

# 納入仕様書

## Specification For Delivery

■ 新規

NEW MODEL

□ 新更様式

REVISION

客户

CUSTOMER

部品番號

PART NUMBER

輸出規格

SPEC. OVERVIEW

12.0VDC 8000mA/ DESK TYPE POWER

### 客户承認回聯 Customer Approval



擔當者	審核	承認	公司承認章



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營業擔當

SALES



產品型號

MODEL:

PS120D08000

技術擔當

ENGINEER



責任者

RESPONSIBILITY



## Table of Content 目录

1 SPECIFICATION CHANGE RECORD 变更记录.....	3
2 DESCRIPTION 概述 .....	4
3 ELECTRICAL CHARACTERISTICS 电气性能.....	4-7
4 ENVIRONMENTAL REQUIREMENTS 环境要求.....	7
5 Reliability 可靠性.....	7-8
6 SAFETY STANDARD 安全标准.....	8
7 MECHANICAL CHARACTERISTICS 机械性能.....	9
8 MAIN TESTING EQUIPMENT 主要测试设备.....	9
9 Lable Drawing 铭牌图.....	10
10 Overall Drawing 外观图.....	11
11 DC/AC Cable Drawing 线材图.....	12-13
12 Packing Drawing 包装图.....	14

## 1 Record of Revision/变更记录

Revision 版本	Change record 变更记录	Arbiter 确认者	Changed date 变更日期
A/0	Primary Release.	Angie	2020.06.12

## 2 Description 概述

### 2.1 Power Supply Description 产品概述

PS120D08000 is an AC / DC power supply, 100Vac-240Vac wide voltage input, 12V/8.0A output, total rated output power 96W , the power supply has short circuit protection, over current protection and overvoltage protection.

PS120D08000是一款AC/DC电源, 100Vac - 240Vac宽电压输入, 12V/8.0A输出, 额定输出总功率96W, 该电源有短路保护、过流保护和过压保护.

### 2.2 Power Supply Change Notification 变更事前通知

The vendor shall notify customer of significant design changes, prior to implementation. However, process improvements can be an exception.

有重大设计变动时,在变更实施之前,供应商将通知到客户,工艺改善可以例外.

### 2.3 Power Supply Frame 电源结构型式

- Wall mount 插墙式  Desk-top 桌上式
- Open frame 开放式结构/裸板  Other 其它

## 3 ELECTRICAL CHARACTERISTICS 电气性能

### 3.1 AC Input Voltage and Frequency 输入电压及频率

2.1.1 Rated Input Voltage 额定输入电压 : AC [100/240V](#)

2.1.2 Reliable Input Voltage 可输入电压范围 : AC [90-264V](#)

2.1.3 Rated Input Frequency 额定输入频率: [50/60Hz](#)

2.1.4 Reliable Input Frequency 可输入频率范围 : [47-63Hz](#)

### 3.2 Maximum AC Current 最大输入电流

Input rated voltage, Output rated load. Input AC Current [3.0Amps](#) Maximum.

输入额定电压,输出额定负载条件下,最大输入电流为:[3.0Amps](#).

### 3.3 Input Inrush Current 最大浪涌(突入)电流

Input [220Vac](#) 50Hz, Output rated load (cold start) inrush Current [50Amps](#) peak.

输入[220Vac](#) 50Hz,输出额定负载(冷启动)条件下,最大浪涌(突入)电流为:[50Amps](#).

### 3.4 No-load Loss Power 空载功耗

Input [115/230Vac](#), Output no load. Maximum loss power [0.21](#) Watts.

输入[115/230Vac](#),输出空载,最大空载功耗为: [0.21](#) 瓦.

### 3.5 Output Voltage 输出电压

Output 电压	Output Current 输出电流		Output Voltage Range 输出电压范围	
	Min	Max	Min	Max
<a href="#">12.0V</a>	<a href="#">0A</a>	<a href="#">8.0A</a>	<a href="#">11.40V</a>	<a href="#">12.60V</a>

### 3.6 Output Ripple Voltage 输出纹波电压

3.6.1 Output ripple test condition: input rated voltage and output rated load @ 25degrees C.

在额定输入及输出的条件下 (25°C) 测试输出纹波电压.

3.6.2 Peak to peak ripple is measured with an oscilloscope with a bandwidth of 20MHz.

纹波量测试时示波器选用20MHz带宽限制.

3.6.3 Measurement of ripple should include a 0.1uF ceramic capacitor and a 47uF electrolytic capacitor at the input of the measuring oscilloscope.

