

1. Electrical Characteristics

1.1 Input Requirements

AC920
33770072

额定输入电压 Rated Input Voltage	AC230V
额定输入频率 Rated Input Frequency	50Hz
最大空载电流 Max. Exciting Current (no loading)	60mA max
最大铁损 Maximum Input Core Loss	N/A

1.2 Output Requirements

输出电压 Output Voltage	AC9.0V $\pm$ 5% ✓
负载电流 Rated Load Current	2000mA ✓
空载电压 No Load Voltage	AC11.0V $\pm$ 5%
纹波电压 Maximum Ripple Voltage	---

2. Security Test

2.1 Hi-Pot Test / 高压测试:

2.1.1 Standard: 3750 VAC 50 Hz 5 mA 1 minute between input to output & case(or core).

标准: 输入对输出 & 外壳(或铁芯)承受高压: 3750 VAC 50 Hz 5 mA 1 min.

2.1.2 Line production test: 4200 VAC 50 Hz 3 mA 1 second between input to output & case (or core); 2000 VAC 50 Hz 3 mA 1 second between output to core.

生产线测试: 输入对输出 & 外壳(或铁芯)承受高压: 4200 VAC 50 Hz 3 mA 1 second.

输出对铁芯承受高压: 2000 VAC 50 Hz 3 mA 1 second.

2.2 Insulation Test / 绝缘测试:

DC 500 V 100 MΩ min between input to output plug and case(or core).

输入对输出 & 外壳(或铁芯)施加 DC 500 V, 绝缘电阻最小 100 MΩ.

2.3 Temperature Rise / 温升测试:

AC input 230 V 50 Hz, output rated load 2000 mA(AC) shall not exceed 95 K on input coil (by resistance method), at ambient temperature $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$.

在室温 $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ 的情况下测试, 输入 AC 230 V 50 Hz, 输出额定负载 2000 mA, 输入线圈温升不超过 95 K(依照电阻法计算).

2.4 Induced voltage / 高电压高频率测试:

All secondary open, primary should withstand 440 V AC 400 Hz for 15 second without breakdown.

全部次级打开, 初级要在 15 秒内经受住 440 V AC 400 Hz 而不损坏.

2.5 Overload Test / 过载测试:

In an ambient temperature of 25 °C applies a power source of rated input with the output load adjusted to 5% of rated output and rated continuously for 4 hours, after turning off 60 minutes in normal temperature, shall meet item 2.1 ~ 2.2.

环境温度为 25°C 的情况下, 适配器额定输入, 输出有 5% 调整率; 不间断工作 4 小时, 断开电后恢复 60 分钟, 需满足 2.1~2.2 的要求.

2.6 Humidity Test / 湿度测试:

Temperature $40 \pm 2^{\circ}\text{C}$, 90~95% R.H. for 48 hours, after taken out from oven. Shall meet 2.1.

在 $40 \pm 2^{\circ}\text{C}$, 湿度 90~95% 的环境下, 放置 48 小时, 取出烤箱后需满足 2.1 的要求

2.7 Caution(Attention) / 警示 (注意):

RISK OF ELECTRIC SHOCK DRY LOCATION USE ONLY (POUR UTILISATION À L'INTÉRIEUR SEULEMENT).

触电危险, 仅用于干燥环境下使用.

3. Mechanical Characteristics:

3.1 Strain Relief Test / 拉力测试:

Plug and cord, at their normal position applied a weight of 20lbs to input plug, 10 lbs to output cord, for 60 seconds each, there shall be no broken of lead or other damage result.

输入插头能承受 20lbs 的拉力, 输出线能承受 10lbs 的拉力, 无任何损坏。

3.2 Drop Test / 落地测试:

Products shall be dropped from a height of 0.75 m, onto 1cm thickness dry wood surface 3 times, after shall no abnormal condition happen, and insulation test 10 MΩ min.

产品从 0.75 米高度落下, 落在 1 cm 厚的干木板上跌落 3 次, 产品无异常; 绝缘测试最小为 10 MΩ.

3.3 Cord Bending Test / 摇摆测试:

The cord shall withstand a weight of 200 g, it swings from left to right at an angle of 120 degree(total), 40 cycle/min, 300 times minimum. The cord shall be conductible.

输出线悬挂 200 克重量, 以 120 度、40 周/分钟 左右摇摆最小 300 次, 输出线无异常。

4. Reliability / 耐用度:

The design and construction of this power supply shall exhibit a minimum mean time between Failure of 25,000 hours full rated load operation 25 °C.

