



Approval Sheet

CUSTOMER NAME (客戶名稱): _____
CUSTOMER NO. (客戶編號) : _____
MODEL NO. (型號) : BI36-120300-E2
STANDARD (安規標準) : GS/UL/CE-Mark
TYPE (類型) : Output 12V 3A Desk Top Power Supply
PRODUCT NO. (產品編號) : D03612030000FK-G
DATE (日期) : 27-Jun-2018
SAMPLE NO (樣品單號) : _____

APPROVED BY CUSTOMER (客戶確認)			
			客戶承認章

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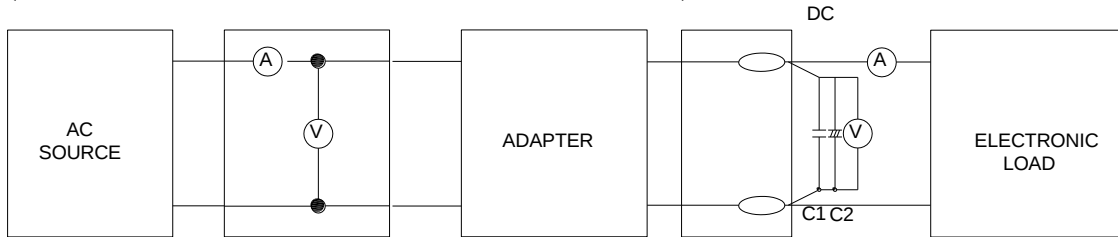
History List

Revision (版本)	Date (日期)	UPDATE (項目更新)	DETAIL (詳述)
0.1	2018-06-27	Issue	
	2018-09-28	變更 AC 線長 變更 DC 線	在 D03612030000FK-A 上升級
	2018-09-29	變更封面為皇鎧 變更型號及銘牌	在 D03612030000FK-B 上升級
	2018-10-18	變更 DC 頭尺寸	在 D03612030000FK-C 上升級
	2019-01-09	變更 DC 線	在 D03612030000FK-D 上升級
	2019-11-25	變更 DC 頭為彎頭 AC 和 DC 線 SR 用耐寒料	在 D03612030000FK-E 上升級
	2019-12-06	變更 DC 頭長度	在 D03612030000FK-F 上升級

1. Electrical Characteristic (電氣特性)

1.1 Test Circuit (測試電路)

If the test is to be made on a specified circuit, be sure to use the following circuit
(無特殊規定的情況下，依照下面的電路進行測試)



C1 : 0.1uF CERAMICS CAPACITOR

C2 : 10uF/50V ALUMINUM CAPACITOR

2. Input Characteristic (輸入特性)

2.1 Rated Input Voltage (額定輸入電壓)

The adapter should be operated from 100 Vac to 240 Vac.

Input Voltage Range(輸入電壓範圍)

The adapter should be operated from 90 Vac to 264 Vac..

2.2 Rated Input Frequency (額定輸入頻率)

It is normal for 50Hz or 60Hz and single phase

2.3 Frequency Range(輸入頻率範圍)

The adapter should be operated with an input frequency from 47Hz to 63Hz

2.4 Efficiency (效率)

The average efficiency is over 87.4% when the input voltage is 115 Vac or 230 Vac (Remark: The average efficiency is measured from four different active loads which are 25%, 50%, 75% & 100%.)

在輸入電壓 115Vac 或 230Vac 時，平均效率大於 87.4%。(注：平均效率為輸出電流 25%, 50%, 75%, 100% 四種負載測試所得效率的平均值。)

The maximum no-load power is 0.1W while input is 115Vac or 230Vac.

當輸入電壓為 115Vac 或 230Vac 時，空載功耗 0.1W 為最大。



2.5 Safety Standard (安全標準) :

UL UL60950/UL60065 GS EN60065/EN60950

EMC Standard (電磁相容性標準):

EN55022 FCC Part 15 B

Approved by (核准)	<i>luohailing</i>	Checked by (審核)	Hulei	Prepared by (製作)	<i>linjunhong</i> Page 1
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3. Output Characteristics (輸出特性)

3.1 Rated output Voltage (輸出額定電壓 12V±5%)

3.2 Rated output current is specified within (額定輸出電流 0~3A). Over Current Protection is 6A max (過流保護 6A 最大)

3.3 Rated Power (額定功率)

Out Power is 36 Watt

3.4 Output Ripple (輸出紋波)

When the input is 100Vac or 240Vac, the Full-Load and No-Load out ripple voltage is less than 200 mV when it is measured (at the end of DC cable) at oscilloscope bandwidth of 20MHz with 0.1uF ceramic and 10uF electrolytic capacitor applied across output connector terminals.

