

**SPECIFICATION** 

EMC directives.



### 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
- Approvals: UL/ CUL/ TUV/ CB/ CE
- No load power consumption<0.75W@240VAC
- ZCS/ZVS technology to reduce power dissipation
- · 2 years warranty

# FC cULUS AGE CB(E

MODEL		AS-120P-12	AS-120P-15	AS-120P-20	AS-120P-24	AS-120P-48	
	ORDER NO.	AS120P12R7B	AS120P15R7B	AS120P20P2M	AS120P24P2M	AS120P48P2M	
OUTPUT	DC VOLTAGE Note.2	12V	15V	20V	24V	48V	
	RATED CURRENT	8.4A	6.7A	6A	5A	2.5A	
	CURRENT RANGE	0~ 8.4A	0 ~ 6.7A	0 ~ 6A	0 ~ 5A	0 ~ 2.5A	
	RATED POWER	100W	100W	120W	120W	120W	
	RIPPLE & NOISE (max.) Note.3	100mVp-p	100mVp-p	200mVp-p	200mVp-p	240mVp-p	
	VOLTAGE ADJ. RANGE	11 ~ 13.5V	13.5 ~ 16.5V	18 ~ 22V	21.6 ~ 26.4V	43.2 ~ 52.8V	
		Fixed output by customer choose					
	VOLTAGE TOLERANCE Note.4	. ,	±4.0%	±3.0%	±2.0%	±2.0%	
		±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LOAD REGULATION Note.6	±3.5%	±3.0%	±2.5%	±2.0%	±2.0%	
	SETUP, RISE TIME	3000ms, 80ms at full load					
	HOLD TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load					
	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)		PF≥0.98/115VAC at full lo	ad			
	EFFICIENCY (Typ.)	85.5%	87.5%	89.5%	90%	89%	
	AC CURRENT (Typ.)		230VAC	1	1 = - / V	1 34 /4	
	INRUSH CURRENT (Typ.)	120A/230VAC					
	LEAKAGE CURRENT (max.)	120A/230VAC <1mA / 240VAC					
	LEARAGE CORRECT (Max.)	105 ~ 135% rated output power					
	OVER LOAD	Protection type: Hiccup mode, recovers automatically after fault condition is removed					
		14 ~ 16.8V	17 ~ 21V	22.5 ~ 28V	27 ~ 33.6V	53.3 ~ 67.2V	
PROTECTION	OVER VOLTAGE				21 ~ 33.0 V	33.3 ° 07.2 V	
		Protection type: Shut down o/p voltage, re-power on to recover					
	OVER TEMPERATURE	90°C ±15°C (RTH2) Detect on heatsink of power transistor  Protection type: Shut down o/p voltage, re-power on to recover					
	WORKING TEMP						
	WORKING TEMP. WORKING HUMIDITY	0 ~ + 50°C (Refer to output load derating curve)					
ENVIDONMENT		20% ~ 90% RH non-condensing					
ENVIRONMENT	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT	-20 ~ +85°C, 10 ~ 95% RH					
	VIBRATION	±0.03% / °C (0 ~ 50°C)  10 ~ 500Hz, 2G 3AXES 10min./1cycle, period for 60min. each along X, Y, Z axes					
SAFETY &	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 Approved					
	WITHSTAND VOLTAGE	I/P-O/P:4.25KVDC					
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms					
	EMI CONDUCTION & RADIATION						
(Note. 7)	HARMONIC CURRENT	Compliance to EN61000-3-2,3					
•	EMS IMMUNITY	Compliance to EN61000-3-2,3  Compliance to EN61000-4-2,3,4,5,6,8,11, Light industry level, criteria A					
OTHERS	LIFE	Average life expectancy of 6 years (12 hours / day, 70% load, 115VAC)					
	MTBF	308.9K hrs min. MIL-HDBK-217F (25°C)					
	DIMENSION						
		167*67*35mm (L*W*H) 0.52Kg; 30pcs/16.6Kg/1.1CUFT					
CONNECTOR	PACKING PLUG	Standard type R7B,P2M: $2.5\phi * 5.5\phi * 11$ mm, center positive for stock; Other type available by customer requested					
	CABLE						
		Standard type 120cm of SPT-1, 16Awg*2c for stock; Other type available by customer requested					
NOTE	2.DC voltage: The output volt 3.Ripple & noise are measure 4.Tolerence: includes set up t 5.Line regulation is measured	d at 230VAC input, rated load, 25°C 70% RH. Ambient. tage set at point measure by plug terminal & 50% load. sed at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. tolerance, line regulation, load regulation. If from low line to high line at rated load. If from 0% to 100% rated load.					

7.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets



# Mechanical Specification Case No.947A Unit:mm 1200:50 16AWG.2C 1200:50 1100:50 1200:50 1100

## ■ Plug Assignment

Standard plug(For 12V,15V only)

R7B						
	PIN NO	OUTPUT				
2 (0 0) 3	1,4	+V				
1	2,3	-V				

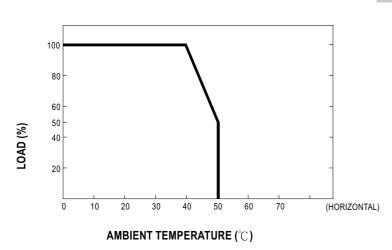
Standard plug(For 20V,24V,48V only)

P	2M	
P/N	OUTPUT	HAAT.
CENTER	+	ID 2.5 x

Outside ⊖ ⊕ Inside

OD 5.5

# **■** Derating Curve



### ■ Static Characteristics

