ADF120 SERIES 120 Watts

KEY FEATURES

- Din Rail Switching Power Supply
- Universal Input: 90-264 VAC
- With P.F.C. Function
- Free Air Convection
- Ultra Compact Size: 1.66 x 5.16 x 3.94 Inches
- 3-Year Product Warranty

(Pending)

ELECTRICAL SPECIFICATIONS

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

Model No.		ADF120-12S	ADF120-24S	ADF120-48S
Max Output Wattage (W)		120W	120W	120W
Input	Voltage	90-264 VAC or 120-370 VDC		
	Frequency (Hz)	47-63 Hz		
	Current (Full load)	<2.0 A max. (115 VAC) / <1.0 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>0.94 (230 VAC) at Full Load		
Output	Voltage (V.DC.)	12V	24V	48V
	Voltage Accuracy	±2%		
	Current (Convection) (A) max	10	5	2.5
	Line Regulation	±1%		
	Load Regulation	±1%		
	Minimum Load	0%		
	Maximum Capacitive Load	470-23,000μF depending on model		
	Ripple & Noise	1% max.		
	Efficiency (typ.)	90%	91%	92%
	Hold-up Time	20 ms min.		
Protection	Over Power Protection	Auto recovery		
	Over Voltage Protection	Latch Off		
	Short Circuit Protection	Latch Off		
Isolation	Input-Output (V.AC)	3000V		
	Input-FG (V.AC)	1500V		
	Output-FG (V.AC)	500V		
Environment	Operating Temperature	-10℃…+70℃ (with derating)		
	Storage Temperature	-25℃…+85℃		
	Temperature Coefficient	±0.03%/℃ (0~50℃)		
	Humidity	95% RH		
	MTBF	>50,000 h @ 25℃ (MIL-HDBK-217F)		
	Vibration	10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes.		
Physical	Dimension (L x W x H)	1.66 x 5.16 x 3.94 Inches (42.4 x 131.1 x 100.0 mm) Tolerance ±0.5 mm		
	Weight	Pending		
	Cooling Method	Free convection		
Safety	Agency Approvals	CE, UL60950-1 (Pending)		
EMC	EMI (Conducted & Radiated Emission)	EN 55022 class B		
	EMS (Noise Immunity)	EN 55024		

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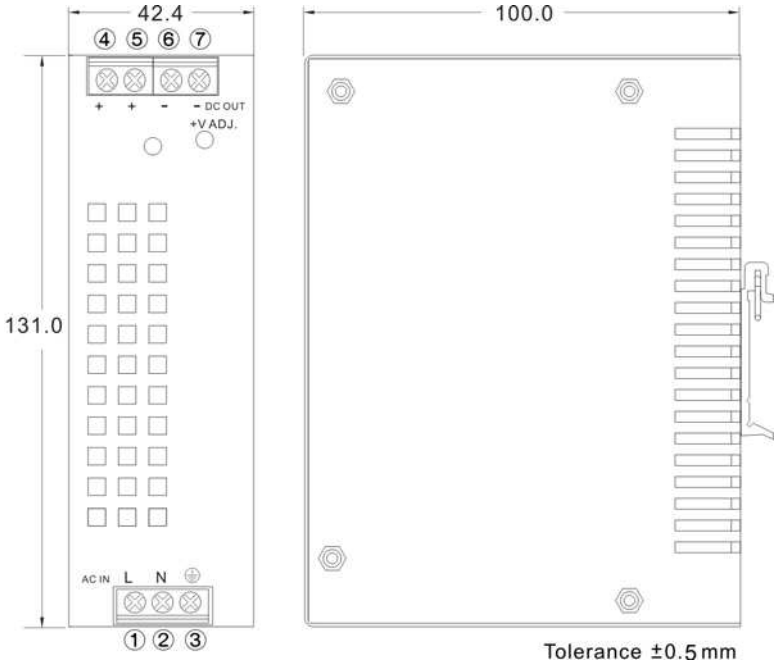
NOTE

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

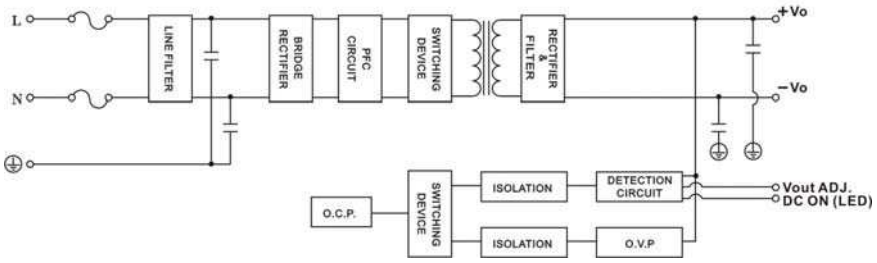
MECHANICAL DIMENSION (Top View)



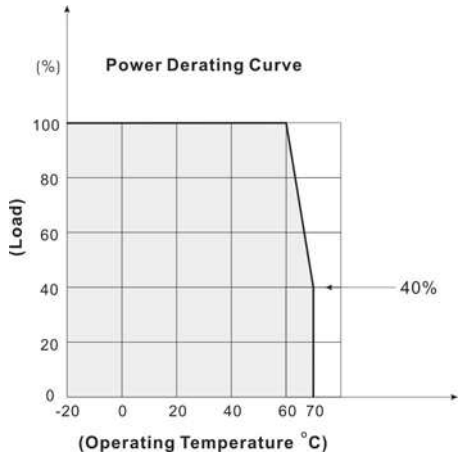
PIN#	Single
1	AC IN (L)
2	AC IN (N)
3	FG
4	+DC OUT
5	+DC OUT
6	-DC OUT
7	-DC OUT

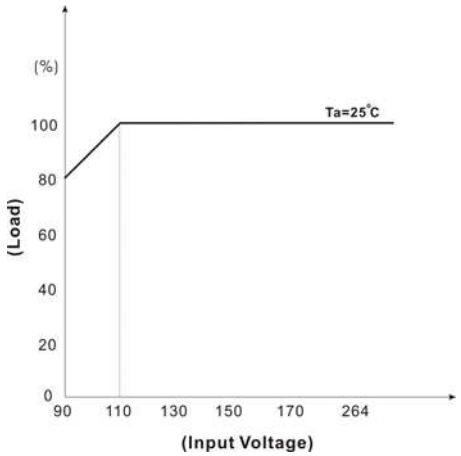
BLOCK DIAGRAM

Single Output



DERATING





EFFICIENCY VERSUS LOAD

ADF120-24S

VIN VS Efficiency

Input Voltage (V)	90	115	180	230	264
Efficiency (%)					

LOAD VS Efficiency

Load (%)	10	20	30	40	50
115V (%)					
230V (%)					
Load (%)	60	70	80	90	100
115V (%)					
230V (%)					

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115V (%)					
230V (%)					
Load (%)	60	70	80	90	100
115V (%)					
230V (%)					

EFFICIENCY VERSUS LOAD

ADF1250-48S

VIN VS Efficiency

Input Voltage (V)	90	115	180	230	264
Efficiency (%)					

LOAD VS Efficiency

Load (%)	10	20	30	40	50
115V (%)					
230V (%)					
Load (%)	60	70	80	90	100
115V (%)					
230V (%)					