

Features:

1. Wide input range (90-264VAC, 120-370VDC)
2. Size 76.2*50.8*28.0mm, 3"*2"
3. No-load power consumption<0.5W
4. Protection type: short circuit/over temperature/over load/over voltage
5. Operating temperature range -40°C to +85°C
6. 4000V isolation voltage
7. Built-in EMI filter: CLASS B
8. Suitable for CLASS I or CLASS II installations
9. 100% high temperature aging and testing
10. 3 years warranty
11. Meet IEC60335-1



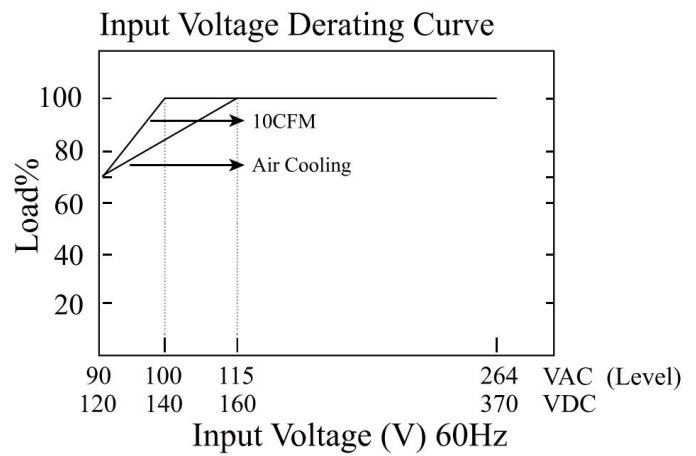
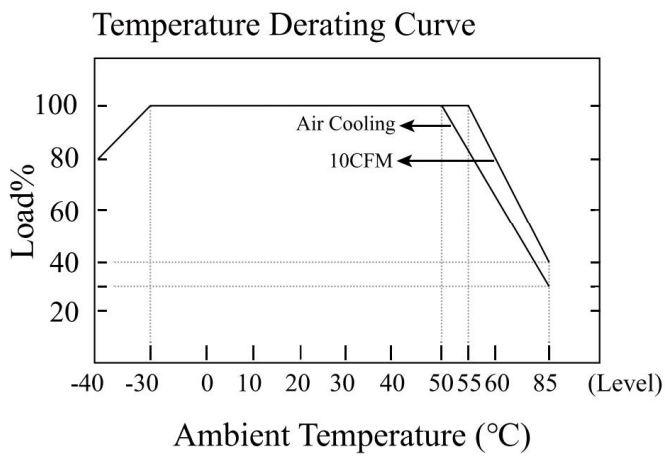
3 years
Warranty