适配器的设计和结构在环境温度为 25°C 的情况下, 带额定负载, 可至少工作 25000 小时。

5. Insulation System / 绝缘等级:

☐ CLASS A(105°C)

☐ CLASS E(110°C)

★CLASS B(130°C)

☐ CLASS F(155°C)

6. Environmental Condition / 环境:

6.1 Operating temperature range / 工作温度范围: -20°C ~ +40°C

6.2 Operating humidity range / 工作湿度范围: 30 ~ 85%R.H

6.3 Storage temperature range / 储藏温度范围: -20°C ~ +80°C

7. DC Resistance: Ambient temperature 25 ± 5 °C.

7.1 Primary / 初级: 166 ± 20% Ω(ref)

7.2 Secondary / 次级: 0.3 ± 20% Ω(ref)

8. NET WEIGHT / 净重: 430 (g)(ref.)

9. INSPECTION ON LINE / 生产线检查:

9.1 The test items for each product / 全检测试项目:

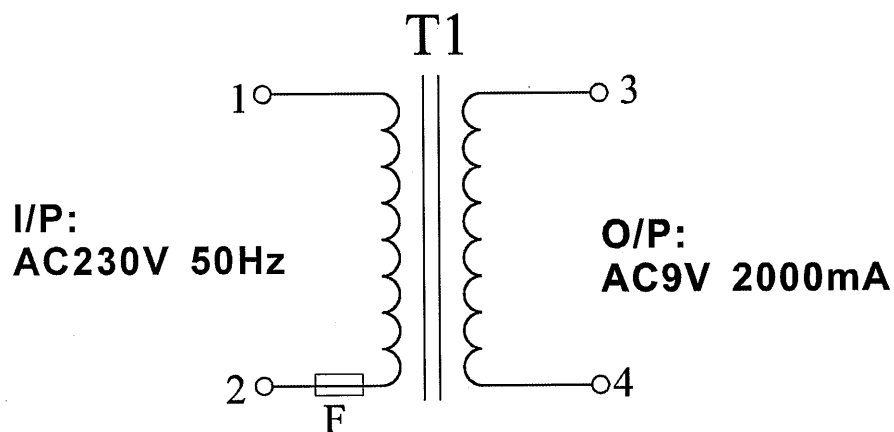
- | | | |
|--|--------------|-----------------|
| ★Primary exciting current | ☆Core loss | ★Output voltage |
| ★Input current and power at rated load | | ★Noise |
| ☆Polarity of output plug | ★Hi-pot test | ★Appearance |
| | | ☆Ripple voltage |

9.2 The test item for part of products / 抽检测试项目:

- | | |
|------------------------------|------------------|
| ★Hum operating at rated load | ☆D.C. Resistance |
| ★Insulation test | ★Life test |
| | ★Drop test |