测试时在输出端要并联一颗0.1uF的陶瓷电容和一颗47uF的电解电容.

Input	Full Load	Ripple&Noise
100Vac-240Vac	8.0A	300mV

### 3.7 Time Sequence 时序特性

3.7.1 The power delay time measured is when AC power on to 90% of specified output voltage observed on the channel.

开机延迟时间为AC 输入上电到输出电压上升到90%间的时间。

3.7.2 The hold-up time measured is when AC power off to 90% of specified output voltage observed on the channel.

输出保持时间为从输入AC 掉电到输出电压下掉到输出电压的90%间的时间。

3.7.3 The rise time measured is when the output voltage rise from 10% to 90% of specified output Vout observed on the channel wave form.

输出上升时间为输出电压从10%上升到90%间的时间。

NO	ITEM	Specifications	Remarks
3.7.1	Output delay time	$\leq 3S$	VIN=110Vac, rated load
3.7.2	Hold up time	$\geq 8mS$	VIN=115Vac, rated load
3.7.3	Output rise time	$\leq 20mS$	VIN=110Vac, rated load

**3.8 Output Overshoot 输出过冲**

3.8.1 [5%](#) Rated Voltage Max. when the power turn on.

当电源开机时,过冲电压值最大为额定电压值的[5%](#).

3.8.2 [5%](#) Rated Voltage Max. when the power turn off.

当电源关机时,过冲电压值最大为额定电压值的[5%](#).

Output Rated Voltage	Overshoot Voltage(V)
	Turn on
<a href="#">+12.0V</a>	<a href="#">5%</a>

**3.9 Output transient response 输出瞬态响应**

Output Voltage Tolerance	Rate Slew	Load change
输出电压范围	斜率	负载变化
<a href="#">12.0Vdc±10%</a>	<a href="#">0.25A/μs</a>	<a href="#">25%~50%~25%</a> <a href="#">/50%~75%~50%</a>

Transient response measurements shall be made with a load changing repetition rate of 100Hz to 1kHz.

测量瞬态响应与负载改变的频率应在100Hz至1kHz。

**3.10 Protection Function 保护功能**

3.10.1 Over Voltage Protection 过压保护

Over voltage protection position [18.0V MAX](#)

3.10.2 Over Current Protection 过流保护

The power adapter can be automatically protected during the overcurrent condition, it can be automatically restored to be normal when the overcurrent condition removed, over-current output current [13.0A Max](#)

电源在过流情况下可自动保护,当过流情况解除后,可自动恢复正常,过流输出电流[13.0A Max](#).

3.10.3 Short Circuit Protection 短路保护

Shorting of output will not cause power supply to damage, or any safety hazard.

The power supply shall resume normal operation after the short is removed.

输出短路时电源不会损坏,不会有任意的安全危险,短路解除后电源恢复正常工作.

3.10.4 Input Protection 输入保护

The power supply has a current fuse to protect itself.

该电源由一颗电流保险丝来达到输入保护.

### 3.11 Efficiency 效率

Input Voltage 输入电压	Rated Load 定负载	额	Efficiency 效率
115Vac	8.0A		>88.00%
230Vac	8.0A		>88.00%

## 4. ENVIRONMENTAL REQUIREMENTS 环境要求

### 4.1 Temperature 温度

4.1.1 Storage temperature (Non-operating) 可存储温度(非操作状态):

-30 to 70 degrees C [-30] 至 [70]摄氏度.

Typical values:25 degrees C. 典型值:25摄氏度.

4.1.2 Operating temperature Limits 可操作温度:

-20 to 40 degrees C. [-20] 至 [40]摄氏度.

Typical values:25 degrees C. 典型值:25摄氏度.

### 4.2 Relative Humidity 相对湿度

4.2.1 Storage Humidity (Non-operating) 存储湿度(非操作状态):

5% to 90% RH (Non-condensing) [5%] 至 [90%],无凝水状态.

4.2.2 Operating Humidity Limits 操作湿度:

10% to 90% RH (Non-condensing) [10%] 至 [90%],无凝水状态.

### 4.3 The Sea Level Altitude 海拔高度

4.3.1 Storage Altitude 可存储海拔度(非操作状态):

0 to +2,000m above the sea level [0] 至 [2,000]米.

4.3.2 Operating Altitude 可工作海拔度:

0 to +2,000m above the sea level [0] 至 [2,000]米.

