

# SPECIFICATION FOR APPROVAL

## 產品確認書/製品仕様書

FILE SERIAL NO./文件序號:	XSG201215294065-L01
CUSTOMER / 客 戶:	
ARTICLE / 品 名:	SWITCHING POWER SUPPLY/CHARGER
MODEL NO. / 機種型號:	XSG2927000
PARAMETER / 規 格:	29.2V 7A
CERTIFICATE/認證:	UL,CUL,FCC,CE,GS,SAA,RCM,C-TICK,PSE,ROHS
ISSUE DATE / 發行日期:	2020/12/15

**Please to sign back after you confirm**

**承認書確認後請回簽一份**

この仕様書をご確認とご署名の上、対象の営業窓口にご返信いただきますよう宜しくお願い致します。

CUSTOMER AUTHORIZED 客戶確認		
Approved by	Checked by	Prepared by

SUPPLIER AUTHORIZED 供方確認		
Approved by	Checked by	Prepared by
李麗敏	賀子豐	張文娟

\*感謝您的支持，我們十分珍惜每次合作機會

\*Thank you for your support,we will treasure the opportunity to cooperate with you

Rev.版本	Description of change/ 變更內容描述		Changed Date 日期	Approved
	Before(變更前)	After/變更後		
A	Original Release(初次發行)		2007/8/26	李麗敏
B	Label updated(標貼版本變更)		2010/6/20	王曉
C	Certificates updated(證書更新)		2018/1/22	李麗敏



\* Make practical and safe power supply, Be enterprise with honesty and responsibility

\* 提供實用安全的電源，做誠信負責的企業

\* 実用的、安全な電源を提供し、誠実と信用、責任を持つ企業。

# Table of Content(目錄)

1.SAFETY STANDARD / 安規標準	3
2.INPUT FEATURE / 輸入特性	3
3.CHARGER OUTPUT VOLTAGE / CURRENT FEATURE/ 充電器輸出電壓 / 電流的特性	3
4.Work Status of LED indicator/LED燈工作狀態顯示	3
5.CHARGING CURVE/充電曲線圖	4
6.PROTECTION FEATURE / 保護特性	4
7.ENVIRONMENTAL CONDITIONS / 環境條件	5
8.EMC STANDARDS / 電磁相容性標準	5
9.RELIABILITY AND QUALITY CONTROL / 可靠性及品質控制	6
10.WEIGHT / 重量	6
11.MECHANICAL REQUIREMENT / 結構參數	6
12.INSULATION RESISTANCE / 絕緣阻抗	6
13.LEAKAGE CURRENT / 漏電流	6
14.MAJOR MEASURE EQUIPMENT / 測量設備; VERIFIED BY THE THIRD LAB/外校	6
15.PRODUCT OUTLINE DIMENSION / 產品外觀尺寸	7
16.DC CORD / 輸出線材	8
17.RATING LABEL / 銘牌	9

<b>EDITION</b>	<b>C</b>	<b>PAGE</b>	<b>2/9</b>
----------------	----------	-------------	------------

## ELECTRICAL PERFORMANCE / 電器性能

### 1.SAFETY STANDARD / 安規標準

- 1.1 The green mode power supply shall be certified by the following international regulatory standards: 充電器應符合下列的國際標準:

Certificate 證書	Country 國家	Standard/安規標準	Certificate 證書	Country 國家	Standard/安規標準
■ UL/CUL	USA/CA 北美	UL/CSA62368-1; UL/CSA60950-1;	■ FCC	USA	FCC Part 15 Sub-part B
■ LVD/ GS	Germany 德國	EN60950; EN62368 EN 61558;EN60335	■ CE	Europe 歐洲	EN55032;EN55024; EN55020;EN61000; EN55014;
■ UKCA	United Kingdom 英國	BS EN 62368	■ KC	Korea 韓國	K60950-1
■ PSE	Japan 日本	J60950-1; J61558	■ SAA/RCM	AU 澳洲	AS/NZS 60950




