



120W AC-DC Single Output Desktop

AS-120P-12SO



REF

■ Features :

- 3 pole AC inlet IEC320-C14
- Built-in active PFC function, PF>0.95
- Protections: Short circuit/ Over load/ Over voltage/Over temperature
- High power density 5w/in<sup>3</sup>
- Fully enclosed plastic case
- No load power consumption<0.5W
- Pass energy star level IV(CEC)
- Meet EISA 2007(Energy Independence and Security Act)
- ZCS/ZVS technology to reduce power dissipation
- 2 years warranty

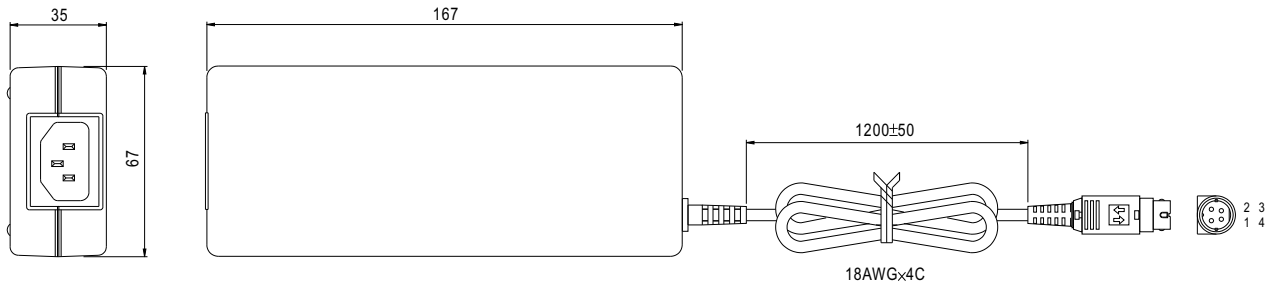


SPECIFICATION

MODEL		AS-120P-12SO
OUTPUT	DC VOLTAGE	Note.2 Fixed 12V
	RATED CURRENT	8.4A
	CURRENT RANGE	0~ 8.4A
	RATED POWER	100W
	RIPPLE & NOISE (max.)	Note.3 100mVp-p
	VOLTAGE TOLERANCE	Note.4 ±4.0%
	LINE REGULATION	Note.5 ±1.0%
	LOAD REGULATION	Note.6 ±3.5%
	SETUP, RISE TIME	3000ms, 80ms at full load
	HOLD TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load
INPUT	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC
	FREQUENCY RANGE	47 ~ 63Hz
	POWER FACTOR (Typ.)	PF ≥ 0.95/230VAC PF ≥ 0.98/115VAC at full load
	EFFICIENCY (Typ.)	85.5%
	AC CURRENT (Typ.)	1.4A/115VAC 0.7A/230VAC
	INRUSH CURRENT (Typ.)	120A/230VAC
	LEAKAGE CURRENT (max.)	<1mA / 240VAC
PROTECTION	OVER LOAD	105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed
	OVER VOLTAGE	14 ~ 16.8V Protection type : Shut down o/p voltage, re-power on to recover
	OVER TEMPERATURE	90℃ ±15℃ (RTH2) detect on heatsink of power transistor Protection type : Shut down o/p voltage, re-power on to recover
ENVIRONMENT	WORKING TEMP.	0 ~ + 50℃ (Refer to output load derating curve)
	WORKING HUMIDITY	20% ~ 90% RH non-condensing
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH
	TEMP. COEFFICIENT	±0.03% / °C (0 ~ 50℃)
	VIBRATION	10 ~ 500Hz, 2G 3AXES 10min./1cycle, period for 60min. each along X, Y, Z axes
SAFETY	SAFETY STANDARDS	Design refer to UL60950-1, TUV EN60950-1, CCC GB4943
	WITHSTAND VOLTAGE	I/P-O/P:4.25KVDC
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 25℃ / 70% RH
OTHERS	LIFE	Average life expectancy of 6 years (12 hours / day, 70% load, 115VAC)
	MTBF	308.9K hrs min. MIL-HDBK-217F (25℃)
	DIMENSION	167*67*35mm (L*W*H)
	PACKING	0.52Kg; 30pcs/16.6Kg/1.1CUFT
CONNECTOR	PLUG	Standard type R7B
	CABLE	Standard type 120cm of SPT-1, 18Awg*4c
NOTE		1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH. Ambient. 2.DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. 4.Tolerance: includes set up tolerance, line regulation, load regulation. 5.Line regulation is measured from low line to high line at rated load. 6.Load regulation is measured from 0% to 100% rated load. 7.Mean Well reserves the right to adjust this spec when deemed appropriate.

