广州大井科技有限公司
Guangzhou Dajing Science and Technology Co., Ltd.

客户承认书
SPECIFICATION FOR APPROVAL

客户CUSTOMER:		型号MODEL NO:	ADP-30B4
客户订单号 CUSTOMER P/N:		产品版本号 PRODUCT NO:	24158
客户规格型号 CUSTOMER MAINFRAME MODEL:		修订版本号 REV. NO:	A0
		编制日期 DATE:	June.23.2019

品名规格 DESCRIPTION: 输入电压/Input: 100-240Vac; 输出电压/ Output: 24V1.25A

CUSTOMER AUTHORIZED SIGNATURE/客户承认签核		
拟制/PREPARED BY	审核/CHECKED BY	批准/APPROVED BY

确认签署后,请回传一份,有任何问题,请尽快告知我们。Please return us one copy of the approved sheet after Signed. Please tell us if you find out some problems in this specification as quickly as possible.

广州大井科技有限公司/Guangzhou Dajing Science and Technology Co., Ltd.

地址：中国广东省广州市番禺区天安节能科技园/Factory Address: Tianan energy technology park，Panyu District, Guangzhou City,Guangdong province,China

衡阳市迪曼电子产品有限公司/Hengyang Dimension Electronic Co., Ltd

厂址：中国湖南省衡阳市衡南县三塘镇三塘工业园/Factory Address: Santang Industrial Park, Santang Town, Hengnan County, Hengyang City, Hunan Province, China

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变更履历表/E. C. LIST

版本/Rev.	变更内容描述/Description of Change		日期/Changed Date	备注 Remark
	变更前/Before	变更后/After		
A0	初次发行/Original Release	-		

目录/Table of Contents

1. Scope/概述

该文件详细阐述了该开关电源的电子、机械和环境的规范。/This document details the electrical, mechanical and environmental specifications of a switching power supply.

1.1 **Description/类型**

☐ 插墙式/ Wall Mount　　☑ 桌面式/Desk-Top

☐ 裸板/Open Frame　　☐ 其它/Others

2. 输入特性/INPUT REQUIREMENTS

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

输入电压范围：从 90Vac 到 264Vac, 单相输入。The range of input voltage is from 90Vac to 264Vac single phase.

项目/Item	最小电压/Min.	正常电压/Normal	最大电压/Max.
输入电压/Input Voltage	90Vac	100Vac-240 Vac	264Vac
输入频率/Input Frequency	47Hz	60Hz /50Hz	63Hz

2.2 **AC 输入电流/Input AC Current**

在 90Vac-264Vac 输入和最大负载条件下最大 0.8A。0.8A max. @ 90Vac-264Vac input & max. load.

2.3 **输入空载功率损耗/No-Load Input Power Dissipation**

在输入 115Vac-230Vac 条件下, 输入空载功耗小于 0.3W。While input 115Vac-230Vac and the output is no load,the input power loss must be less than 0.3W。

2.4 **浪涌电流(冷启动) /Inrush Current (cold start)**

在 264Vac 输入和最大负载条件下最大 50A。50A max. @ 264Vac input & max. load.

2.5. 平均效率/Average Efficiency

在输入 115Vac/230Vac 时,输出负载的 100%/75%/50%/25%四点平均效率不小于 83.49%，(根据能效标准，先老化半小时)。83.49% min@ 115Vac/230Vac input & max. load(100%,75%,50%,25%). (according to energy standard,first burn-in 0.5 hours)。

3. 输出特性/OUTPUT FEATURES

3.1 **输出参数/Output Parameters**

3.1.1	输出数据/Output Data	规格说明/Spec. Limit			测试环境 Test Condition
		最小值/Min. Value	**正常值 Normal**	**最大值/Max. Value**	
3.1.2	输出电压/Output Voltage	22.8Vdc	24VDC	25.52Vdc	0A~1.25A Loading
3.1.3	纹波和噪音/Ripple and Noise	—	—	240mVp-p	20MHz Bandwidth 10uF Ele. Cap.0.1uF Cer. Cap.
3.1.4	输出过冲/欠冲/Output Overshoot / Undershoot/	—	—	10%Vdc	CC1.25A(230Vac input)
3.1.5	过流保护 /Over Current Protection	1.5A	—	—	110Vac input
3.1.6	过流保护 /Over Current Protection	1.5A	—	—	220Vac input
3.1.7	过压保护/Over Voltage Protection	—	—	<36V	100~240Vac input

3.2 **开机延迟时间 /Turn - on Delay Time**

在 230Vac 输入和最大负载条件下最大 2S。2S max. @230Vac input &max. load.