### 2.INPUT FEATURE / 輸入特性

- 2.1 INPUT VOLTAGE RANGE: 90Vac to 264Vac. 輸入電壓範圍可以從90Vac到264Vac.
- 2.2 RATED INPUT VOLTAGE: 100Vac to 240Vac. 額定輸入電壓從100Vac到240Vac.
- 2.3 INPUT FREQUENCY RANGE: 47Hz to 63Hz. 輸入頻率範圍從47Hz到63Hz.
- 2.4 INPUT CURRENT: 3A max.&100-240Vac. 最大輸入電流3A(輸入條件100-240Vac)
- 2.5 INRUSH CURRENT: 60A max. at 100-240Vac input for a cold start at 25 °C.在准開機條件下，最大浪湧電流不超過60A (輸入條件100-240Vac).
- 2.6 EFFICIENCY: higher than 87% at 100-240Vac input and output full load. 效率高於87% (輸入100-240Vac 和輸出滿載條件).
- 2.7 No-Load Input Power Dissipation/輸入空載功率損耗: Input 115Vac or 230Vac,output no load, the input power loss is less than 0.5W. 輸入115/230V交流，在空載時，輸入功耗小於0.5W.

### 3.OUTPUT/輸出特性

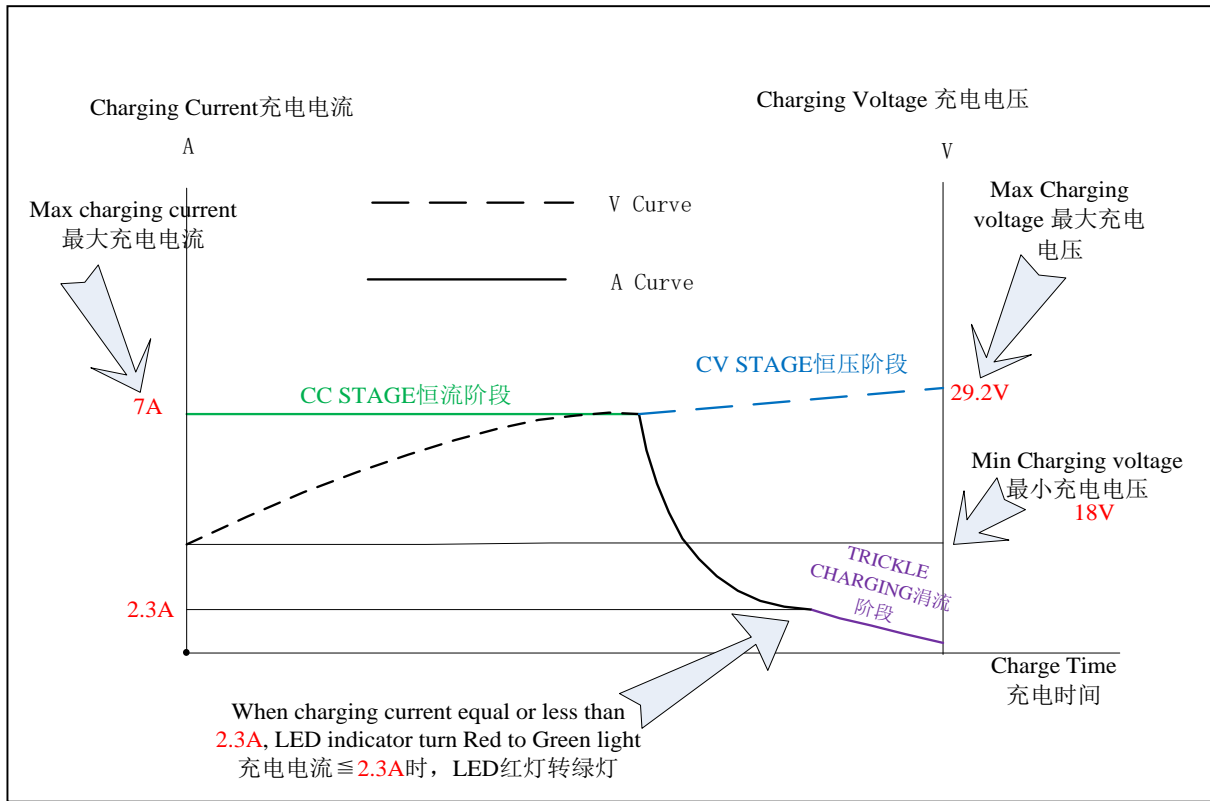
Charging Status 充電狀態	Charging Stage 充電階段	Output current 輸出電流(A)	Output voltage 輸出電壓(V)	LED indicator 指示燈
1.Charging 充電中	Constant Current 恒流	7A	18V-29.2V	Red
	Constant Voltage 恒壓	7A->2.3A	29.2V	Red
2.Charged full 充滿	Trickle Charging 涓流	2.3A->0	29.2V	Green