## Mechanical Specification

Case No.947A Unit:mm

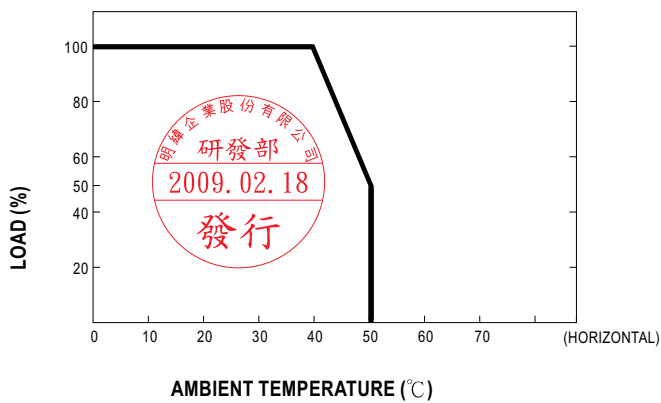


## Plug Assignment

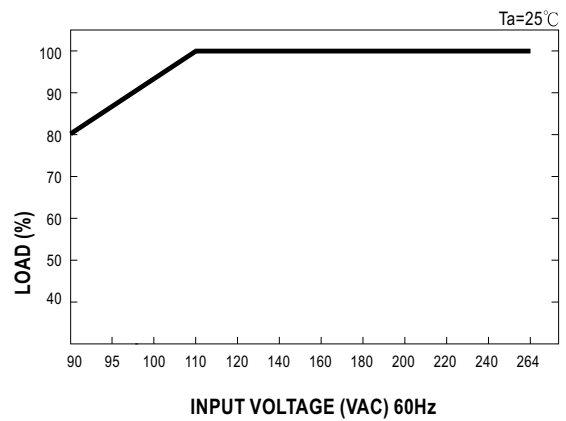
Standard plug

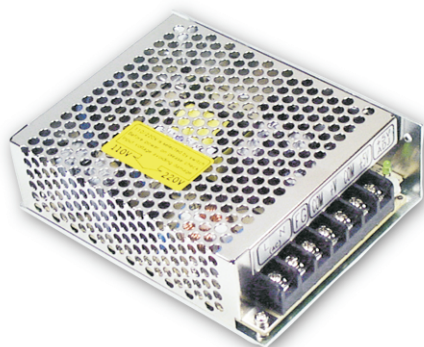
R7B			
PIN NO		OUTPUT	
1,2		+V	
3,4		-V	

## Derating Curve



## Static Characteristics





## ■ Features :

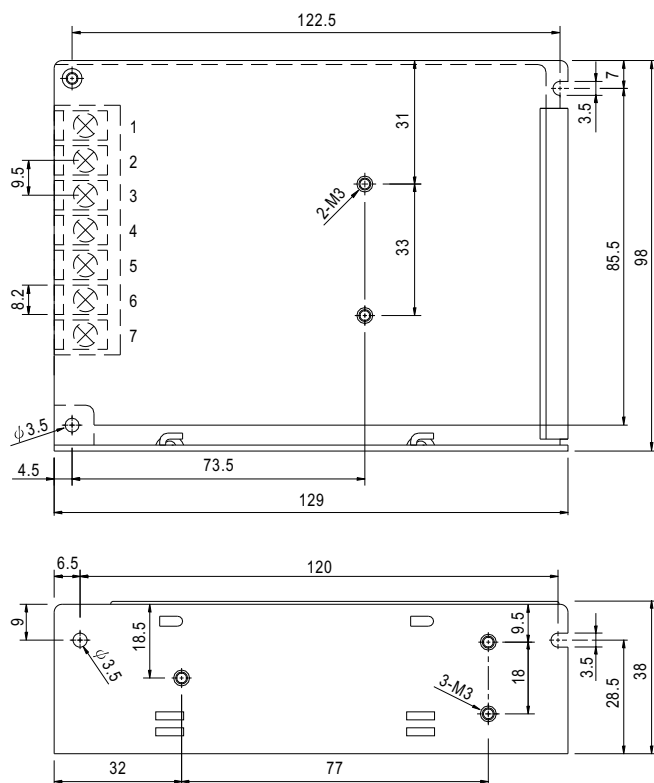
- AC input range selected by switch
- Protections: Short circuit / Overload
- Cooling by free air convection
- Output is isolated from the others
- 100% full load burn-in test
- Fixed switching frequency at 25KHz I/P-O/P: Rated
- Low cost
- High reliability
- 1 year warranty