## 5 Reliability 可靠性

5.1 MTBF: Mean Time Between Failure 平均故障间隔时间

The power supply shall be designed and manufactured to have more than50,000 operating hours (about 5 years for 24-hour-operation a day) of mean time between failure (MTBF) at 90% of confidence level while operating under the prevailing conditions below.

在如下条件,该电源设计和制造平均故障间隔时间(MTBF)将超过50,000个操作时间(大约操作24小时/每天/5年),信心指数为90%。

**5.2 Insulation Resistance 绝缘阻抗**

Test Points 检测部位	Condition & Specification 条件及规格
Input to Output 输入-输出	DC500V 10MΩ MIN. (at ambient temperature 25 degree C, humidity 90%)
	DC500V 10MΩ 最小. (在室温25摄氏度,湿度90%条件下).

**5.3 Hi-Pot 绝缘耐压**

Test Points 检测部位	Condition & Specification 条件及规格
Input to output 输入-输出	AC3000V 50Hz,60s,10mA MAX. (at ambient temperature 25 degree C, humidity 90%)
	AC3000V 50Hz,60s,10mA MAX. (在室温25摄氏度,湿度90%条件下).

**5.4 Leakage Current 漏电流**

The leakage current shall not exceed 0.25mA for Class II when power supply is operated maximum input voltage and maximum load.

当电源供应器操作在最大输入及最大负载情况下，其漏电流应小于0.25mA，满足Class II 等级。

**5.5 Burn-in 老化**

The Burn-in testing will performed at least 4 hours on the condition of 25°C at full load  
在25°C环境下，满载老化至少4小时

**6 SAFETY STANDARD 安全标准****6.1 SAFETY STANDARD 安全标准**

EN60065/EN60950

**6.2 ELECTROMAGNETIC COMPATIBILITY (EMC) 电磁兼容性****6.2.1 EMI 电磁干扰**

This power supply shall compliance with the following Criterion 本电源将遵照以下标准:

**6.2.1.1 Conduction Emission 传导干扰度**

EN55032 CLASS B, FCC CLASS B.

**6.2.1.2 Power Clamp 功率辐射**

EN55032 CLASS B, FCC CLASS B.

**6.2.2 EMS 电磁抗扰**

This power supply shall compliance with the following Criterion 本电源将遵照以下标准:

**6.2.2.1 ESD 静电抗扰度**

Standard: \* IEC61000-4-2 判据B

AIR DISCHARGE at 8KV, CONTACT DISCHARGE at 6KV (整机测试) .

**6.2.2.2 EFT 脉冲群抗扰度**

Standard: \* IEC61000-4-4 判据B ±1KV

**6.2.2.3 Surge 雷击浪涌**

Standard: \* IEC61000-4-5 判据B Differential mode: 1KV.



Remarks: EMC-SPECIFICATION test with the Pure resistance as load to test,and we only responsible for the product we supplied.

电磁兼容性测试是以纯电阻作为负载测试的，我们只对单品测试负责。

## 7. MECHANICAL CHARACTERISTICS 机械性能

### 7.1 Input Connection 输入连接:

#### 7.1.1 Wall plug or Cord to Cord Type 插墙式或导线式

- |                                     |   |  |
|-------------------------------------|---|--|
| <input type="checkbox"/> For EU     | <input type="checkbox"/> For UL 3PIN      | <input type="checkbox"/> For CCC           |
| <input type="checkbox"/> For PSE    | <input type="checkbox"/> For UK 3PIN 两铜一塑 | <input type="checkbox"/> For Korea         |
| <input type="checkbox"/> For IRAM   | <input type="checkbox"/> For SAA          | <input type="checkbox"/> For UL            |
| <input type="checkbox"/> For Brazil | <input type="checkbox"/> For PSB          | <input checked="" type="checkbox"/> Others |

### 7.2 Unit Weigth 产品单重

The weight of the unit power supply shall be about 530 g(Ref).

产品单重大约: 530g 克 (供参考).