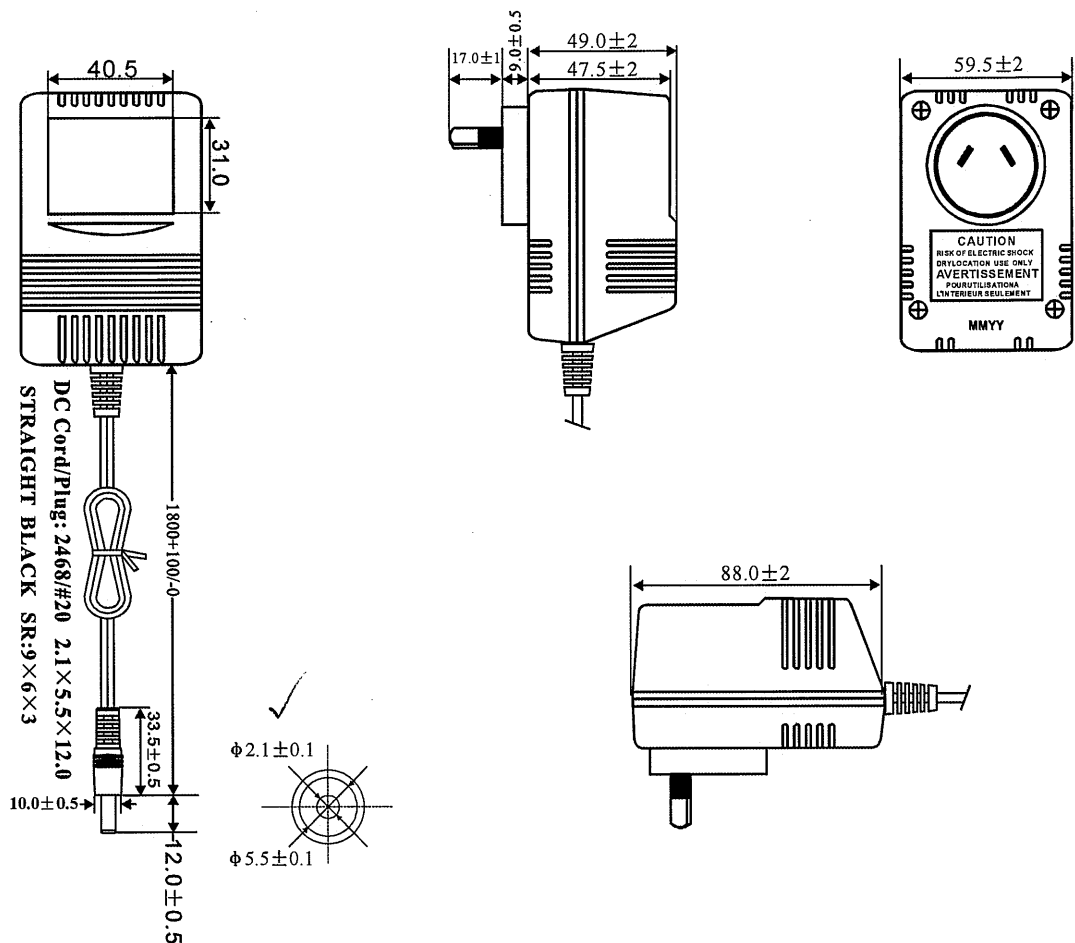
9.3 Other for Customer / 其它:

10. Circuit Diagram / 电路图:

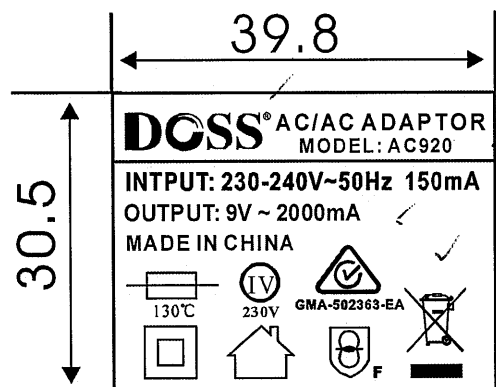


Symbol	Part Name	Specification	Symbol	Part Name	Specification
T1	Transformer	EI-48			
F	Thermal-Link	130℃ 250VAC 2A			

11. Outline And Dimensions / 外形与尺寸:



12. Nameplate(Unit: mm) / 铭牌:

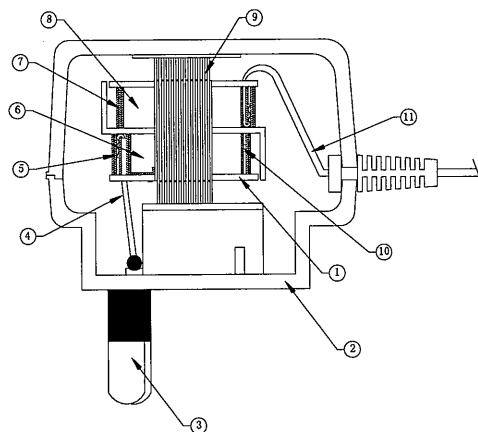


NOTES:

- 1.MATERIAL: PVC
- 2.THICKNESS:0.25
- 3.COLOUR:SILVER BACKGROUND BLACK WORD

备注: 铭牌按客户要求!