### 4.Work Status of LED indicator/LED燈工作狀態顯示

- No load output:Green Light 空載輸出:綠燈 
- In Process of Charging:Red Light 充電中:紅燈 
- Charged Full: Green Light 充滿:綠燈 

<b>EDITION</b>	<b>C</b>	<b>PAGE</b>	<b>3/9</b>
----------------	----------	-------------	------------

5.CHARGING CURVE/充電曲線圖:



6.PROTECTION FEATURE / 保護特性

6.1 OVER—CURRENT PROTECTION / 過電流保護:

The green mode power supply shall be hiccup when any output operating in overload condition (set @ Max load 100~200%) under any line condition for an indefinite period of time. The power supply shall be self—recovery when the fault condition is removed.  
 在任何時候任何輸入條件，當輸出操作在超載條件最大充電器的（100~200%）時，充電器將進入打嗝模式，當故障被移走後，充電器要能自動恢復到正常

6.2 SHORT—CIRCUIT PROTECTION / 輸出短路保護:

The power supply shall be hiccup and no damage shall occur when any output operating in a short circuit condition under any line condition for an indefinite period of time. The power supply shall be self—recovery when the fault condition is removed.  
 在任何時候，任何輸入條件下，當輸出操作在短路情況下，充電器將進入打嗝模式，當故障消失後，充電器要能自動恢復正常。

6.3 REVERSE POLARITY PROTECTION/防反接保護

- 6.3.1. To use Fool-Proof type DC plug. 建議使用防呆式設計的DC連接頭
- 6.3.2. When Connect wrong polarity, the charger will be self-recovery when fault condition is removed. this function is optional, customer could choose it in according to real requirement.

<b>EDITION</b>	<b>C</b>	<b>PAGE</b>	<b>4/9</b>
----------------	----------	-------------	------------

## ELECTRICAL PERFORMANCE / 電器性能

當錯誤操作，反向連接時，充電器進入保護狀態，直到故障解除。此為選配功能，客戶可根據實際情況選擇。

### 7. ENVIRONMENTAL CONDITIONS / 環境條件

#### 7.1 OPERATING / 操作條件：

The power supply shall be capable of operating continuously in any mode without performance deterioration in the following environmental conditions.

在下列環境條件下，充電器要能夠連續操作在各種模式，且不能造成性能的退化。

7.1.1 Operation Temperature: -20°C ~ 40°C 工作溫度：-20°C ~ 40°C

7.1.2 Relative Humidity: 10% ~ 90% 相對濕度：10% ~ 90%

7.1.3 Vibration: 1.0mm, 10-25Hz, 15 minutes per cycle for each axis (X, Y, Z)

7.1.4 Cooling: The power supply will operate with convection cooling. Blocking of vents must not cause damage to The power supply..