3.3 **关机保持时间/Hold-up Time**

在 230Vac/50Hz 输入、最大负载同时在最差情况下关机，最小 10mS。10mS min. @ max. load &230Vac/50Hz input turn off at worst case.

3.4 **上升时间/Rise Time**

输出电压从 10%上升至 90%、额定负载条件下最大 20mS。20mS max. @ rated. load,output voltage from 10% to 90%.

3.5. **线性/负载调整率/ Line/Load Regulation**

输出 /Output	负载条件/Load Condition		负载调整率 /Load Regulation	线性调整率 /Line Regulation	备注/Remark
额定/Rate	最小负载 min.load	最大负载 max.load			
+24V	0.0A	1.25A	±5%	±1%	

3.6. **输出负载瞬态响应/ Output Load Transient Response**

输出电压在 22.8V -25.2V 之间,负载变化: 从 25% 到 100% 到 25%, 斜率: 0.1A/uS, 动态响应恢复时间：200uS. output voltage within 22.8V -25.2V for load step from 25% to 100% to 25%, R/S: 0.1A/uS,Transient Response Recovery Time :200uS.

4 机械特性/ MECHANICAL CHARACTERISTICS

4.1 **物理尺寸/ Physical Dimensions**

电源尺寸详见附录A。/ The detail dimension of the power supply is drawed on APPENDIX A.

4.2 **铭牌/ Nameplate**

电源标签，请参阅附录B。/ The label of the power supply, please see APPENDIX B.

4.3 **落地测试/ Drop Test**

适配器应承受六次定向下降从1000毫米到混凝土（每一面都落下）。/ adaptor shall withstand six times oriented drops from 1000mm onto concrete(fall on each of the 6faces).

5 安全标准/ SAFETY

5.1 **安规标准/Regulatory Standards**

电源应符合以下国际标准/ The power supply shall be certified under the following international regulatory standards

商标/Trademark	国家/Country	认证/Certified Status	标准/Standard
CCC	中国/CHINA	☑	GB4943
UL/CUL	美国/加拿大 USA/Canada	☐	UL 60950
TUV	欧洲/Europe	☐	TUV/VDE-EN60950
CE	欧洲/Europe	☑	Declared & CE Mark
FCC	美国/USA	☑	PART 15 CLASS B
BIS	印度/INDIA	☐	IEC 60950
CB	会员国/member States	☐	IEC 60950
Others		☐	

5.2 **绝缘阻抗/ Insulation Resistance**

在初级与次级间加 500Vdc 进行测试，最小 100MΩ。100MΩ min. between primary to secondary add 500Vdc test voltage.

5.3 **介电耐压强度(高压)。Dielectric Strength(Hi-pot)**

初级对次级: 1500Vac / 5mA max. / 60 秒(生产时高压测试时间: 3 秒)。Primary to Secondary: 1500Vac / 5mA max. / 60seconds(3seconds for production).

5.4 **漏电流 /Leakage Current**

在 240Vac / 50Hz 输入时最大 0.25mA。0.25mA max. at 240Vac / 50Hz.

5.5 电磁干扰/Electromagnetic Interference

参数项目 Items	条件 Condition	最小Min	标准 Std	最大 Max	单位 Unit	备注 Note
浪涌冲击抗扰度/Input Line Surge Immunity	Line to Line		1		kV	EN61000-4-5/ GB/T 17626.5-2008
	Line to Earth		2		kV	
快速瞬变脉冲群抗扰度 /Electrical Fast Transient	Line to Line		1		kV	EN61000-4-4/ GB/T17626.4-2008
放电静电抗扰度 /Electrostatic Discharge	Contact		±4		kV	EN61000-4-2/ GB/T 17626.2-2006
	Non-Contact		±8		kV	

6 保护要求/Protection Requirements

6.1 过压保护/Over-Voltage Protection

在失效条件下,产品输出不超过此电压。AT Rated Input Voltage; The Power Shall Not output over this voltage, By Short or open any component. Fault condition tests.

