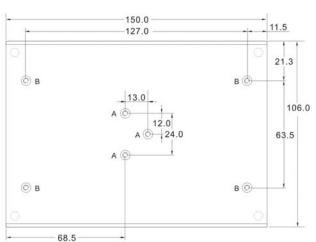
MECHANICAL DIMENSIONS (Top View)



Tolerance ± 0.5 mm



Brands		Terminal			
PIN#	Single				
1	AC IN (L)	ANIVTEK DOGGE B 02B			
2	AC IN (N)	ANYTEK DG28S-B-03P			
3	FG				
4~5	+DC OUT	ANYTEK DG28S-B-04P			
6~7	-DC OUT	ANTIER DG205-B-04P			



A= For fixture to chassis only

A=M3x0.5P

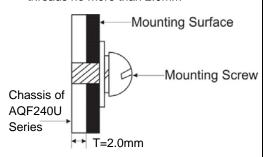
B=For fixture to pcb/chassis only

B=M3x0.5P

Torque:3±0.5 Kgf.cm

ASSEMBLY INSTRUCTIONS

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Standard (5S N/A)





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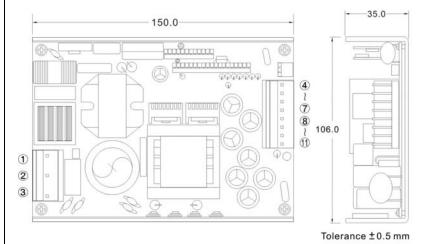


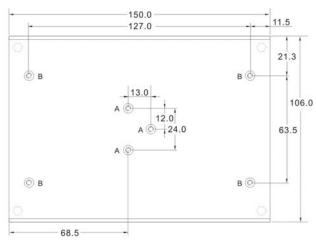


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MECHANICAL DIMENSIONS (Top View)





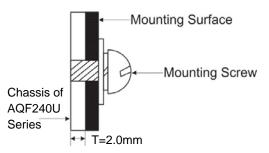


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A= For fixture to chassis only
A=M3x0.5P
B=For fixture to pcb/chassis only
B=M3x0.5P
Torque:3±0.5 Kgf.cm

ASSEMBLY INSTRUCTIONS

*U Case T=2.0mm
Customer is advised to screw into the threads no more than 2.0mm



A Type (5S N/A)





Please refer to the types of terminal block; the pictures shown are for illustration purpose only, actual product may vary.

Brands		Al	ex	Molex		
PIN#	Single	Mating Housing Terminal		Mating Housing	Terminal	
1	AC IN (L)	8639-05N2 8095-05N2	23T or 24T series 94T or 95T series	5195-05	5194T	
2	AC IN (N)					
3	FG					
4~7	+DC OUT	8639-08N2	23T or 24T series	5195-08	5194T	
8~11	-DC OUT	8095-08N2	94T or 95T series	3193-06	31941	