

规格承认书

SPECIFICATION FOR APPROVAL

CUSTOMER 客户: _____
CUSTOMER P.N. 客户料号: _____
MODEL NO. 产品型号: SW-AD24WBS
DESIGN NO. 设计编号: _____
DATE 日期: 2019-06-05

CUSTOMER AUTHORIZED SIGNATURE / 客户承认签章		

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.

制作: Prepared By :	审核: Checked By :王在建	批准: Approved By
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修改记录 (Specification Change History)

项目 Item.	修改日期 Revision Date	修改内容 Revision Content	生效日期 Effective Date	确认 Arbiter	修改人 Revisor
1					
2					
3					
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索引 (Index)

1. 描述 (Description)	4
2. 电气规格 (Electrical Specification)	4
3. 保护功能 (Protection)	5
4. 可靠性 (Reliability)	5
5. 环境特性 (Environment)	6
6. 安全及 EMI 要求 (Safety and EMI Requirement)	7
7. 测试设备清单 (Test Equipment List)	8
8. 结构参数 (Mechanical Requirement)	8
9. 机械规格 (Mechanical Specifications)	9
10. 重量 (Weight)	10
11. 铭牌图 (Label Drawing)	10
12. 包装图 (Package Drawing)	11
13. 样品测试报告 (Samples test report)	12

1. 描述 (Description)

本规格书适应于 **SW-AD24WBS** 型号的开关电源.

This specification apply to the switching power whose model no. is **SW-AD24WBS**

2. 电气规格 (Electrical Specification)

1. 2.1 输入 (INPUT)

输入电压范围 (Input voltage range)	100Vac - 240Vac
额定输入电压范围 (Rated voltage range)	100Vac - 240Vac
适用频率范围 (Input frequency range)	47Hz-63Hz
额定频率 (Rated input frequency)	50Hz/60Hz
输入电流 (Input current)	0.8A max. at full load
浪涌电流【Inrush current(cold start)】	50A typ peak, 220Vac Input

2.2 输出 (OUTPUT1)

2.2.1 额定输出 (Rated Output1):

输出电压 Output Voltage1 (Vdc)	输出电压范围 Output Volt Limit (Vdc)	纹波&噪声 Ripple & Noise (mV)	额定输出电流 Output Current (A)
3V	2.85-3.15	50	1.5
4.5V	4.25-4.75	50	1.5
5V	4.75-5.25	60	1.5
6V	5.7-6.3	80	1.5
7V	6.65-7.35	90	1.5
9V	8.55-9.45	90	1.5
12V	11.4-12.4	100	1.5

注 (Notes): 在测试纹波时示波器带宽调至 20MHz, 示波器的测试端并联一粒 10uF 的电解电容和一粒 0.1uF 的瓷片电容。(Ripple Voltage is measured with oscilloscope with bandwidth 20MHz . A 10uF E-cap and 0.1uF ceramic-cap shall be connected to the connector in parallel.)

2.2.2 输出超调 (DC Output Overshoot At Turn On & Turn Off)

输出电压 Output Voltage (V)	输出超调电压比例 Proportion of the output voltage overshoot	
	开通 Turn on	关断 Turn off
3V	5%	5%
4.5V	5%	5%
5V	5%	5%
6V	5%	5%
7V	5%	5%
9V	5%	5%
12V	5%	5%

注 (Note): 在全部电流范围内进行测试 (All of dc output current from Min. to Max..)

2.2.3 负载特性,调整率 (Combined Load/Line Regulation)

电压 Voltage	最小负载 Min. Load	额定负载 Rated. Load	线性调整 Line Regulation	负载调整 Load Regulation
3Vdc	0A	1.5	±5%	±5%
4.5Vdc	0A	1.5	±5%	±5%
5VDC	0A	1.5	±5%	±5%
6VDC	0A	1.5	±5%	±5%
7VDC	0A	1.5	±5%	±5%
9VDC	0A	1.5	±5%	±5%
12VDC	0A	1.5	±5%	±5%

2.2.5 启动延迟时间 (Turn on delay time) :

当输入 115Vac 和输出最大负载时,最大启动时间为 2S.

