

1.INPUT/输入特性

1.1 Input voltage rating/额定输入电压范围:	100-240V AC	33774347	SM2429B
1.2 Input voltage range/输入电压范围:	90-264V AC		
1.3 Input frequency rating/额定输入频率:	60/50 Hz		
1.4 Input frequency range/输入频率范围:	63/47 Hz		
1.5 AC input current/最大输入电流:	1.5 A Max .@100V AC		
1.6 AC input power saving/输入空载功率:	0.15 W Max .@230V AC at no load		
1.7 Inrush Current/最大浪涌电流:	60 A Max .@100VAC (Cold start/冷启动)		
	90 A Max .@230VAC (Cold start/冷启动)		
1.8 Leakage current/最大漏电流:	0.25mA Max		

2. Output characteristics/输出特性

2.1 Output voltage/输出电压:	24 V
2.2 Max. load current/最大负载电流:	2.9 A
2.3 Min. load current/最小负载电流:	0 A
2.4 Output noload voltage/输出空载电压:	24 V± 5%
2.5 Output full load voltage/输出满载电压:	24 V± 5%
2.6 Output ripple & noise/输出纹波与噪声:	300 mV max.

Note: 1. output voltages shall be measured at output connector.

2. Ripple measurements shall be made with an oscilloscope of at least 20 MHz bandwidth. Output shall be bypassed at the connector with a 0.1uF ceramic disk capacitor and a 10uF electrolytic capacitor to simulate system loading at temperature 25°C.

1.输出电压要求测试连接输出端。

2.纹波测试要求在环境温度25度情况下示波器频宽在20MHz以下，量测输出连接端并联一个10uF电解电容与0.1uF的独石电容。

3. General characteristics/一般特性

3.1 Total output power/额定总输出功率:	69.6 Watts
3.2 Average Efficiency / 平均效率:	While input 115Vac and 230Vac,the average efficiency is more than 89.00% .The test point is at10% 25%,50%,75% and 100% load after 30 min warm up at max load.comply must with requirements level VI 在输入115Vac和230Vac条件下，平均效率不小于 89.00% 测试点分别是最大载的10%25%, 50%, 75% 和 100%. 测试要求电源满载预热30分钟测试. 必需符合能效六等级要求。
3.3 Short circuit protection/短路保护:	A Short circuit placed on DC output shall cause no damage or auto-recovery the power supply. 输出短路时电源不会损坏或自动还原供电。
3.4 Over Voltage Protection/过压保护:	When overvoltage occurs on DC output shall cause no damage or auto-recovery the power supply. 输出过压发生时电源不会损坏或自动还原供电。

4. Environment/环境:

- 4.1 Operating temperature/:操作温度 0~40°C
- 4.2 Storage temperature/:存储温度 -25°C to 70°C
- 4.3 Operating humidity/:环境湿度 8% to 90%
- 4.4 Storage humidity/:存储湿度 5% to 95%

5. Application safety standard : meet/应用安全标准

- | | | | | |
|-----------------------------------|-----------------------------------|--|---------------------------------|---------------------------------|
| ☐ UL 60950 | ☐ EN 60950 | ☐ AS/NZS 60950 | ☐ J60950 | ☐ K60950 |
| ☐ UL 60065 | ☐ EN 60065 | ☒ AS/NZS 60065 | ☐ J60065 | ☐ Brazil |
| ☐ UL 1310 | ☐ EN 60335 | ☐ GB4943 | ☐ J61558 | |
| | ☐ EN 61558 | ☐ GB8898 | | |

6. EMC standard /电磁干扰标准:

6.1 EMI standard / EMI 标准:

- | | | |
|--|--|---------------------------------|
| ☐ FCC Part 15 Class B | ☐ GB 9254-2008 | ☐ J55022 |
| ☒ EN 55032: 2015 | ☐ GB 17625.1-2012 | ☐ J55013 |

6.2 EMS standard / EMS 标准:

- | | |
|--|---|
| ☒ EN 61000-4-2/ESD静电耐受测试 | ☒ EN 61000-4-5/Surge点击波耐受测试 |
| ☒ EN 61000-4-3/RS辐射场强耐受测试 | ☒ EN 61000-4-6/CS传导场强耐受测试 |
| ☒ EN 61000-4-4/EFT/Burst瞬间脉冲耐受测试 | |

7. HI-POT test/高压测试

- (1) Primary to secondary/:初级对次级 3000VAC for 3sec. 5mA(production testing)
- 3000VAC for 1min. 5mA(Sample testing)
- (2) Primary to case/:初级对外壳 3000VAC for 3sec 5mA(Production test)
- (only for metal case)/只适用于金属外壳

8. Insulation resistance /绝缘电阻

- Input to output/输入对输出: >10Mohm.@500VDC

9. Reliability:/ 可靠性

- 9.1 MTBF/平均故障间隔时间: 50K hours min. @full load at 25°C ambient temperature.

- 9.2 Burn-in/烘烤: 2-4hours,25~45°C ,Input 220VAC,Output 100% load .