6.2 过流保护/Over Current Protection

当过电流时，输出将进入打嗝模式，当过电流情况解除后，产品将会自动恢复正常。The output shall hiccup when the over current applied to the output rail,and shall be self-recovery when the fault condition is removed.

6.3 短路保护/Short Circuit Protection

当输出短路时,产品输入功率小于 10W,且在 0-10W 间歇式变化。当短路情况解除后,产品将会自动恢复正常。The input power shall be less than 10W and intermittent changes between 0-10W when the output short, the power supply shall no damage, and shall be self-recovery when the fault condition is removed.

7 环境要求/Environment Requirements

7.1 工作温度和湿度要求/Operating Temperature and Relative Humidity：-10℃ to +40℃ 10%RH to 90%RH.

7.1.1 储存温度和湿度要求,正常工作/Storage Temperature and Relative Humidity/(Can operate normally)
-20℃ to +70℃,5%RH to 95%RH non-condensing

7.1.2 海拔高度/Height Above Sea Level

电源在海拔-65~5000 米能正常工作。/The power supply can normal operate at-65~ 5000 meter.

7.2 振动/Vibration

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。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. 。

7.2.1 跌落/Drop in

1 角、3 棱、6 面，各跌落 1 次，高度为：1 米，跌落到硬木板上。One angle，Three arrises，Six surfaces，Each ones，Heigh：1m，On the hard wood.

7.2.2 振动与冲击/Vibration and Shock

电源应设计成能够承受每MIL–STD-810D、方法514和程序X的正常运输振动，作为模拟电源打包装箱后在（汽车，飞机，船）底盘运输的振动环境。 The power supply shall be designed to withstand normal transportation vibration per MIL–STD-810D, method 514 and procedures X, as it is mounted in the chassis assembly and packed for shipping.

8 可靠性要求/Reliability Requirements

8.1 老化测试/ Burn-In

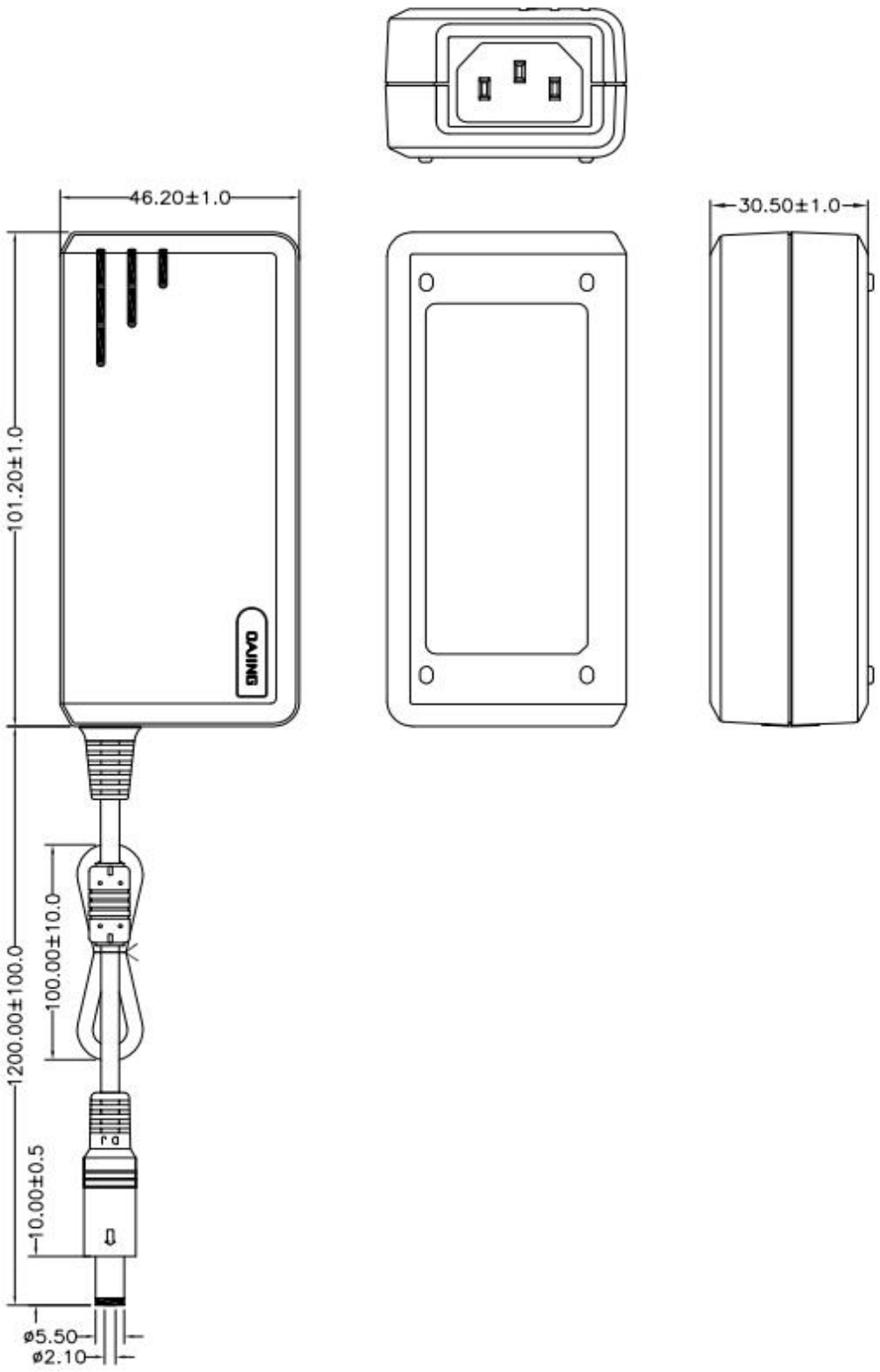
电源在25℃～40℃室温满载下应经受至少**2小时**的老化试验，试验后产品应正常工作。The power supply shall withstand a minimum of **2 hours** Burn-In test under full load at 25℃ ~40℃ room temperatures, after test, product shall operate normally.