(當輸入電壓為 100Vac 或 240Vac, 輸出端並接 0.1uF 與 10uF 電容, 示波器帶寬 20MHz 時, 滿載和空載測試紋波小於 200 mV。)

3.5 Short Circuit Protection (短路保護)

The adapter is protected when a short-circuit happened between the output terminals and it will not result in a fire hazard or cause any damage to the adapter. The adapter will be normal operated automatically while the short-circuit is removed.

(輸出短路後不損壞該產品, 短路消除後恢復正常輸出。)

3.6 HI-Pot test (高壓測試)

At 25°C, the adapter can withstand 3000 Vac and 5mA maximum current. This voltage is applied to the insulation test. Voltage should be gradually adjusted from zero to the specified high voltage in the test and the operation time should be within 3 second.

(在 25°C環境時適配器可承受: 3000 Vac,電流最大 5mA , 這個電壓應用於絕緣測試。電壓應從 0 逐漸調到規定高壓電壓測試, 操作時間最長為三秒鐘。)

3.7 Surge test (雷擊測試)

Input voltage AC100V and AC240V ,Supplying wave form 1.2 / 50 μ s 5 times,Supply voltage : ± 1 kV increment ,Phase : 0° 、 90° 、 270° , (Compliant IEC61000-4-5)

(雷擊測試 1KV)

3.8 Insulation Impedance(絕緣阻抗)

500Vdc/100M Ω Min/1S

3.9 Output polarity(輸出極性)



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4.Mechanical Characteristics(機械特性)

4.1 Dimension (尺寸)	96.3*51.2*32mm	Length*Width* Height (長*寬*高)
4.2 AC Inlet type (輸入插座類型)	60227 IEC 52 (RVV) 2C*0.75mm ² /2500mm SR 為耐寒料	CCC 2 PIN



4.3 Case Material (外殼材質)	PPO,PC, PC+ABS, or equivalent	94V-0
4.4 O/P Cord (線材)	20AWG/2464/600mm 材質為 TPE 且 SR 為耐寒料	As attachment page 4 (附件在第 4 頁)
4.5 Connector DC Plug(輸出連接頭)	5.5*2.5*12mm 音叉溝槽	L-type(彎頭)
4.6 Drop Test (落地測試)	Drop the adapter from 1 meter height onto the wood planks (at least 13mm thick). Each face of the adapter is dropped once and with total 6 faces. (產品從 1 米高度自由跌落在厚 13mm 以上的木板上，每個面跌一次，合計 6 次)	After test, body is not broken or disassembled or damaged. Electrical performance is ok (跌落測試之後，產品不會裂開，外觀無損壞,電氣性能 OK)

5.Environmental Characteristics:(環境特性)

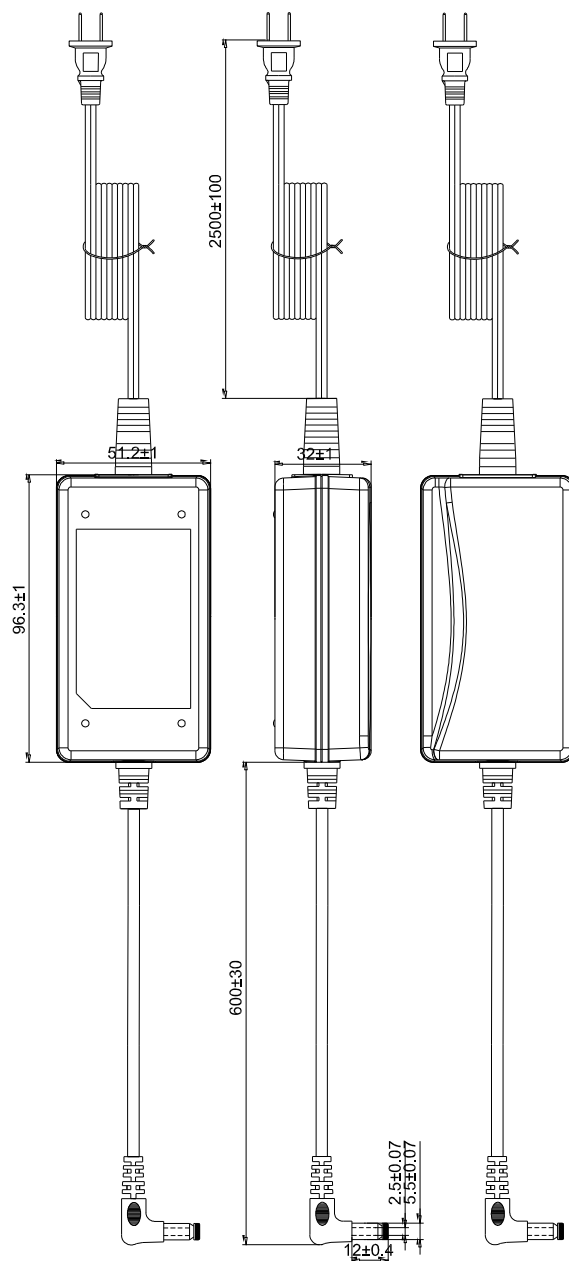
5.1 Storage Temperature Range (存儲溫度範圍)	-30 to +65°C	
5.2 Operating Temperature Range (工作環境範圍)	0 to +35°C	
5.3 Storage Relative Humidity Range (存儲濕度範圍)	5 to 95%	
5.4 Operating Relative Humidity Range (工作濕度範圍)	20 to 90%	
5.5 Burn-in (老化)	4 hours (The new product for first production is 4 hours, the product after mass production is 2 hours) 4 小時 (第一次生產老化為 4 小時，生產多次的產品老化為 2 小時)	
	60,000Hours	At 25°C (工作環境 25°C)