2Second Max. at 115Vac input and output Max. load.

2.2.6 上升时间 (Rise time) :

当输入 115Vac 和输出最大负载时最大时间为 40mS.

40mS Max. at 115Vac input and output Max load.

2.2.7 保持时间 (Hold up time) :

当输入 115Vac 和输出最大负载时,最小保持时间为 5mS.

5mS Min. at 115Vac input and output Max. Load.

2.2.8 效率 (Efficiency) :

当 230Vac 输入时, 输出在 25%, 50%, 75%及满载情况下, 平均效率需达到 80.4% (开机 30 分钟后测试) .

Average efficiency reach 80.4% minimum at 25%,50%,75%&100% of full-loading and 230Vac input (After warm up 30 minutes).

空载输入功率 $\leq 0.3W$.

No-load input power $\leq 0.3W$

3. 保护功能 (Protection)

3.1 短路电路保护 (Short circuit protection) :

该电源供给器在短路解除时能正常工作恢复.

The power supply will be auto recovered after short circuit faults remove.

3.2 过流保护 (Over current Protection) :

过流故障排除后, 电源将自动恢复正常工作.

The power supply will be auto recovered after over current faults remove.

4. 可靠性要求 (Reliability Requirements)

4.1. 老化 (Burn-in)

产品至少要在 40°C \pm 5°C 的环境及 80%额定负载条件下煲机 2-4 小时

The power supply shall be burn-in for 2-4 Hours under normal input and 80% rated load at 40°C \pm 5°C

4.2. 平均间隔故障时间估算 (MTBF Qualification)

平均间隔故障时间: 至少 50,000 小时, 25°C 环境及额定输入与满载条件下

The MTBF shall be at least 50,000hours at 25°C, Full load and nominal input condition

5. 环境要求 (Environment Requirement)

5.1 工作温度 (Operating Temperature) :

0°C-40°C, 满载, 正常工作

0°C to 40°C, Full load, Normal operation.

5.2 储藏温度 (Storage Temperature) :

-40°C to 85°C 【带外壳 (With package)】

5.3 工作湿度 (Relative Humidity) :

5% (0°C) ~95% (40°C) , 72 小时, 满载, 正常工作.

5% (0°C) ~95% (40°C)

5.4 振动 (Vibration) :

5.4.1. 测试标准:国际电工电子委员会

Operating: IEC 721-3-3 3M3

5~9Hz, A=1.5mm

9~200Hz, 加速度 Acceleration 5m / S2

5.4.2. 运输 (Transportation) :

IEC 721-3-2 2M2

5-9Hz, A=3.5mm

9~200Hz, 加速度 Acceleration=5m / S2

200~500Hz, 加速度 Acceleration=15m / S2

5.4.3. 轴向振动 (Axes, 10 cycles per axis):

在测试过程中不能出现永久性的损坏.

No permanent damage may occur during testing.

在电源开启和关闭后, 样机能够恢复到最初条件.

The product can restore to its original situation after power off / on.

5.5 跌落试验 (Dropping Packed) :

一个角, 三个棱, 六个面.

1 corner, 3 edges, and 6 surfaces

高度 76cm

Height:76cm.