8.2 元器件降级测试/ Component Derating

半导体结温度不应超过制造商的最大热额定值。
Semiconductor junction temperatures shall not exceed the manufacturer's maximum thermal rating.

附录A / APPENDIX A

单位：毫米/ Unit: mm

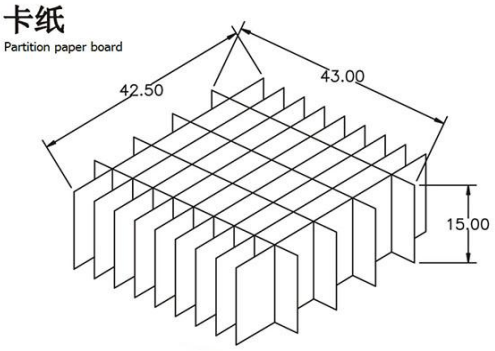


附录B / APPENDIX B

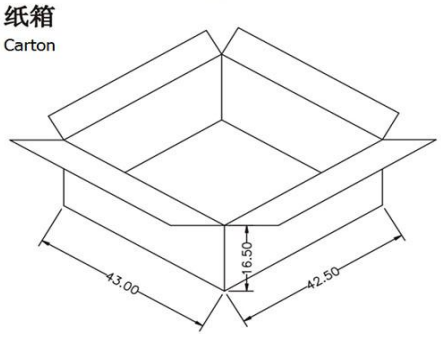
铭牌/ Name Plate:　　单位：毫米/ (Unit: mm)

附录C / APPENDIX C

卡纸
Partition paper board



纸箱
Carton



尺寸（单位:CM) / Size (Unit: CM)

	L/长	W/宽	H/高	Item No./ 品号
纸箱 carton	43	42.5	16.5	AY150010047
卡纸 paperboard	43	42.5	15	AY150010048
PP袋 PP bag	13	19		AY150010071

包装方式/PACKING METHOD：

包装方式 PACKING METHOD	50个每层*1层 50PCS/LAYER X 1LAYERS
数量/ QTY	50个/ 50PCS
净重/每个 / N.W./PC	克/g
毛重/每箱 / G.W./CARTON	千克/kg