充電器將操作在對流冷卻的環境下，即使將通風口阻塞充電器也不允許有任何損傷發生。

#### 7.2 NON-OPERATING / 非操作條件：

The power supply shall be capable of withstanding the following environmental conditions extended periods of time, without sustaining electrical or mechanical damage and subsequent operational deficiencies:

充電器要能夠長期的經受下列的環境條件，且不允許有電氣級機械方面的損傷和併發的操作的缺失

7.2.1 Storage Temperature: -30°C ~ 70°C 儲存溫度：-30°C ~ 70°C

7.2.2 Relative Humidity: 10% ~ 90% 相對濕度：10% ~ 90%

7.2.3 Color of case and cable / 外殼及線材顏色：Black / 黑色

7.2.4 Vibration and Shock / 振動和衝擊

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. 充電器出貨的包裝設計，均要能承受正常運輸的振動，並符合MIL-STD-810D方法514和程式X。

#### 7.2.5 Dropping Testing / 跌落試驗：

X-Y-Z direction 100cm, one time with each direction

X-Y-Z三個方向高度1m每個方向各一次。

### 8. EMC STANDARDS / 電磁相容性標準

#### 8.1 EMI STANDARDS / EMI 標準

The power supply met the radiated and conducted emission requirements for FCC CLASS B, EN55022 CLASS B.

本充電器符合輻射及傳導要求，滿足FCC CLASS B, EN55022 CLASS B.

#### 8.2 EMS STANDARDS / EMS 標準

The power supply shall meet the following EMS standards:

本充電器滿足下列EMS標準

<b>EDITION</b>	<b>C</b>	<b>PAGE</b>	<b>5/9</b>
----------------	----------	-------------	------------

## ELECTRICAL PERFORMANCE / 電器性能

8.2.1 EN61000-4-2: 1995 / A1: 1998 Electrostatic Discharge(ESD)

8.2.2 EN61000-4-3: 1996 / A1: 1998 Radiated Electromagnetic Fields(RS)

8.2.3 EN61000-4-4: 1995 Electrical Fast Transient / Burst(EFT)

8.2.4 EN61000-4-5: 1995 Lighting Surge Attachment. Line to Neutral: 2KV

### 9.RELIABILITY AND QUALITY CONTROL / 可靠性及品質控制

9.1 BURN-IN / 老化 The power supply shall undergo a minimum of 4 hours Burn-In test under full load at 40°C ~ ±5°C.  
充電器應在40°C ~ ±5°C和滿載條件下老化4小時。

9.2 COMPONENT DERATING / 元件溫度要求 Semiconductor junction temperatures shall not exceed the manufacturer's maximum thermal rating.半導體結溫不允許超過其製造商要求的最大溫度值。

10.WEIGHT / 重量 The weight of the power supply shall be about 700 g. 充電器的重量大約為 700 g

### 11.MECHANICAL REQUIREMENT / 結構參數

The power supply size:L176\*W80\*H47mm.外殼尺寸: L176\*W80\*H47mm

12 INSULATION RESISTANCE / 絕緣阻抗 Input to output: 50M OHM(500VDC)輸入對輸出50兆歐姆(500VDC)

### 13.LEAKAGE CURRENT / 漏電流

The leakage current shall be less than 0.75mA for class I when power supply is operated maximum input voltage and maximum load.