6. 安全及 EMI 要求 (Safety and EMI Requirement) :

6.1 安全:符合标准 (Safety: accord with):

certificate	国家/Country	standards	
<input type="checkbox"/> UL/CUL	美国/USA	UL60065	
<input type="checkbox"/> UL/CUL	美国/USA	UL60950	
<input type="checkbox"/> TUV/GS	欧洲/Europe	EN60065	
<input type="checkbox"/> TUV/GS	欧洲/Europe	EN60950	
<input type="checkbox"/> FCC	美国/USA	Class B	
<input type="checkbox"/> CE	欧洲/Europe	EN60065	
<input checked="" type="checkbox"/> CE	欧洲/Europe	EN60950	
<input type="checkbox"/> MEPS	澳洲/Australia	AS/NZS 4665	
<input type="checkbox"/> SAA	澳洲/Australia	AS/NZS 60950	
<input type="checkbox"/> SAA	澳洲/Australia	AS/NZS 60065	
<input type="checkbox"/> CCC	中国/China	GB8898	
<input type="checkbox"/> CCC	中国/China	GB4943	
<input type="checkbox"/> PSE	日本/Japan	J60950 (H22)	
<input type="checkbox"/> CB	欧洲/Europe	IEC60065	
<input type="checkbox"/> CB	欧洲/Europe	IEC60950	
<input type="checkbox"/> C-TICK	澳洲/Australia	AS/NZS CISPR13:2004	
<input type="checkbox"/> EK/KC	韩国/Korea	K60065	
<input type="checkbox"/> EK/KC	韩国/Korea	K60950	

6.2 EMI 标准 (EMI STANDARD):

Meets the Limits /测试符合

<1>.Fcc class B rules <2>.EN55032 class B rules

6.3 绝缘强度 (Dielectric Strength Testing):

绝缘强度满足下表的要求, 100% 在线产品执行此项测试, 并每一项目至少保持 5 S 时间, 无任何故障。
 Hi-pot test shall be met the table 5 requirements, an item listing this test as a 100% production test must be performed and be maintained at that level for a minimum of 5 seconds without failure.

项目 (ITEM)	测试规格 (SPECIFICATION)	结果 (REMARK)
输入—输出 Primary to Secondary	3000Vac/5mA/5s	无飞狐 No arcing
输入—地 Primary to P.G		无击穿 No broken
输出--地 Secondary to P.G		

7. 测试设备清单 (Test Equipment List)

项目	设备名称	制造	型号
1	变频电源 (AC power source)	Chroma	6120
2	示波器 (Oscilloscope)	Tektronix	TDS1002B
3	电子负载仪 (Electronic load)	TET	T3515
4	万用表 (Multimeter)	FLUCK	87III
5	功率计 (Dynamometer)	Chroma	2100
6	温度表 (Thermograph)	LUTRON	TW-902C
7	插头引线弯折试验机 (Plug lead bend test machine)	联欣	LX-817
8	盐雾试验机 (Salt spraying tester)	联欣	LX-8827B
9	震动台 (Vibration table)	精技实验	FZD-25
10	跌落测试台 (Drop test bed)	自制	
11	数显卡尺 (Digimatic caliper)	上海量具	0-150mm

8. 结构参数 (MECHANICAL REQUIREMENT) :

8.1 外壳 (Enclosure) :

外壳尺寸: L90W 50x H70mm;

The power supply size: L90W 50x H70mm

8.2 输入线 (Input Connector) :

3Pin 插脚

Three pin input plug.

8.3 产品外观图片 (Photograph of the product & packing method):

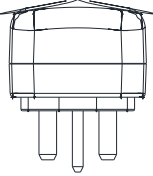
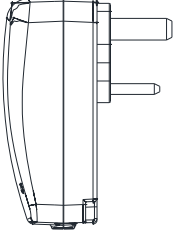

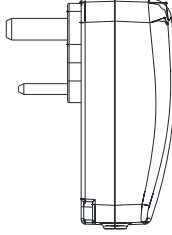
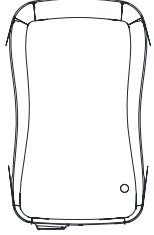
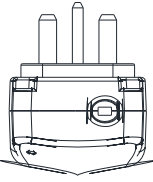
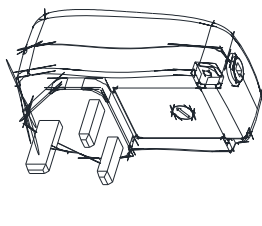
UK plug and Body should be packaged in plastic bubble bag

Bubble bag color: Clear color(transparent color).