### 7.3 Dimension 物理尺寸

7.3.1 Case Size 外壳尺寸: 145\*65\*30.3mm (L\*W\*H)

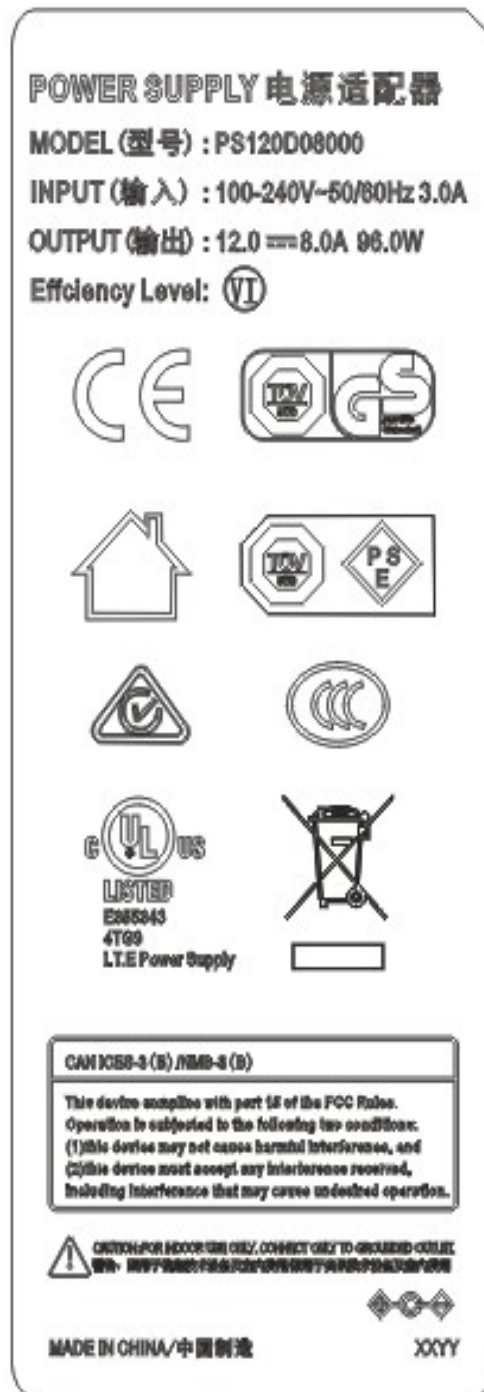
7.3.2 DC Cable 输出线: 1185 16# L=2000±50 mm

7.3.3 DC Plug 输出头: 5.5\*2.5\*10mm Tuning Fork

## 8. Main Testing Equipment 主要测试设备

Equipment	Model
AC Source 交流输入电源	AFC-1000W
Power Meter 功率计	WT310E
Electronic Load 负载机	PRODIGIT 3310C
Oscilloscope 示波器	TEK DPO3014
Digital Multimeter 数字万用表	FLUKE 15B+
DC Power 直流电源	WYK-6030
Hi-pot Tester 耐压测试仪	LANKE 7122
Insulation Rasistance Tester 绝缘电阻表	YD2681A