5.6 M.T.B.F (壽命時間)		
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Outline dimensions(外觀尺寸)

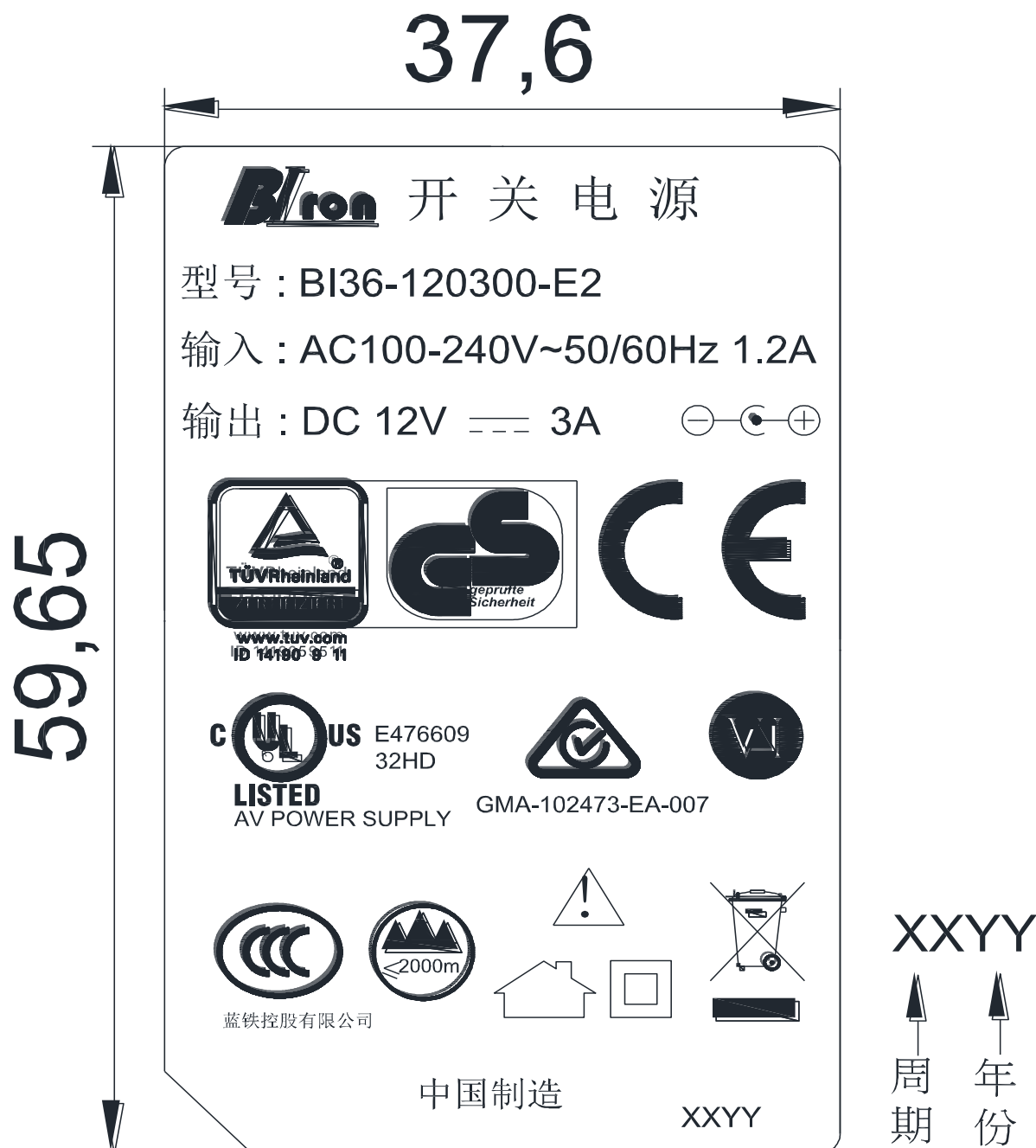


Note

1. AC CORD(輸入線材): 中規 60227 IEC 52 (RVV) 2C*0.75mm² L=2500±100mm;
2. DC CORD(輸出線材): 2464 20AWG 300V 80°C L=600±30mm;
3. DC Plug(輸出線插頭): 5.5*2.5*12mm 音叉溝槽 L-Type 彎頭.

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Label diagram (銘牌圖紙)