9. 机械规格 (MECHANICAL SPECIFICATIONS)

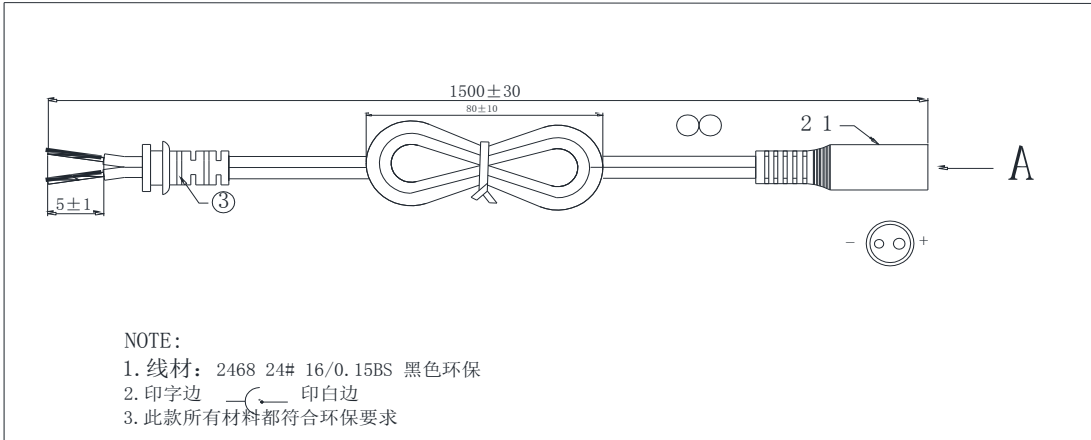
Dimension:90*50*70mm

UK PLUG TYPE:


		1	2	3	4	5	6	7	8	9	10	11	12																																	
		REVISION																																												
A	ISSUE	ZONE	DESCRIPTION	DATE	REVISER													A																												
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9.3 DC 线尺寸图 (DC Output Cord Drawing):

(见图). MODEL: 2468/1.5M/22AWG



NOTE:

1. 线材: 2468 24# 16/0.15BS 黑色环保
2. 印字边  印白边
3. 此款所有材料都符合环保要求

③	线材	2468 22#/2C 黑色环保	185MM	
②	插头	50P黑色PVC胶料		
①	端子	5.5*2.1母座	1PCS	
序号	物料料号	名称	规格	型号
			用量	备注

变 更 记 录					单位: mm		核准	图号		
					0.0				审核	客户P/N
			杨柳彬		0.00				绘制	客户
		NO.	变更内容	责任人	变更日期	版本: A			日期	客户确 认栏

9.3 6个端子尺寸图 (Six tips Drawing):

DC jack size: 2.5mm male*10mm, 3.5mm male*10mm, 5.5 x 2.1mm*10mm,
 5.5 x 2.5mm*10mm, 3.5 x 1.35mm*10mm, 4.0 x 1.7mm*10mm



9.3 产品图片 (product Pictures):



9.3 极性 (Polarity)

9.3.1. 极性 (Polarity):



10. 重量 (Weight)

电源的重量大约为 150 g. The weight of the power supply shall be about 150 g.