- 9.3 Altitude: Will operate properly at altitude between 0 to 6000ft

正常运转在0到6000英尺之间的高度.

10. Mechanical/ 机械结构

10.1 Dimensions/尺寸:Please see the mechanical dimension drawing./请参见机械尺寸图

10.2 Weight/重量: 255 g

11. Mechanical specification/机械参数:

11.1 Drop test/落地测试: The height of 1 M,frequency 1 drop per face.

dropping surface on concrete floor judgment standard:No function fail & no cabinet joint broken.

11.2 Bending test: With load 200g, then bend ± 60 degree at ratio of 45times/minute.

摇摆试验:吊重200 g,折弯 ± 60 度,频率45次/分钟.

16AWG	-----	5000cycles Min
18AWG	-----	4500cycles Min
20AWG	-----	2400cycles Min
22AWG	-----	2000cycles Min
24AWG	-----	1500cycles Min
26AWG	-----	1000cycles Min

11.3AC plug drawing/输入插头图面: Attached/附图

11.4AC cable drawing/输入线图面: Attached/附图

11.5DC cable drawing/输出线图面: Attached/附图

11.6Outline drawing/外观图面: Attached/附图

11.7Lable drawing/铭牌图面: Attached/附图

11.8Package drawing/包装图面: Attached/附图

SAMPLE PRIMARY TEST REPORT/样品初测报告

MODEL NO./产品型号: GPE060D-240290D

TEST BY/测试人: 沈忠伟

Test Items./测试项目	Test Condition/测试条件	Unit/单位	Sample quantity and test result/样品数量和测试结果										Pass /Fail
			1#	2#	3#	4#	5#	6#	7#	8#	9#	10#	
Unload output voltage/ 空载输出电压 (0.0A) 22.8vdc - 25.2vdc	90Vac	V	24.14	24.09									PASS
	115Vac	V	24.14	24.09									PASS
	230Vac	V	24.14	24.09									PASS
	264Vac	V	24.14	24.09									PASS
Rated load output voltage/ 额定负载输出电压 (2.9 A) 22.8vdc - 25.2vdc	90Vac	V	23.86	23.77									PASS
	115Vac	V	23.86	23.77									PASS
	230Vac	V	23.86	23.77									PASS
	264Vac	V	23.86	23.77									PASS
Output ripple & noise voltage (Full load)/输出 纹波及噪声 电压 (满载) ≤ 300mV	90Vac	mV	124	129									PASS
	115Vac	mV	119	121									PASS
	230Vac	mV	156	133									PASS
	264Vac	mV	147	139									PASS
Short-circuit protection test/短路保护测试	90Vac	W	1.11	1.14									PASS
	264Vac	W	1.07	1.09									PASS
Over current protection/ 过流保护点 (≥ 3.48 A)	90Vac	A	4.00	4.00									PASS
	264Vac	A	3.70	3.70									PASS
IC Vcc voltage test/ Vcc电压测试 (规格≤ 27V)	90Vac	V	18.15	18.17									PASS
	264Vac	V	18.15	18.19									PASS
Hi-pot test/介电强度	4242Vdc/5mA/ 1Minute		OK	OK									PASS
Appearance/外观	无刮伤,字迹清晰 无误		OK	OK									PASS
Mosfet (IC) /Vds耐压测试	264Vac		V	549	Mosfet规格		650		Derating ≤ 95% Max. Volt.		84.46%		PASS
输出肖特基D/Vrr耐压测试	264Vac		V	123	Diode规格		150		Derating ≤ 90% Max. Volt.		82.00%		PASS
变压器反饋绕组上所连接电 阻 (R) 功率损耗(PD)	90Vac		P	-	R (功率) 规格		-		Derating ≤ 65% Max Power		-		PASS
	264Vac		P	-	R (功率) 规格		-		Derating ≤ 65% Max Power		-		PASS