Selection Guide

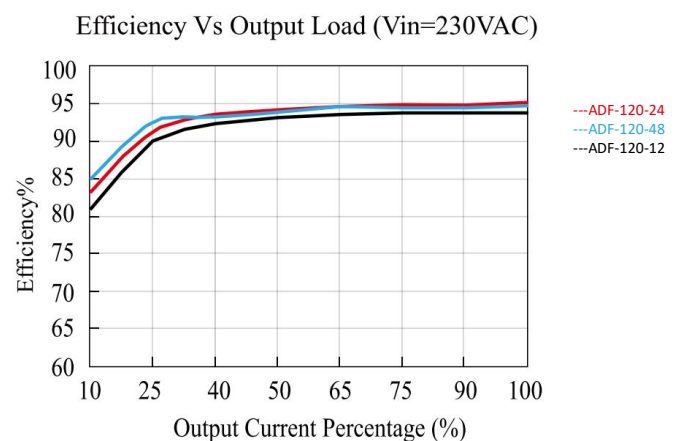
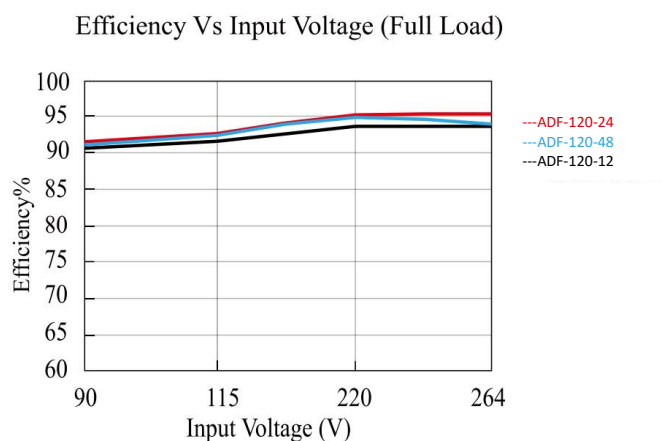
Model	Input Voltage	Rated Power (W)	Output Voltage (V)	Voltage Adjustable Range (V)	Output Current (A)	Ripple & Noise (mVp-p)	Efficiency (%)
ADF-120-12	90-264VAC	120	12	11.4-12.6	10	120	94
ADF-120-15		120	15	14.3-15.8	8	120	94
ADF-120-24		120	24	22.6-25.8	5	150	94
ADF-120-27		120	27	26.5-27.8	4.44	150	95
ADF-120-36		120	36	33.8-38.2	3.33	200	94
ADF-120-48		120	48	44-50.1	2.5	200	94.5

OUTPUT	Voltage Tolerance	±1.0%			12/15V: ±2.0%			
	Line Regulation	±0.5%						
	Load Regulation	±1.0%						
	Setup, Rise Time (Typ.)	1000ms, 30ms/230VAC 1500ms, 30ms/115VAC at full load						
	Hold Up Time (Typ.)	12ms/230VAC 12ms/115VAC at full load						
INPUT	Voltage Range	90-264VAC 120-370VDC						
	Power Factor (Typ.)	PF>0.95/230VAC PF>0.98/115VAC at full load						
	Current (Typ.)	1.5A/115VAC 0.8A/230VAC						
	Inrush Current (Typ.)	Cold boot 40A/115VAC 75A/230VAC						
	Leakage Current (Typ.)	<0.25mA/240VAC/60Hz						
PROTECTION	Over Load	≥110% load, self-recovery after troubleshooting						
	Short Circuit	Hiccup mode, self-recovery after troubleshooting						
	Over Temperature	Shut-off output, normal output can be restored after power restart						
	Over Voltage	Shut-off output						
		Voltage	12VDC	15VDC	24VDC	27VDC	36VDC	48VDC
		Range	≤16V	≤20V	≤32V	≤35V	≤50V	≤60V
ENVIRONMENT	Working Temp.	-40°C to +85°C (Refer to "Derating curve")						
	Working Humidity	10-85%RH						
	Storage Temp., Humidity	-40°C to +85°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	Meet to UL62368-1, EN/EN62368-1, IEC62368-1						
	Isolation Voltage	I/P-O/P: 4000VAC I/P-FG(CASE): 2500VAC O/P-FG(CASE): 500VAC						
	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. MILDBK-217F (25°C)						
	Dimension	76.2*50.8*28.0mm (L*W*H)						
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.							

