

Features:

1. Wide input range (90-264VAC, 100-370VDC)
2. Size 101.6*50.8*32mm, 4"*2"
3. Protection type: short circuit/over load/over temperature/over voltage
4. Operating temperature range -40°C to +70°C
5. 4000V isolation voltage
6. 90W with Natural Convection, 120W with 10 CFM Forced Air Cooling
7. Built-in 12V/0.5A fan auxiliary power supply
8. 100% high temperature aging and testing
9. 3 years warranty



3 years
Warranty

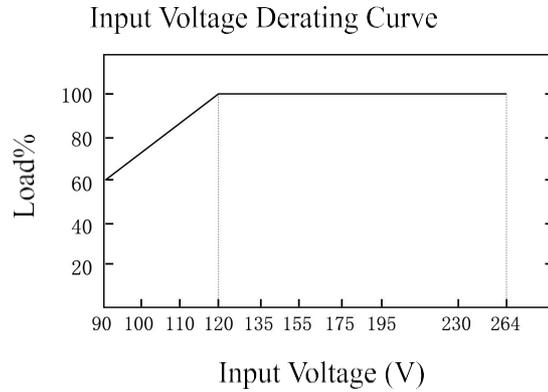
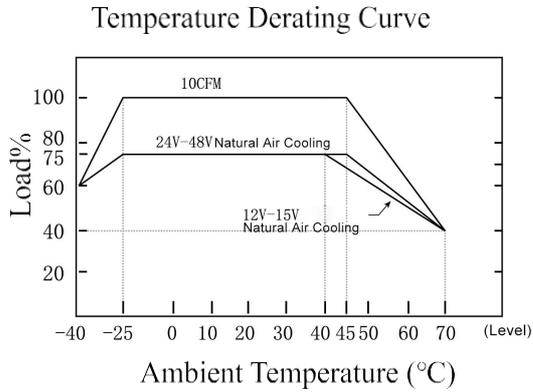
Selection Guide

Model	Input Voltage	Rated Power (W)	Output Voltage (V)	Voltage Adjustable Range (V)	Output Current (A)	Ripple & Noise (mVp-p)	Efficiency (%)
ADF-120-12MU	90-264VAC 100-370VDC	120	12	11.7-12.5	10	120	89
ADF-120-15MU		120	15	14.3-16.4	8	120	91
ADF-120-24MU		120	24	22.6-25.4	5	120	90
ADF-120-27MU		120	27	25.0-32.7	4.44	120	91
ADF-120-36MU		120	36	33.3-38.7	3.33	240	89
ADF-120-48MU		120	48	44.7-53.3	2.5	240	92