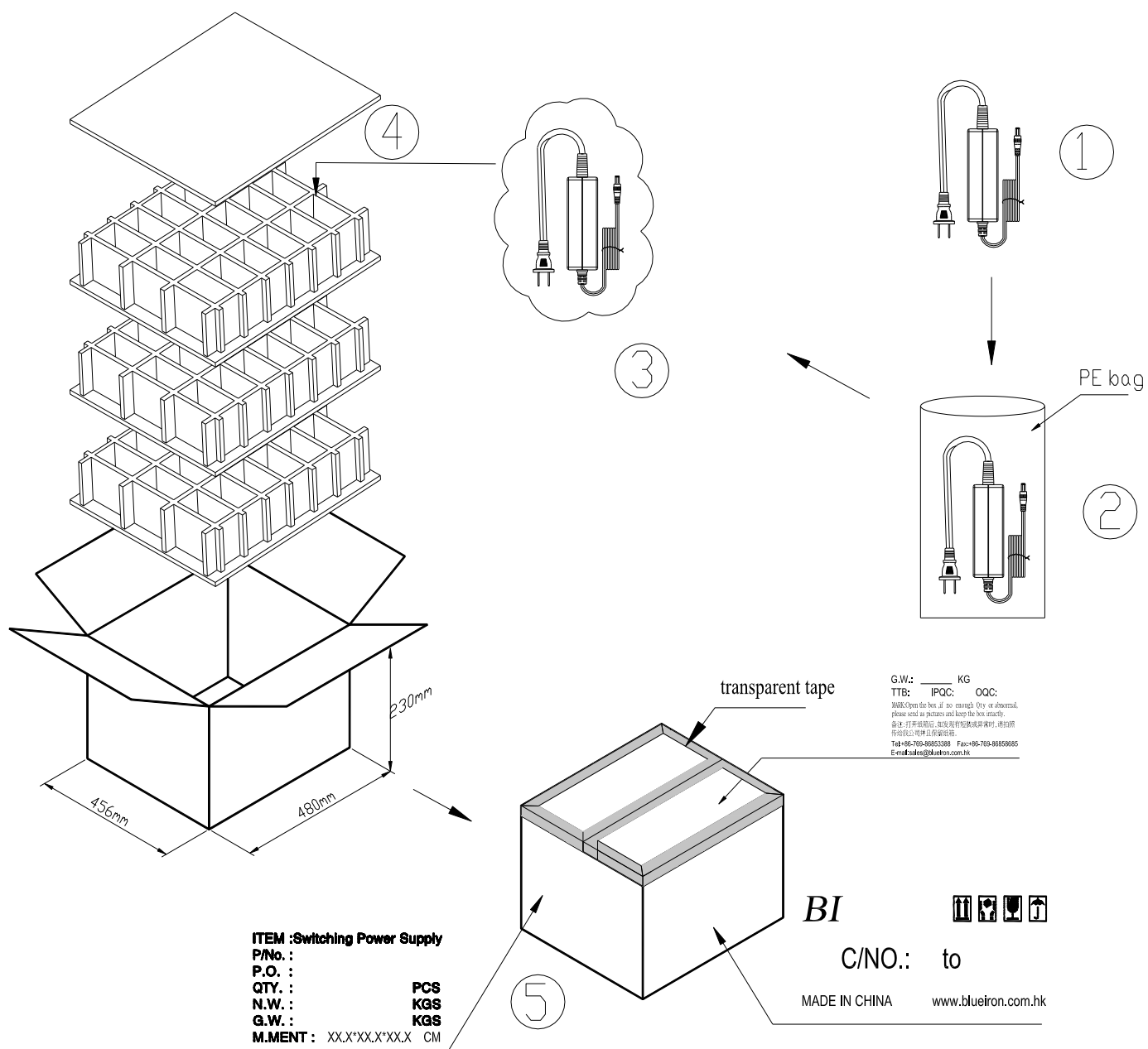


Note(記錄):

1. Thickness: 0.1mm min., inflammation classes 94V-2 or better.(厚度 0.1mm · 防火等級 94V-2 或更好)
2. Color: Silver background with Black letters.(銀底黑字)

Packing List (包裝方式)

1	Part Name	Material	Dimension (mm)	Q'ty
2	One box in 3 level, one level in 15 pcs (45pcs / Box) 一箱三層,每層 15 台,共 45 台			
	Packing Box(外箱)	B=B	480*456*230mm	1/45





東莞市藍鐵實業有限公司
DONGGUAN BLUE IRON ENTERPRISE CO., LIMITED

樣品檢驗記錄表

Sample checkout Record

表單編號(Form No.): BI-4-RD-007-A0

源文件編號(Source file No.): BI-2-07

客戶名稱 (Customer Name)		樣品數量 (Sample Amount)		PCS													
機種名稱 (Model No.)		機種規格 (Model Specifications)		12V 3A													
外觀 檢查	DC線 DC Cord	外部 CASE															
	銘牌 Label	☐ 公司標準品 (Company Standard)		☐ 客戶要求 (Customer Request)													
電 性 測 試	測試項目		1	2	3	4	5	備註									
	AC(100V_60Hz)	空載輸出電壓 No-Load Output Voltage	12.251V	12.250V													
		滿載輸出電壓 Full-Load Output Voltage	12.111V	12.141V													
		空載紋波電壓 Ripple & Noise (Type)	14mV	10mV													
		滿載紋波電壓 Ripple & Noise (Type)	108mV	108mV													
		過流保護 Over Current Protection	5.024A	4.80A													
	AC(115V_60Hz)	空載功耗 No-load power	0.660W	0.662W													
		功率因數(PF值) power factor	0.58	0.59													