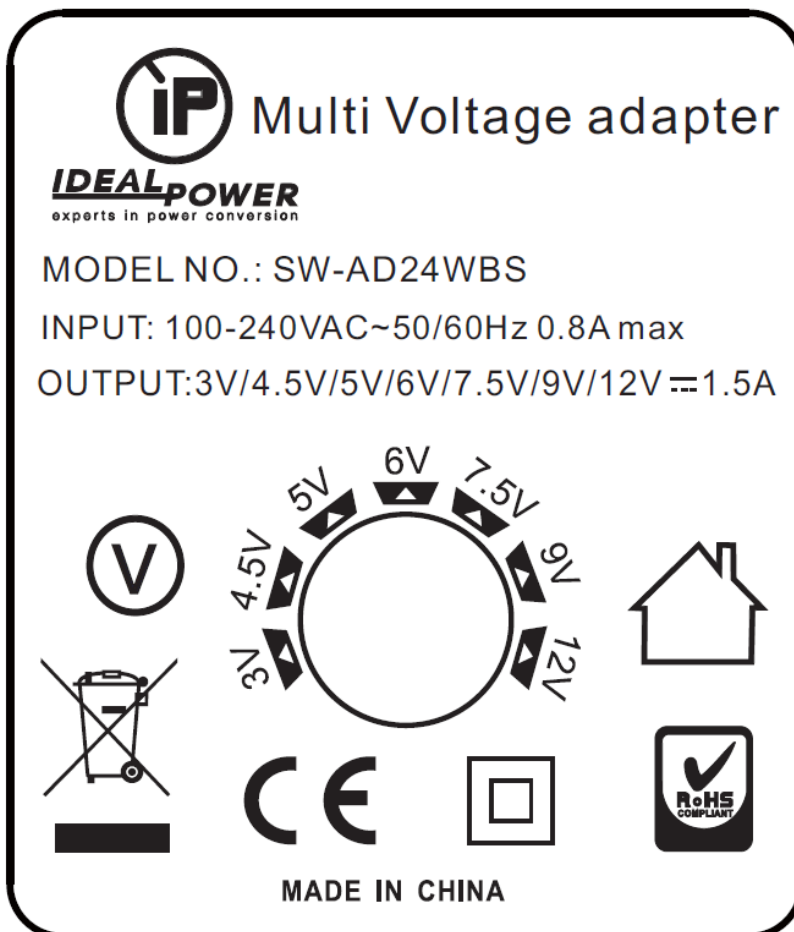
10. 客户需求/Client Request:

NONE.

11. 铭牌图 (Label Drawing)