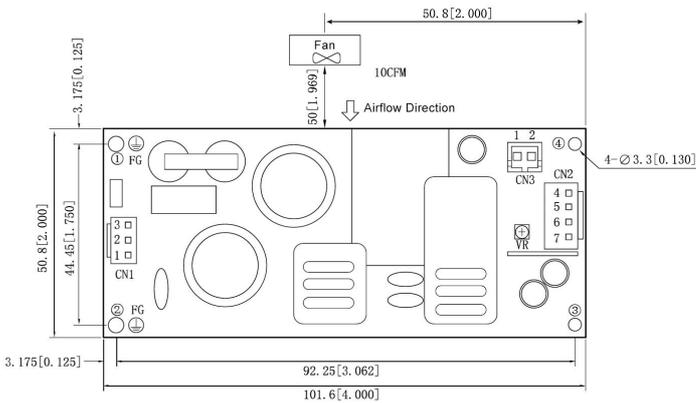
Specifications

OUTPUT	Voltage Tolerance	±1.0% at full load					
	Line Regulation	±1.0% at full load					
	Load Regulation	±1.0% 10-100% load					
	Setup, Rise Time (Typ.)	3s/230VAC at full load					
	Hold Up Time (Typ.)	16ms/230VAC at full load					
INPUT	Voltage Range	90-264VAC 100-370VDC					
	Nominal Voltage	100-240VAC					
	Current (Typ.)	2.3A MAX/100VAC 1.25A MAX/240VAC					
	Inrush Current (Typ.)	Cold boot 30A/115VAC 60A/230VAC at full load					
	Leakage Current (Typ.)	Ground Leakage Current < 130µA/264VAC Touch Leakage Current < 40µA/264VAC					
PROTECTION	Over Load	≥110% load, self-recovery after troubleshooting					
	Short Circuit	Hiccup mode, self-recovery after troubleshooting					
	Over Temperature	Power reduction or no output; requires power-off and discharge before restarting.					
	Over Voltage	Output off, Automatic recovery upon fault removal					
		Voltage	12VDC	15VDC	24VDC	27VDC	36VDC
Range	≤16V	≤20V	≤30V	≤36V	≤48V	≤60V	
ENVIRONMENT	Working Temp.	-40°C to +70°C (Refer to "Derating curve")					
	Working Humidity	10-85%RH					
	Storage Temp., Humidity	-40°C to +105°C					
	Temp. Coefficient	0.03%/ (0-50°C)					
	Vibration	10-500Hz, 2G, 10min./1cycle, 60min.each along X, Y, Z axes					
SAFETY & EMC (NOTE 3.)	Safety Standards	IEC60601-1, EN60601-1, UL62368-1, EN/EN62368-1, IEC62368-1					
	Isolation Voltage	I/P-O/P: 4.0kVAC I/P-FG: 2.0kVAC O/P-FG: 0.5kVAC					
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: >100M Ohms/500VDC 25°C 70% RH					
	EMC Emission & Immunity	EN55011, EN55032 (CISPR32) CLASS B					
	ESD	IEC/EN 61000-4-2 level 4 Contact ±8kV/Air ±15kV					
	RF	IEC/EN 61000-4-3 level 4 lev3					
	EFT	IEC/EN 61000-4-4 level 4 4kV					
	Surge	IEC/EN 61000-4-5 level 4 2kV					
OTHERS	MTBF	165K hrs min. MIL-HDBK-217F (25°C)					
	Dimension	101.6*50.8*32mm (L*W*H)					
	Weight	142g					
	Package	8 PCS/Box 12 Box/Carton					
	Carton Size	360*300*250mm					
NOTE	1. All parameters not specially mentioned, are measured when TA=25°C, humidity<75%, input nominal voltage and output rated load.						
	2. Measurement method of ripple & noise: Parallel line test method shall be adopted. Meanwhile, 0.1uF high-frequency ceramic capacitor and one 47uF electrolytic capacitor shall be connected in parallel at the terminal for measurement under 20Mhz bandwidth.						
	3. The power supply is regarded as a component in the system, and electromagnetic compatibility shall be confirmed in combination with the terminal equipment.						

Derating Curve

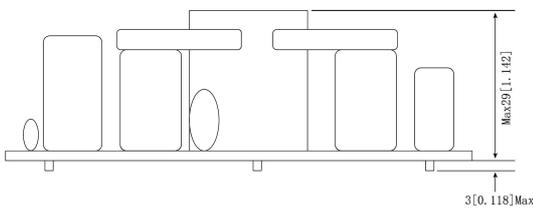


Mechanical Specification



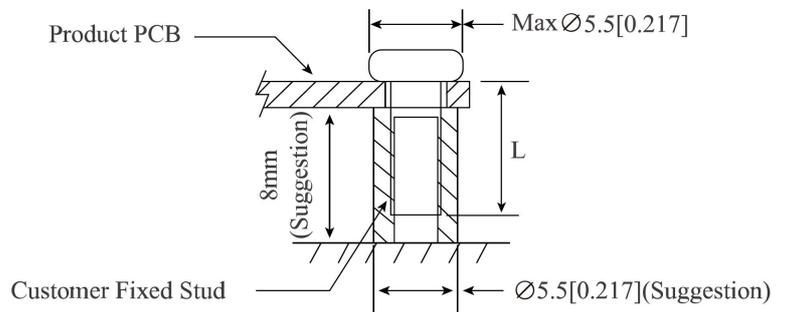
Pin Method			
Connector	Pin	Function	Customer Connection End
CN1	1	AC(N)	Connector: JST VHR Connector Terminals: JST SVH-21T-P1.1 Or Equivalent Products
	2	No Pin	
	3	AC(L)	
CN2	4/5	+Vo	Connector: JST VHR Connector Terminals: JST SVH-21T-P1.1 Or Equivalent Products
	6/7	-Vo	
CN3	1	DC COM	Connector: JST VHR Connector Terminals: JST SVH-21T-P1.1 Or Equivalent Products
	2	+12V	

Installation location	Screw Specifications	L(Suggestion)	Torque (max)
①-④	M3	6mm	0.4N · m



NOTE:

- Unit size: mm[inch] Unmarked tolerances: ±0.5mm



Notes:

1. If the product works under the minimum required load, it cannot guarantee that the performance of the product complies with all the performance indicators in this manual;
2. The maximum capacitive load is tested under the input voltage range and full load condition;
3. Unless otherwise stated, all indexes in this manual are measured at $T_a=25^{\circ}\text{C}$, humidity $<75\%RH$, nominal input voltage and rated output load;
4. All index testing methods in this manual are based on the enterprise standards of the company;
5. Our company can provide product customization, specific needs can directly contact our technical staff;
6. AMCHARD reserves the right to make changes to the product at any time without notice.