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SPECIFICATION



FSP309-2F01 / 90C3090100

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SPECIFICATION

309W AC power supply

FSP309-2F01

P.E	R/D	APPROVED	REV.
Nick Yu	Cerberus Shao	LJ Wei	000

表單編號: 7000P-0105



Electrical Specification

History

REV.	<u>Description</u>	Date	Drawn	Mechanical	Electrical	Approved
000	Spec Issue	Jan.07 '10	Vicky Chen	Nick Yu	Cerberus Shao	LJ Wei

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Electrical Specification

Electrical Requirements

1. Input Characteristics:

※Measured the output voltage at the PCB

ITEM	CONDITION	SPECIFICATION
1.1 Rated Input Voltage		100Vac / 240Vac
1.2 Input Voltage Range	Continuously	90Vac /264Vac
1.3 Input Frequency Range	Continuously	47Hz to 63Hz
1.4 Input Current	100Vac / 240Vac Max. load	≤ 4.0A
1.5 Efficiency	100Vac / Max. load (warm up 10 minutes later) 240Vac / Max. load (warm up 10 minutes later)	≥ 82% ≥ 84%

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Electrical Specification

2. Output Characteristics:

※Measured the output voltage at the PCB

ITEM				CONDITION			SPECIFICATION			
2.1 Output Rated Voltage :										
No.	Symbol	Min.	Max.	Ripple & Noise	Min.(V)	Typ. (V)	Max.(V)	Remark		
1	12V	0.1A	6.25A	200mV	11.4	12.0	12.6			
2	24V	0.1A	9.75A	350mV	22.8	24.0	25.2			
Note: Output Voltage Ripple and Noise:(0.1uF Ceramic Cap. and 35V/47uF Aluminum Cap. Paralleled between the end of output cable, BW=20M Hz)				1. 100Vac / 240Vac 2. Minimum load and Maximum load						
2.2 Turn-On Delay Time:				Applied the AC input voltage is 100Vac and output load is Max. load, output voltage shall remain regulation.			≤ 1Sec.			
2.3 LED Indication:				No definition						
2.4 Hold Up time:				Applied the AC input voltage is 100Vac or 240Vac and output load is Max. load, output voltage shall remain regulation			≥ 5mS			

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Electrical Specification

3. Protection Characteristics:

ITEM	CONDITION	SPECIFICATION
3.1 Short Circuit Protection:	When an internal fault occurs, or an external fault is applied to the power supply, such that an overload or short circuit is applied to the output, the power supply shall shut down.	Shutdown and no damage
3.2 Over Voltage Protection	The output voltage will enter into shut down that means no output on output, while over voltage happened at output terminal that caused by internal fault. The output trip voltage will be less than 180% of its voltage rating. That will be return to normal state by AC reset.	Shutdown and no damage
3.3 Over Current Protection:	When an internal fault occurs, or an external fault is applied to the power supply, such that an overload or short circuit is applied to the output, the power supply shall shut down and enter auto-recovery or latch mode.	Shutdown and no damage

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Electrical Specification

4. Environmental Characteristics:

ITEM	CONDITION	SPECIFICATION
4.1 Electric Fast Transients: Refer to EN61000-4-4	Impulse: $\pm 1\text{KV}$ applied to AC line, pulse duration 50nS period 5 min.	Normal operation shall be continued.
4.2 Lightning Surge: Refer to EN61000-4-5	$\pm 1\text{KV}$ applied between L, N, pulse rise time 1.2us and duty time 50uS $\pm 2\text{KV}$ applied common mode, pulse rise time 1.2uS and duty time 50uS	Normal operation shall be continued.
4.3 Electron Static Discharge: (Refer to IEC61000-4-2 Energy Storage Capacitor 150pF; Discharge Resistor 330 Ω)	Air Discharge: $\pm 8\text{KV}$. Contact Discharge: $\pm 6\text{KV}$. (Note: combine with customer's system.)	Normal operation shall be continued.
4.4 Cooling	Natural air cooling	
4.5 EMI: AC power supply comply with the following national standards: EMI Conducted Emission EMI Radiated Emission	The AC power supply internal filter to meet, combine with customer's system.	FCC CLASS B CISPR 22 CLASS B
4.6 Safety conforming:	Regulated by customer	
4.7 Leakage Current	100Vac / 60Hz 240Vac / 50Hz	$\leq 0.5\text{mA}$
4.8 Harmonics	240Vac / 50Hz (Note: Combine with customer's system)	EN61000-3-2
4.9 Dielectric Strength: (Hi-Pot)	Between AC input and secondary applied AC 3KV / test time 1 minute / cut off current shall be less than 10mA AC 3KV / test time 3 sec. for mass production	
4.10 Temperature:	Operating Storage	0 to 40°C -20 to +85°C
4.11 Humidity:	Operating Storage	20% ~ 90% 5% ~ 95%

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Electrical Specification

5. Mechanical Characteristics:

ITEM	CONDITION		SPECIFICATION							
5.1 Dimension (Length x Width x Height)			325x200x25 mm							
5.2 Input AC socket										
P801				JWT A3963WV2-5P-C or equivalent						
Pin assignment										
Pin No.	1	2	3	4	5					
Signal Name	Line	N/C	N/C	N/C -	Nature					
5.3 Output DC connector										
P201				JWT, A2001WR2-10P or equivalent						
Pin assignment										
Pin No.	1	2	3	4	5	6	7	8	9	10
Signal Name	GND				24V					
P202						JWT, A2001WR2-8P or equivalent				
Pin assignment										
Pin No.	1	2	3	4	5	6	7	8		
Signal Name	GND				12V					