13. Internal Construction / 剖面图:



14. Material List / 材料表:

No	Part Name	Type	Manufacturer	UL No.	SGS No.
1	Bobbin	A3k(g)(f2) PA 66 125°C V-2	Basf Aktiengesellschaft (H&H manufacture)	E41871	CANEC0800722701
2	Enclosure	PC V-0 125°C BLACK	Chi Mei Corporation	E56070	KA/2007/10042
3	AC Plug	AC250V 10A,	Yuen fung plastic manufacturing factory co.,ltd	----	---
4	Primary Leads	1672 #22 VW-1 105°C	Zhong Shan Dong Feng Fu Sheng Wire Cable Factory	E236761	CANEC080/430302
			Dong Guang Hu Men Wan Tong Electric Wire Factory	E218585	GZ0603031356
5	Pri. Insulation Tape	JY25-A 130°C	Jingjiang Jingyi Adhesive Product Co Ltd	E246950	SH556835
		24D 130°C	Foshan Inder Adhesive Products Co Ltd Or Equivalent	E212612	CANEC07004267
6	Primary Winding	MW75#	Shangrao Wire Factory Of Jiangxi Xinxin Industrial Co Ltd	E229727	GZ0706083726
		MW79#	Shanghai Zhongma Magnetic Wire Co Or Equivalent	E226756	SH8018215/CHEM
7	Sec. Insulation Tape	JY25-A 130°C	Jingjiang Jingyi Adhesive Product Co Ltd	E246950	SH556835
		24D 130°C	Foshan Inder Adhesive Products Co Ltd Or Equivalent	E212612	CANEC07004267
8	Secondary Winding	MW75#	Shangrao Wire Factory Of Jiangxi Xinxin Industrial Co Ltd	E229727	GZ0706083726
		MW79#	Shanghai Zhongma Magnetic Wire Co Or Equivalent	E226756	SH8018215/CHEM
9	Core	SILICON STEEL H18/0.35A	Shenzheng wei sheng indu strial co., ltd.	---	GZ0711176800
			Zhongshan Nafang Electronic Factory Or Equivalent	---	GZ0707097767
10	Thermal-Link	130°C 250V 2A	Xiamen Set Electronics Co.Ltd	E214712	SZJH114251
			Hong hu blue light electronic co., ltd. Or Equivalent	E239646	GE0801015917
11	Output Cord	2468 #20 80°C 2.1 × 5.5 × 12 BLACK	Zhong Shan Dong Feng Fu Sheng Wire Cable Factory	E236761	CANEC080/430302
			Zhongshan Dongfeng Zhoushishenlong Electronic Wire Co Ltd	E257280	CANEC0802905105

16. Sample Test Report / 样品测试:

测试项目 Test item	规格 SPECIFICATION	1	2	3	4	5	6	7	8	9	10
输入电压 Input voltage	AC <u>230</u> V <u>50</u> Hz	230	230								
激磁电流 Exciting current	AC <u>60</u> mA max	25	26								
初级负载电流 Primary Load Current	AC <u>250</u> mA max	115	116								
输出空载电压 Sec. Voltage(no load)	AC <u>11.0</u> V $\pm 5\%$	11.0	11.1								
输出负载电压 Sec. Load voltage	AC <u>9.0</u> V $\pm 5\%$	9.0	9.1								
输出额定电流 Sec rated current	AC <u>2000</u> mA	200	2000								
纹波电压 Vp-p voltage	---	---	---								
高压测试 Hi-pot Input to output	AC <u>3750</u> V 5 mA 1min	OK	OK								
落地测试 Drop test	<u>0.75</u> m for 3 times	OK	OK								

备注:

REMARK:

SINGLE VOLTAGE EXTERNAL POWER SUPPLY TEST REPORT

Test result

Model No. : AC920

Tested at : 230 VAC, 50Hz

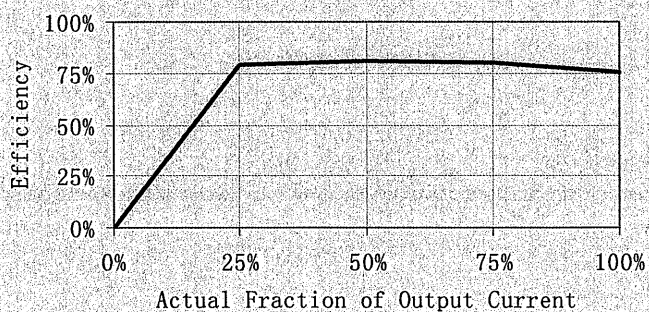
Sample output rating : 9 VAC, 2A

Minimum Efficiency in Active mode (Level IV)

	No Load	Active power values				
Percent of nameplate current	0%	25%	50%	75%	100%	Average
a.c. output current (A)	0	0.5	1.0	1.5	2.0	
a.c. output voltage (V)	11.1	10.7	10.1	9.6	9.1	
a.c. output power (W)	0	5.35	10.1	14.4	18.2	
a.c. input current (mA)	25					
a.c. input voltage (V)	230	230	230	230	230	
a.c. input power (W)	1.3	6.75	12.3	18.0	24.0	
Efficiency	0	79.0%	81.3%	80.0%	75.8%	79.0%

Average active mode efficiency limit: $\geq 76.0\%$

Efficiency of EUT



Input and Output Power vs Output Current