## SPECIFICATION

MODEL		ID-30B	
OUTPUT	OUTPUT NUMBER	CH1	CH2
	DC VOLTAGE	5V	24V
	RATED CURRENT	2.2A	1A
	CURRENT RANGE	0.1 ~ 2.2A	0.1 ~ 1A
	RATED POWER	35W	
	RIPPLE & NOISE (max.) Note.2	100mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	CH1 : 4.6 ~ 5.5V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±7.0%
	LINE REGULATION	±0.5%	±0.5%
	LOAD REGULATION	±1.5%	±6.5%
	SETUP, RISE TIME	250ms, 100ms at full load	
	HOLD TIME (Typ.)	40ms at full load	
INPUT	VOLTAGE RANGE	90 ~ 130VAC / 180 ~ 260VAC selected by switch on PCB	248 ~ 370VDC
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY(Typ.)	72%	
	AC CURRENT (Typ.)	0.8A/110VAC	0.4A/220VAC
	INRUSH CURRENT (Typ.)	15A/110VAC	30A/220VAC
PROTECTION	OVER LOAD	105 ~ 150% rated output power	
		Protection type : Hiccup mode, recovers automatically after fault condition is removed	
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to output load derating curve)	
	WORKING HUMIDITY	20 ~ 90% RH RH non-condensing	
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95%	
	TEMP. COEFFICIENT	±0.05%/℃	
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes	
SAFETY & EMC	SAFETY STANDARDS	Design refer to UL1012	
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC	
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH	
	EMI CONDUCTION & RADIATION	Design refer to FCC Part15 J Conduction Class A	
OTHERS	MTBF	597.7K hrs min. MIL-HDBK-217F (25℃)	
	DIMENSION	129*98*38mm (L*W*H)	
	PACKING	0.41Kg; 30pcs/13.4Kg/0.86CUFT	
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation.		

## Mechanical Specification

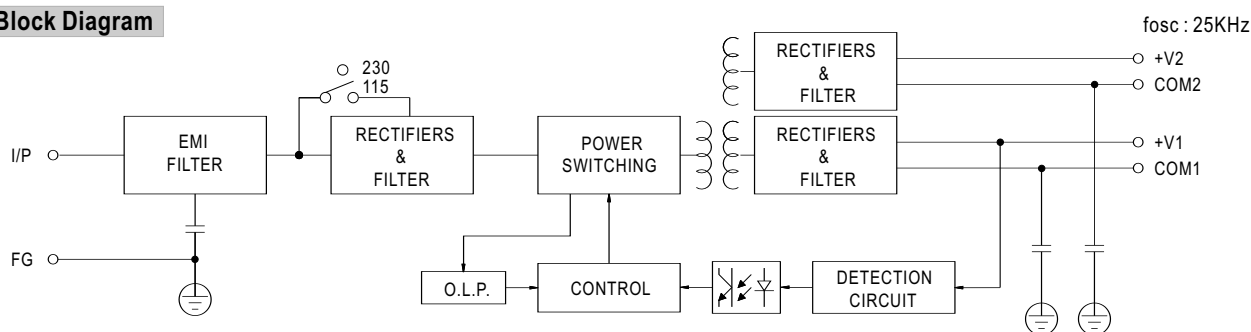
Case No. 903 Unit:mm



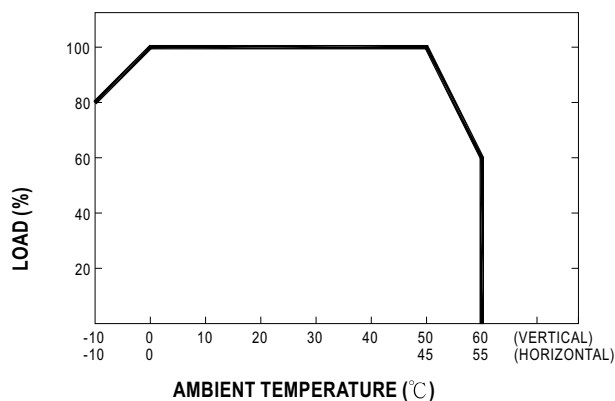
Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	DC OUTPUT +V
2	AC/N	6	DC OUTPUT G1
3	FG $\equiv$	7	DC OUTPUT +5V
4	DC OUTPUT G2		

## Block Diagram



## Derating Curve



## Static Characteristics (B)