直接丝印, 尺寸? Mm X ? mm

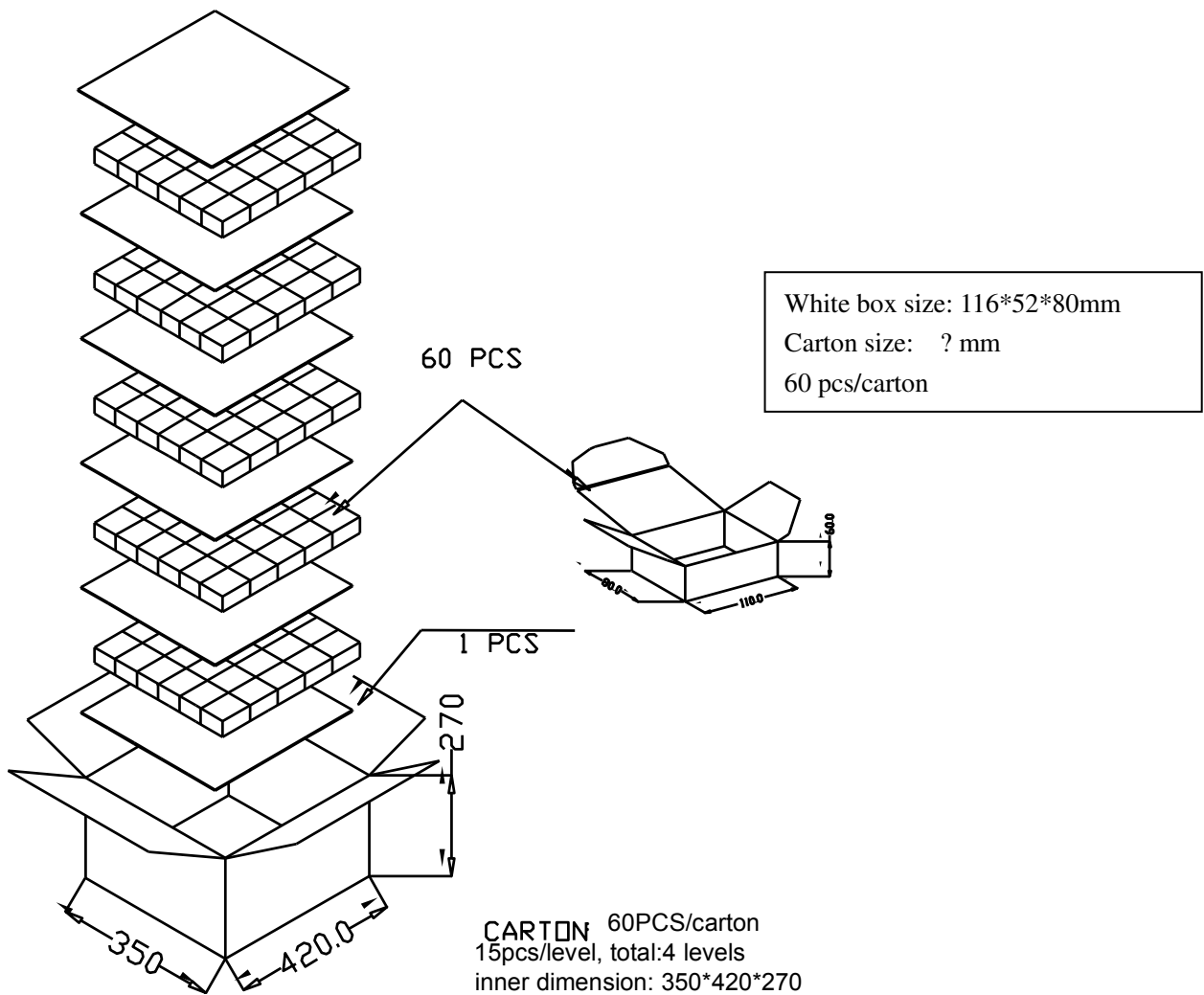
Print to the enclosure directly.



12. 小白盒 (White box)

尺寸(Dimension):116*52*80mm

2.1 包装图 (Package Drawing)



包装说明 (PACKING):

若客户未提出包装方式时, 均使用本公司之包装方式。

Our own packing style will be adopted if no special packing required .

a 内包装/inner package

小白盒/white box

b 外包装/ Outer package

纸箱/ paper-box.

尺寸: ? mm ,

c 外包装箱标识/ Outer package notes include the information

客户、订单号、品名、数量、日期等信息

Customer Name, LOT Number, Model No., Date, and so on.



23SW-AD24WBS USER MANUAL

Specifications:

- Input voltage : 100~240VAC 50/60Hz
- Output voltage: 3V/4.5V/5V/6V/7.5V/9V/12VDC
- Output current: Rated at 1.5Amp
- AC plug: UK
- DC cable: 1.5 meters
- Material: ABS + PC + Fireproofing material
- Protection: Over Load protection, Over Current protection
Temperature protection, Short Circuit protection.
- Product Size: 84.4x50.6x61.8mm
- DC connector (6 types):

1) 2.5x10mm Jack	2) 3.5x10mm Jack
3) 2.1x5.5x10mm	4) 2.5x5.5x10mm
5) 1.35x3.5x10mm	6) 0.7x4.0x10mm



Voltage adjust:

- Switch key Left/Right to set output voltage required



Connector & Polarity:

- Choose the right connector for your equipment and be careful to connect the product with the right polarity connection for your equipment to avoid damaging your equipment.



NOTE:

PSU is under 18W/1.5A max rated, for indoor use only.
Maximum operating ambient temperature is 40 °C.

- Please ensure the correct polarity is observed before connecting to any user equipment

Accessories

Adapters x 1 , Switch key x 1 ,
DC tips x 6 , User manual x 1