## 9 Label Drawing 铭牌图


 Print/印刷

 Laser Carving/镭雕

9.1 White Text on Blackground 黑底白字

9.2 Material : PET 消银龙

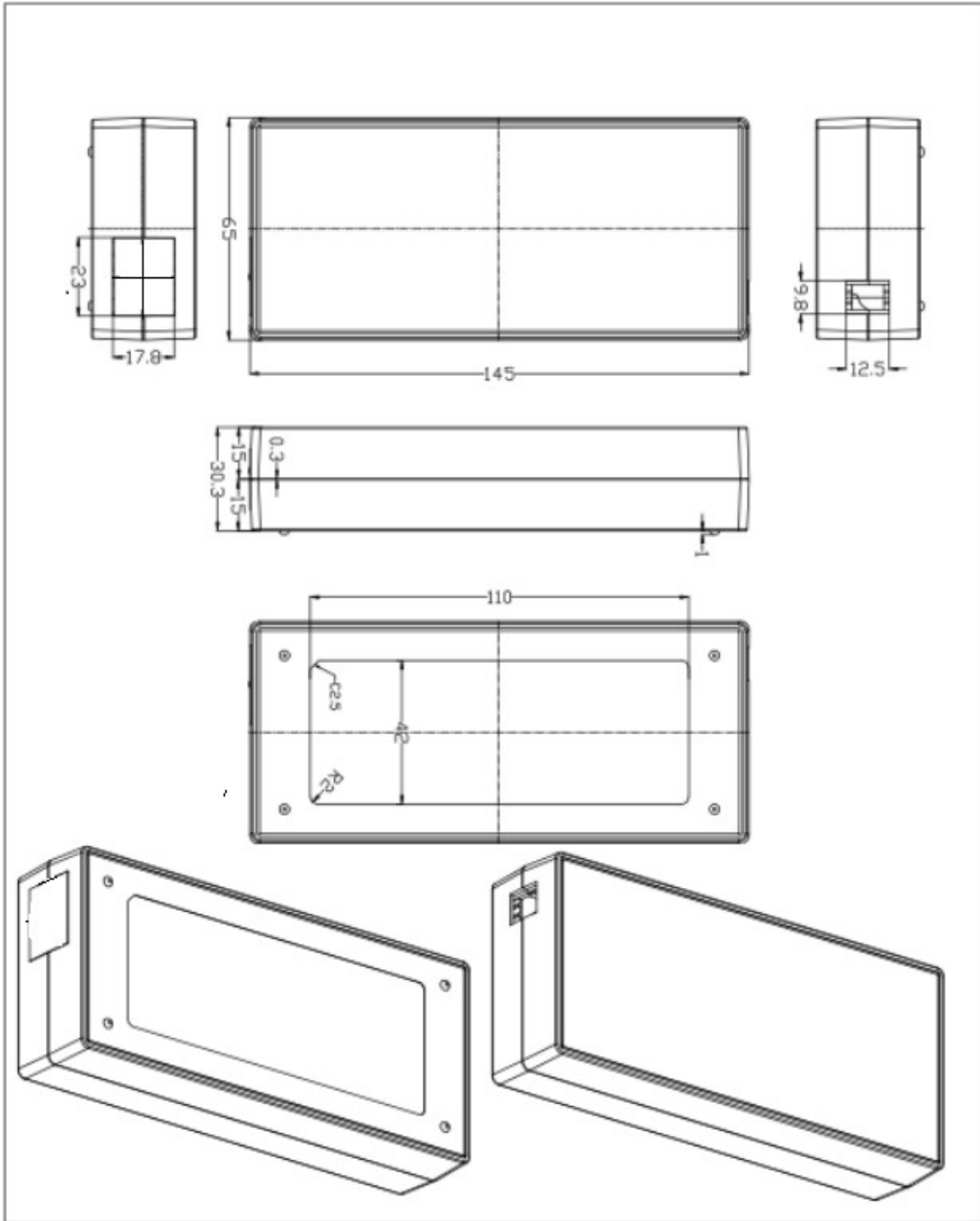
9.3 Clear Printing,Wipe Resistance 丝印清晰，耐擦拭

9.4 Gum Permanent 永久背胶

9.5 Meet Requirement of Environmental Protection 符合环保要求

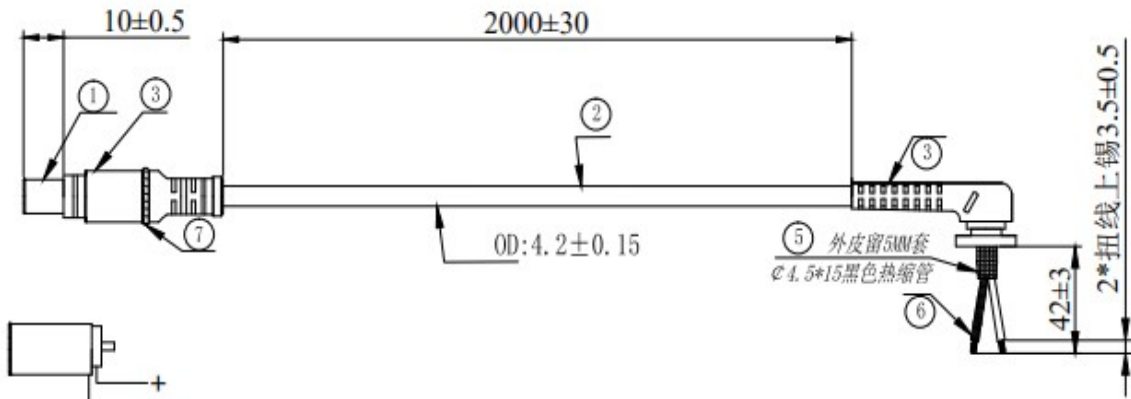
9.6 XX为周期，YY为年份

10. Overall Drawing 外观图



Material/材料	Fireproof Class 防火等级	Color 颜色
PC + ABS	UL94V-0	Black 黑色

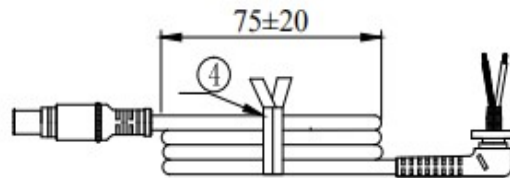
11 DC Cable Drawing 线材图



接线方式：白色接“-”  
缠绕接“+”