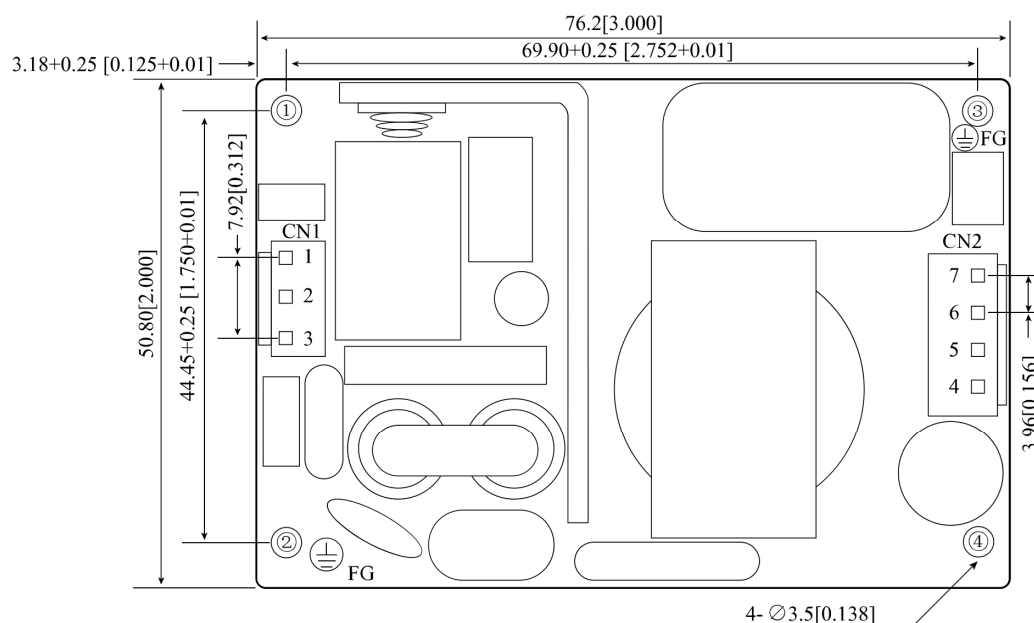
Typical Characteristics Curve

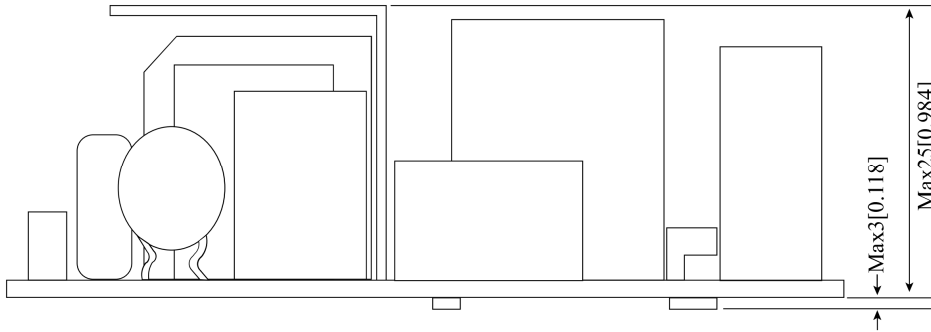


Efficiency Curves



Mechanical Specification

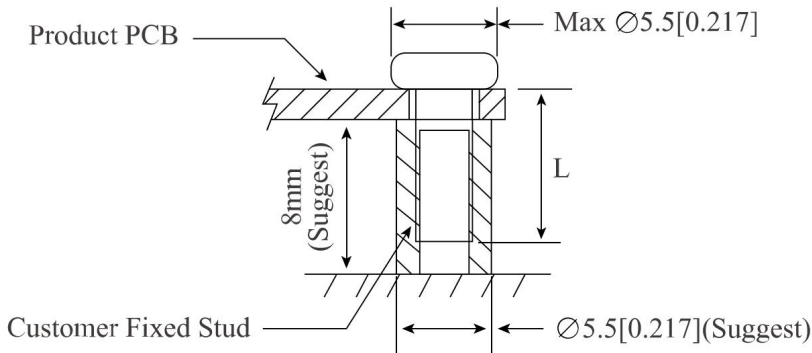




NOTE:

1. Unit size: mm[inch]
Unmarked tolerances: $\pm 0.5\text{mm}$
2. CLASS I system: Mounting holes marked with $\perp$ must be connected to safety earth
3. CLASS II system: Unnecessary to connect with safety earth

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	NC	
	3	AC(L)	
CN2	4-5	-Vo	Connector: JST VHR Connector Terminals: JST SVH-21T-P1.1 Or Equivalent Products
	6-7	+Vo	



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

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 $<75\%\text{RH}$, 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.