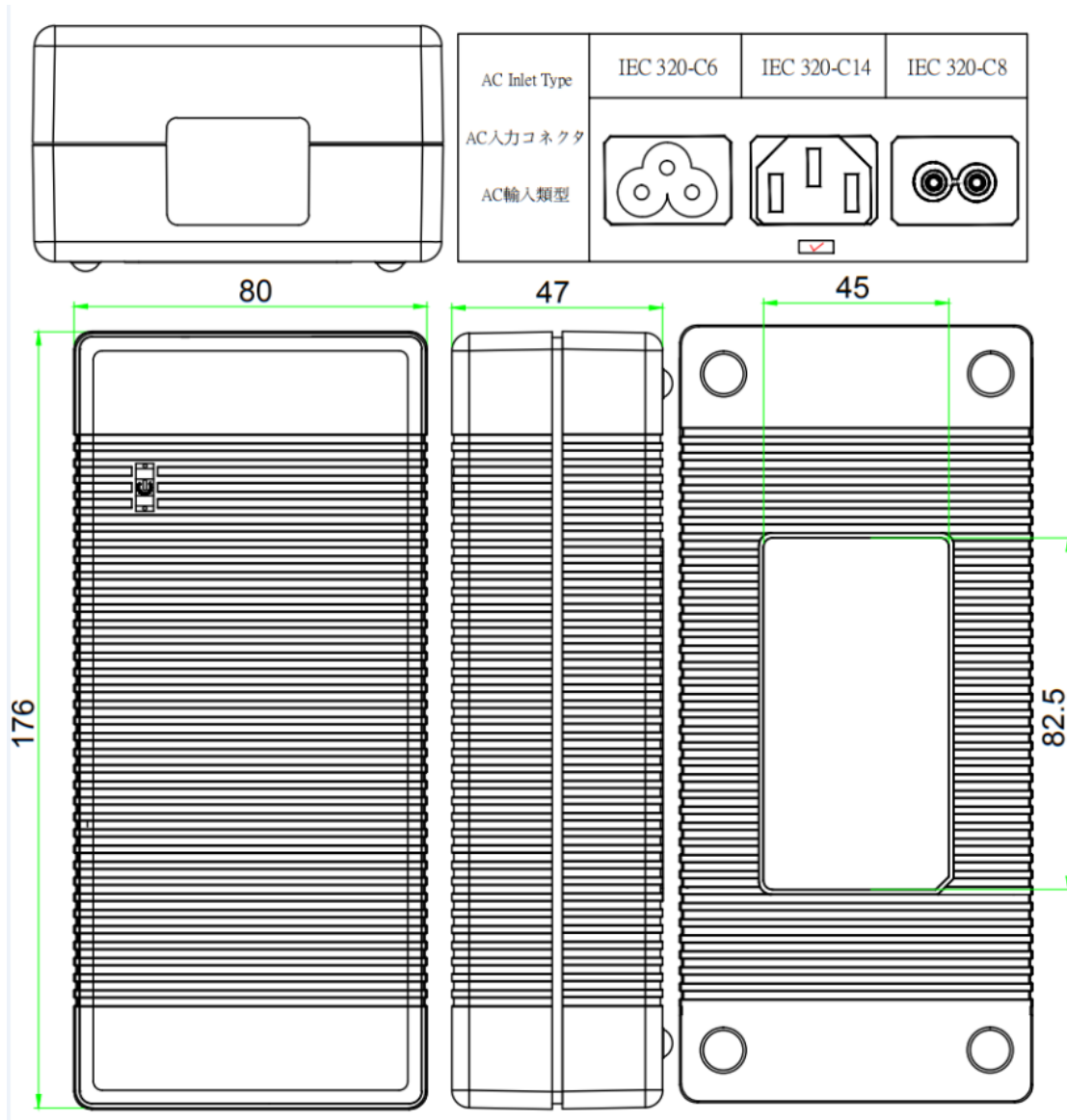
當充電器操作在最大輸入及最大負載情況下，其漏電流應小於0.75mA，滿足class I等級。

### 14.MAJOR MEASURE EQUIPMENT / 主要測量設備; VERIFIED BY THE THIRD LAB/外校

- |   |  |                          |   |
|---|--|--------------------------|---|
| A | AC SOURCE / 交流輸入充電器: AFC-500W,校準頻次: 1次/年                 | <input type="checkbox"/> | ✓ |
| B | POWER METER / 充電器功率計: CHROMA 2100,校準頻次: 1次/年             | <input type="checkbox"/> | ✓ |
| C | ELECTRONIC LOAD / 電子負載: PRODIGIT 3310C,校準頻次: 1次/年        | <input type="checkbox"/> | ✓ |
| D | OSCILLOSCOPE / 存儲示波器: TDS-2012B,校準頻次: 1次/年               | <input type="checkbox"/> | ✓ |
| E | DIGITAL MULTIMETER / 數字式萬用表: Fluke 4.5,校準頻次: 1次/年        | <input type="checkbox"/> | ✓ |
| F | DC POWER / 直流輸入充電器: WYK-6030,校準頻次: 1次/年                  | <input type="checkbox"/> | ✓ |
| G | HI-POT TESTER / 耐壓測試儀: LANKE 7112,校準頻次: 1次/年             | <input type="checkbox"/> | ✓ |
| H | INSULATION RASISTANCE TESTER / 絕緣電阻表: YD2681A,校準頻次: 1次/年 | <input type="checkbox"/> | ✓ |