- 技术要求：
1. 必须按图纸生产，尺寸符合要求
  2. 线材外皮无破损、无污垢
  3. 所有材料必须符合ROHS标准

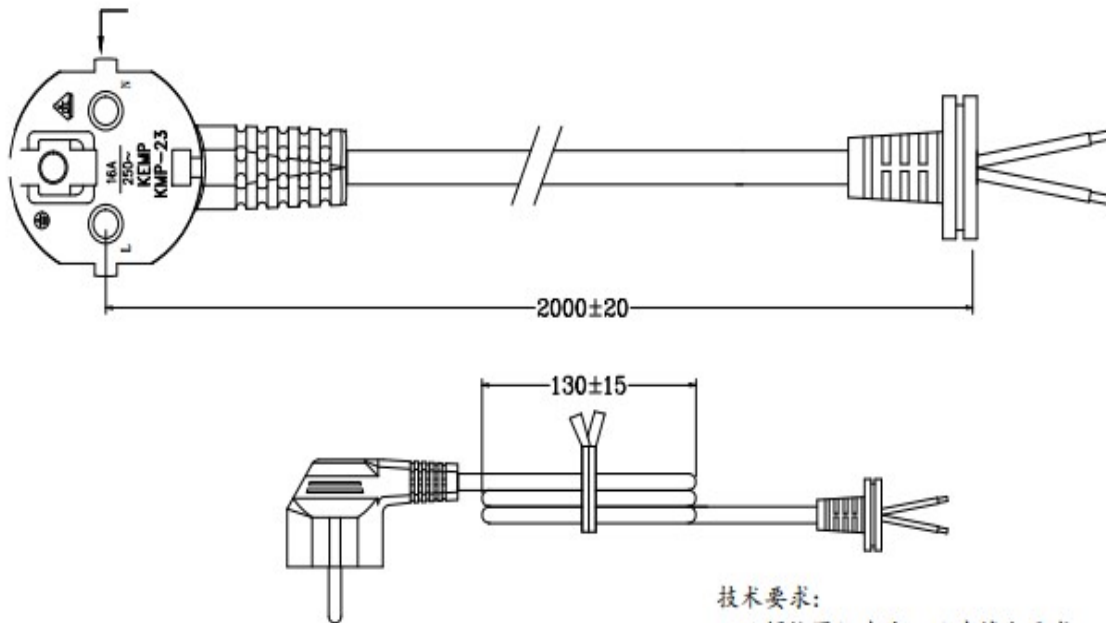
- 测试要求：
- 1、100%导通测试
  - 2、极性测试



绕线图

CableSpecification/线材规格书		
UL1185 16AWG L=2M Black 80°C		
Item NO	Part Name (部件名称)	Description (描述)
A	Length of DC cord (DC线长度)	2M
B	Size of DC connector (DC头尺寸)	5.5*2.5*10MM, Inner Negative , Outer Positive
C	Length of coil (线包长度)	75±10MM
D	SR NO (线卡编号)	/
E	Length of inlet wire (出线长度)	35±3MM
F	Tinned length (吃锡长度)	3.5±0.5MM

11 AC Cable Drawing 线材图



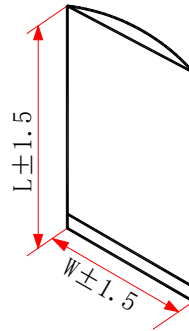
技术要求:

1. 必须按图纸生产, 尺寸符合要求
2. 线材外皮无破损、无污垢
3. 所有材料必须符合ROHS标准

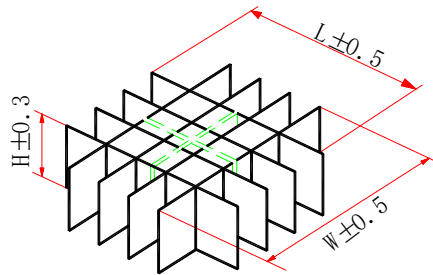
12. Packing Drawing 包装图

PACKING METHOD: 30PCS/LAYER\*2LAYERS, TOTAL=60PCS

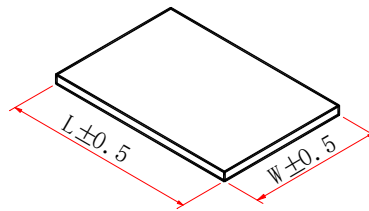
PLASTIC BAG/塑料袋:



CARDBOARD/刀卡:



CARDBOARD/纸板:



PAPER CASE/纸箱:

