



木林森MLS

中山市木林森电器有限公司
Zhongshan MLS Electrical Appliance Co., Ltd.

规格书

SPECIFICATION FOR APPROVAL

CUSTOMER/客户: _____

CUSTOMER P.N./客户物料号: 24V1A 英规 白色

MODEL NO./产品型号: M240100-A033BS

DESIGN NO./设计编号: MXXXYYY-A033

Sample NO./样品编号.: 2407197

SAMPLE DATE/送样日期: 2024/7/30

CUSTOMER APPROVAL 客户确认		
CHNFIRM 确认	CHECK 审核	APPROVAL 批准

Please return to us one copy of "SPECIFICATION FOR APPROVAL" with you approved signature./客户确认签字，盖章后请回传一份承认书给我司

MANUFACTURER 制造商		
DESIGN 制定	CHECK 审核	APPROVAL 批准

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528415 Guangdong P.R. China

E. C. LIST/变更履历表

Rev.版本	Description of Change/变更内容描述		Changed Date/日期
	Before/变更前	After/变更后	
A			
B			
C			

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3. Input Characteristics/输入特性

1. SCOPE/概述

The document details the electrical, mechanical and environmental specifications of a SMPS, the power supply provides 24 W continuous output power.

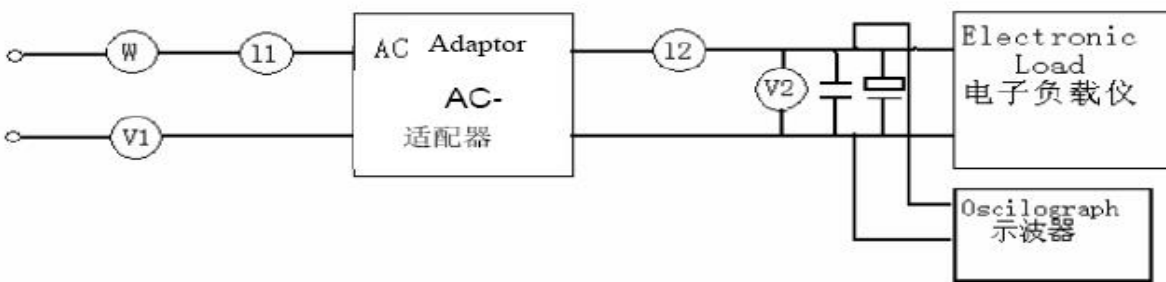
资料详细描述了一款24W(连续输出功率)开关电源的电气性,结构性及环境等要求

The power supply shall meet the RoHS requirements. 此款电源符合RoHS要求.

- Adaptor(Wall mount)/插墙式适配器
- Adaptor(Desk-top)/桌面型适配器
- Open Frame/无外壳开放式结构
- Industrial power supply With Case/带铁壳型
- Others/其他: 车充

1. Electrical Characteristic (电气特性)

1.1 Test Circuit (测试电路)



2. Input Characteristics/输入特性

2.1. Input Voltage & Frequency/输入电压与频率

	Minimum/最小	Rating/额定值	Maximum/最大
Input Voltage/输入电压	200Vac	<u>220 Vac~240 Vac</u>	240Vac
Input Frequency/输入频率	50Hz	60Hz/50Hz	63Hz

2.2. Input AC Current / 输入电流

0.6A max. @ 90Vac input & Full load/在90Vac 输入和满载条件下最大0.6 A

Inrush Current (cold start)/浪涌电流(冷启动 @ 230V AC)

No damage for 230V/50Hz at cold start (25°C). 在冷开机条件下, 最大浪涌电流对机型不损坏.

2.3. Average Efficiency /平均效率

While input 115Vac and 230Vac, the average efficiency is more than 86.2%. The test point is at 25%, 50%, 75% and 100% of max load respectively

在输入115Vac和230Vac条件下, 平均效率不小于86.2%测试点分别是最大载的25%, 50%, 75% 和100%。

2.4. Standby power / 空载功耗

Standby power < 0.1 W @ 230VAC/50Hz. 在输入230Vac, 空载功耗小于0.1 W.

2.5. Peak Inrush Current (峰值输入电流)

With cold starting, the peak inrush current should less than 30A

(电源启动时最大峰值输入电流小于30A)

4. Output Characteristics/输出特性

3. Output Characteristics/输出特性

RATED OUTPUT / 额定输出	Rated Load/额定负载		Remark 备注
	Min.	Max.	
Output Voltage(unload) / 空载输出电压	22.8V	25.2V	
Output Voltage(Full load) / 负载输出电压	22.8V	25.2V	
Output Current / 输出电流规格	0A	1.0A	
Turn - on Delay Time/开机延迟时间		3S	
Hold-up Time/关机维持时间	5mS		
Ripple & Nasic / 纹波与噪声		240 mVp-p	
OCP / 过电流保护		2.0A Max	
power Wp-p / 峰值功率			

Ripple & Noise: Tested by a oscilloscope using 20MHz bandwidth and the output is paralleled a 0.1uF ceramic capacitor and a 47uF electrolysis capacitor

纹波与噪声: 量测时示波器选用20MHz带宽限制,输出端要并联一颗0.1uF的陶瓷电容和一颗47uF的电解电容

4. Protection Requirements/保护要求

4.1. Over Current Protection/过流保护

OCP Point Limited: 140%-200% auto restart 保护点限制: 140%-200%自动保护

The output shall hiccup when the over current applied to the output , and shall be self-recovery when the fault condition is removed

当过电流时,输出将进入打嗝模式,当过流情况解除后,产品将会自动恢复正常

4.2. Continuous Working (连续工作时间)

With the rated voltage charged to the primary and output current 1000mA, after continuously work 24hours have no damage.(在输入额定电压和输出电流 1000mA 的条件下,连续工作24 小时,无任何故障。)

4.3. Short Circuit Protection/短路保护

The input power shall decrease when the output is short to GND, the power supply shall not damage, and shall be self-recovery when the fault condition is removed

当输出对地短路时,产品输入功率降低且不会损伤,当短路情况解除后,产品将会自动恢复正常

5. Environment Requirements/环境要求

5.1. Operating Temperature and Relative Humidity/操作温度和湿度要求

0°C to +40°C 20%RH to 80%RH @ Sea level shall below or no more than 10,000 feet

在海拔小于或等于10,000英尺的条件下,低温工作下限为0°C,高温工作上限为 +40°C,相对湿度为20%RH to 80%RH。

5.2 Storage Temperature and Relative Humidity/存储温度和湿度要求

-30°C to +70°C 10%RH to 90%RH (non-condensing) @ Sea level shall below 30,000 feet

在海拔低于30,000英尺的条件下,低温存储下限为-30°C(无结冰环境);高温存储上限为+70°C,相对湿度为10%RH to 90%RH

5.3. Vibration/振动

10 to 300Hz sweep at a constant acceleration of 1.0G(Breadth: 3.5mm) for 1Hour for each of the perpendicular axes X, Y, Z

扫描频率: 10 to 300Hz, 加速度: 1.0G(位移: 3.5mm), X, Y, Z三垂直坐标轴向各振动1小时

5.4 This product does not have dimming function and can be paired with a suitable controller to achieve the corresponding function.该产品不具备调光功能,可以搭配适合的控制器的实现相应功能。

5.EMC/ Safety Standards/EMI/EMS标准

6. EMC Standards & Safety Standards / EMC标准与安规标准

6.1. EMC Standards/EMC标准

GB9254	GB17625.1	GB13837	FCC- Part15
EN 55032	EN55024	CISPR 22	EN 61000-4-4
EN 61000-3-2	EN 61000-3-3	EN 61000-4-2	EN 61000-4-3
EN 61000-4-5	EN 61000-4-6	EN 61000-4-8	EN 61000-4-11