EDITION	C	PAGE	6/9
---------	---	------	-----

PRODUCT OUTLINE DIMENSION / 產品外觀尺寸(mm)



Material/材料: PC

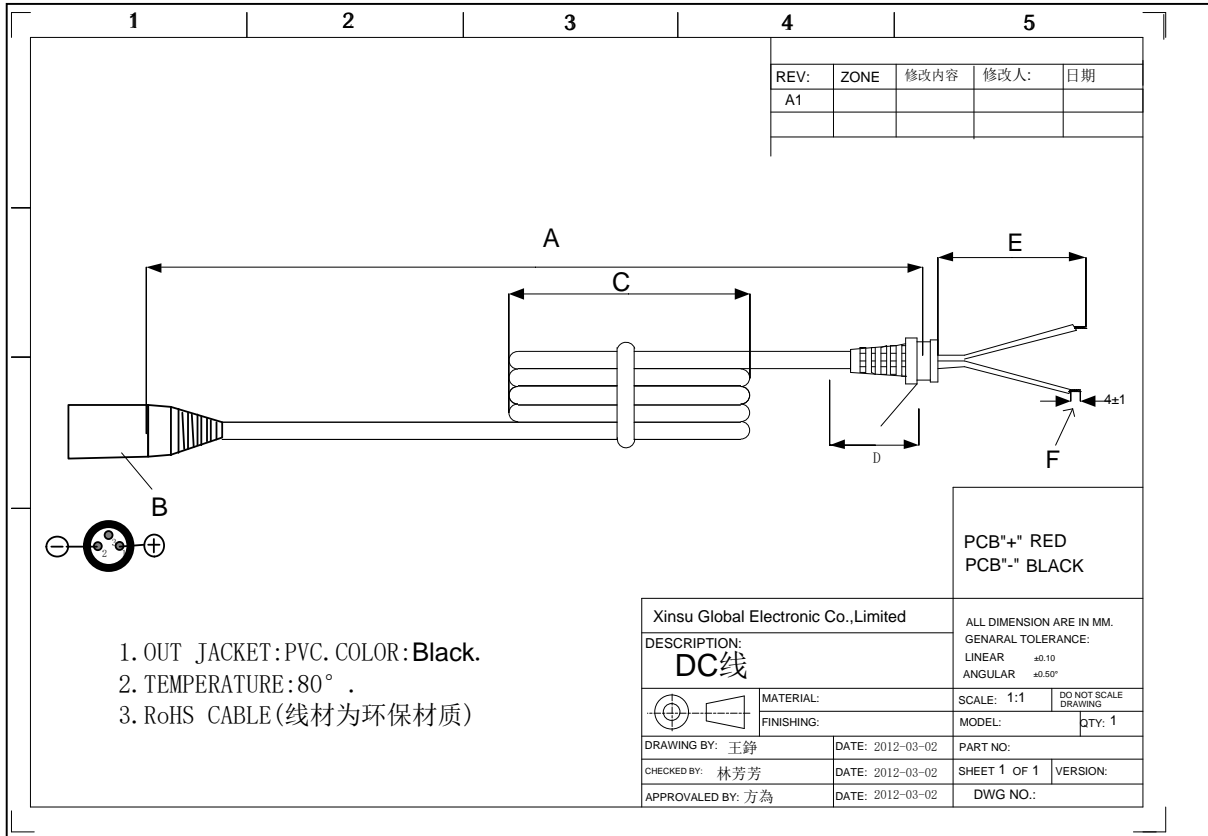
Brand/品牌: GE

Fireproof Class/防火等級: UL94V-0

Color/顏色: Black/黑色

EDITION	C	PAGE	7/9
---------	---	------	-----

## DC CORD / 輸出線材



### Cable Specification/線材規格

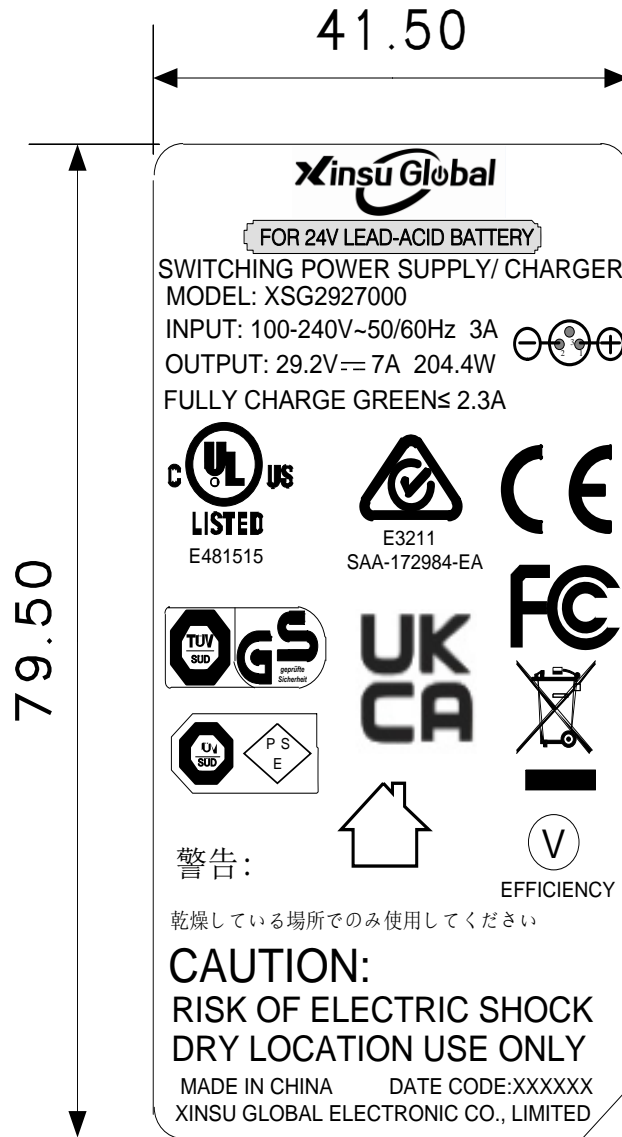
**UL 18AWG\*2C 2464 L=1.2M Black 80'C**

Item No	Part Name (部件名稱)	Description (描述)
A	Length of DC cord(DC線長度)	1.2M
B	Size of DC connector (DC頭尺寸)	XLR male plug, pin 1 positive, pin 2 negative, Pin 3 empty
C	Length of coil (線包長度)	70MM±10
D	SR NO(線卡編號)	XYX-XL007
E	Length of inlet wire (出線長度)	30MM±1
F	Tinned length (吃錫長度)	4MM±1

<b>EDITION</b>	<b>C</b>	<b>PAGE</b>	<b>8/9</b>
----------------	----------	-------------	------------



RATING LABEL / 銘牌



Print/印刷

Laser Carving/鐳雕

- 1.Silver text on black background 黑底銀字
- 2.Material: PET 底材為消銀龍.
3. Clear Printing, Wipe Resistance 絲印清晰, 耐擦拭.
- 4.Gum Permanent 永久背膠.
- 5.Meet Requirements of Environmental Protection 符合環保要求

<b>EDITION</b>	<b>C</b>	<b>PAGE</b>	<b>9/9</b>
----------------	----------	-------------	------------