		空載輸出電壓 No-Load Output Voltage	12.251V	12.251V													
	AC(240V_50Hz)	滿載輸出電壓 Full-Load Output Voltage	12.120V	12.150V													
		空載紋波電壓 Ripple & Noise (Type)	10mV	10mV													
		滿載紋波電壓 Ripple & Noise (Type)	112mV	112mV													
		過流保護 Over Current Protection	4.976A	4.608A													
		空載功耗 No-load power	0.89W	0.85W													
	AC(230V_50Hz)	功率因數(PF值) power factor	0.45	0.46													
AC(100V_60Hz)	老化時間 (Aging Time)	2H	2H														
AC(240V_50Hz)	短路Short (自動恢復)	OK	OK														
AC(100V - 240V)	空載 1/4 異音測試	OK	OK														
AC(100V - 240V)	ON/OFF測試	10次	20次														
AC(115V_60Hz)	高壓/接地測試 Hi-pot Test	OK	OK														
AC(3750V_10mA)	1米自由落地 1M at liberty Drop	OK	OK														
能 效 測 試	115V/60Hz				230V/50Hz				平均效率								
	序號	25%	50%	75%	100%	序號	25%	50%	75%	100%							
	1	88.2	88.2	87.4	86.5	87.6	1	88.1	88.8	88.4	88.4						
	2	88.6	88.4	87.8	87.1	87.9	2	88.2	89	88.7	88.5						
	3						3										
4						4											
5						5											
恒流測試 Invariableness Current Test		輸入電壓	序號	1	2	3	4	5	輸入電壓	序號	1	2	3	4	5		
		115V/60Hz	恒定電壓						230V/50Hz	恒定電壓							
			恒流電流							恒流電流							
備註 NOTE																	
Approved by (核准)		Luohaibing				Checked by (審核)		Hulei				Prepared by (制作)				王曉明	