6.1.2. Safety Standards / 安规标准

Type	Country	Standard	Type	Country	Standard
CCC	China	GB4943	CE	Europe	EN62368-1
UL/CUL	USA	UL62368-1	CB	CB	IEC62368
KC	Korea	KC62368	C-TICK	Australia	AS/NZ62368
			GS/TUV	German	EN62368

6.1.3. Dielectric Strength(Hi-pot)/介电耐压强度(高压)

Primary to Secondary: 3000Vac / 5mA / 60 seconds (3 seconds for production)

初级对次级:3000Vac / 5mA / 60秒(生产时高压测试时间: 3秒)

6.1.4. Leakage Current/漏电流

0.25mA max. at 240Vac / 50Hz input/在输入240Vac/50Hz的条件下最大 0.25 mA

6.1.5 .Insulation Resistance/绝缘阻抗

100MΩ min. @ primary to secondary add a 500Vdc test voltage







在初级与次级间加500Vdc进行测试,最小100MΩ


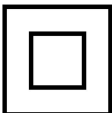


6.1.6 雷击测试(Lightning Surge): 2KV (DM); ±2KV (CM)

7. Testing Equipment / 测试设备

	Testing Equipment / 测试设备	Model/型号	Validity/有效期	Remark/备注
1	AC Source / 交流输入电源	华仪6205-300W	2024.10.05	
2	Power Meter / 电源功率计	UI2011	2024.10.05	
3	Electronic Load / 电子负载	Chroma-63030C	2024.10.05	
4	Oscilloscopes / 示波器	TDS1012B	2024.10.05	
5	Digital Multimeter / 数字万用表	VC9807A	2024.10.05	
6	DC Power / 直流输入电源	PC-303DM	2024.10.05	
7	HI-POT Tester / 耐压测试仪	华仪7410	2024.10.05	
8	Hybrid Recorder / 混合记录仪	YOKOGAWA DR130	2024.10.05	
9	Cons. T/H Simulator / 恒温恒湿仪	TH-A4H 1-150	2024.10.05	
10	Insulation Resistance Tester / 绝缘电阻表	华仪7410	2024.10.05	

7.Label Drawing/标贴图

AC/DC ADAPTER
For LED modules only
MODEL : M240100-A033BS
INPUT : 220-240V~
50/60Hz 0.6A
OUTPUT: 24.0V===1.0A 24.0W
SELV   
 ta=40°C - tc=75°C
UK  
CA
 **MADE IN CHINA CV**
 Zhongshan MLS Electrical Appliance Co., Ltd.
 5F, Building 4, No.1, Mu Lin Sen Road, Xiaolan Town,
 Zhongshan City, Guangdong Province, P.R.C.

	Indoor use only
	Protection class II appliance
 	<p>The appliance shall not be disposed together with thenormal waste. It must be recycled. Do not dispose ofelectrical appliances as unsortedmunicipal waste,use separate collection facilities.</p> <p>Contact your local government for informationregarding the collection systems available.</p> <p>If electrical appliances are disposed ofin landfills ordumps,hazardous substances can leak into thegroundwater and get into the food chain, damagingyour health and well-being.</p> <p>When replacing old appliances with new once, theretailer is legally obligated to take back your oldappliance for disposal at least for free ofcharge</p>

Note:

UNIT/单位: mm

TOLERANCE/公差: +0/-0.2

1. 标贴镭雕

* 铭牌资料供客户样品认可使用,如有疑问,请于样品认可前提出,否则,资料将视作客户认可并应用于生产上.

* PLEASE ADVISE IF ANY COMMENT ON NAME PLATE INFORMATION.OTHERWI THIS INFORMATION IS REGARDED AS CUSTOMER APPROVAL AND APPLY IN PRODUCTION.

8.Package Drawing/包装示意图