DOE level VI/COC V5 Tier 2 test/能效测试

MODEL NO./产品型号: GPE060D-240290D

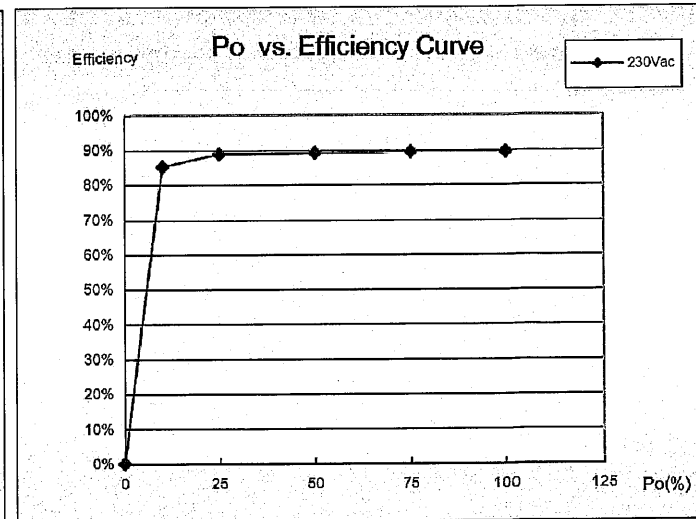
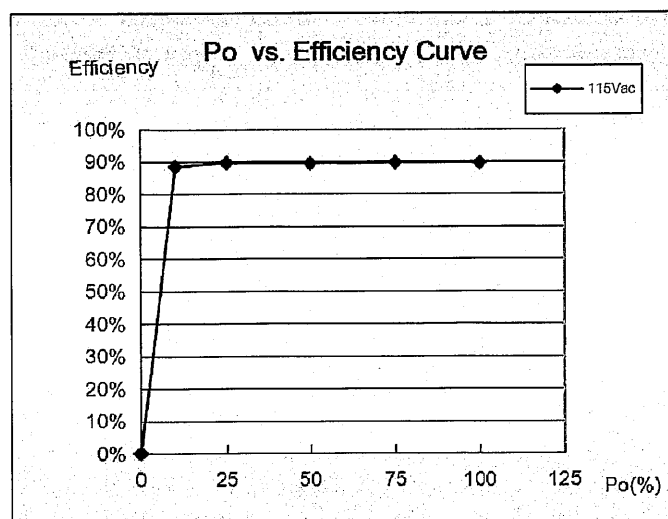
TEST BY/测试人: 沈忠伟

Environment : ● Ambient ○ High ○ Low : 25°C

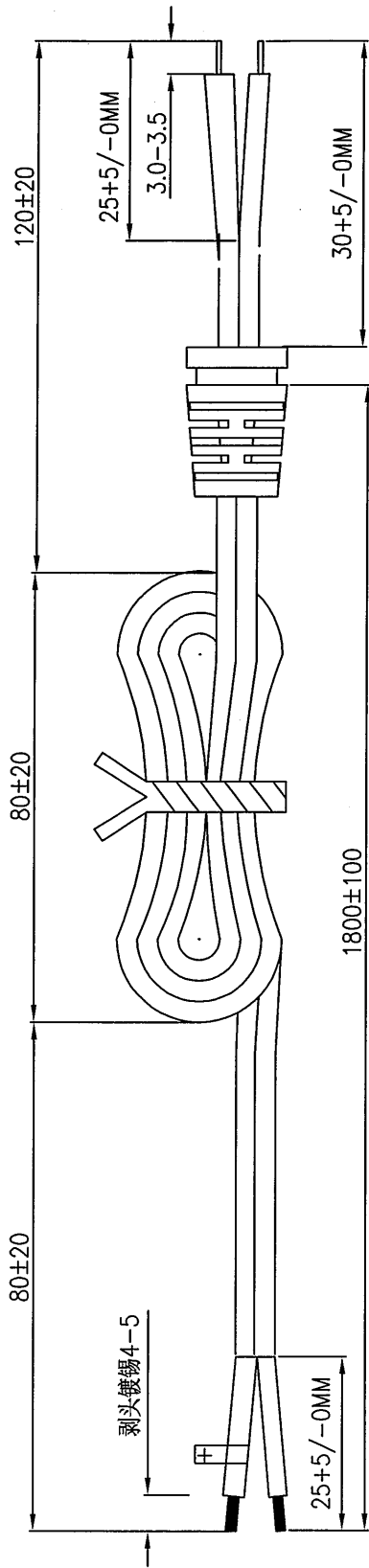
Test Condition: Vac=115V/230V ,Load :0~100% step Load :25%

1 Vin: 115Vac/60Hz							
Load (%)	Vout(V)	Iout(A)	PF	Pin(w)	Po(w)	Efficiency	Result
0	24.07	0.000	---	0.06	0	0.00%	PASS
10	24.12	0.290	---	7.91	6.9948	88.43%	PASS
25	24.07	0.725	---	19.49	17.45075	89.54%	---
50	24.00	1.450	---	38.96	34.8	89.32%	---
75	23.93	2.175	---	58.09	52.04775	89.60%	---
100	23.86	2.900	---	77.36	69.194	89.44%	---
				Average 89.48% PASS			
Po_typical (w)				69.6	10% load	79.00%	
				Spec. 89.00% VI			

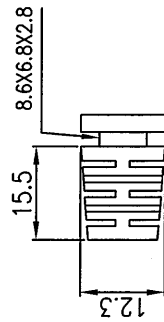
1 Vin: 230Vac/50Hz							
Load (%)	Vout(V)	Iout(A)	PF	Pin(w)	Po(w)	Efficiency	Result
0	24.10	0.000	---	0.09	0	0.00%	PASS
10	24.12	0.290	---	8.21	6.9948	85.20%	PASS
25	24.07	0.725	---	19.64	17.45075	88.85%	---
50	23.99	1.450	---	39.01	34.7855	89.17%	---
75	23.93	2.175	---	58.19	52.04775	89.44%	---
100	23.86	2.900	---	77.31	69.194	89.50%	---
				Average 89.24% PASS			
Po_typical (w)				69.6	10% load	79.00%	
				Spec. 89.00% VI			



版本	变更内容	变更人	变更时间



线材规格：黑色 18# SPT-1



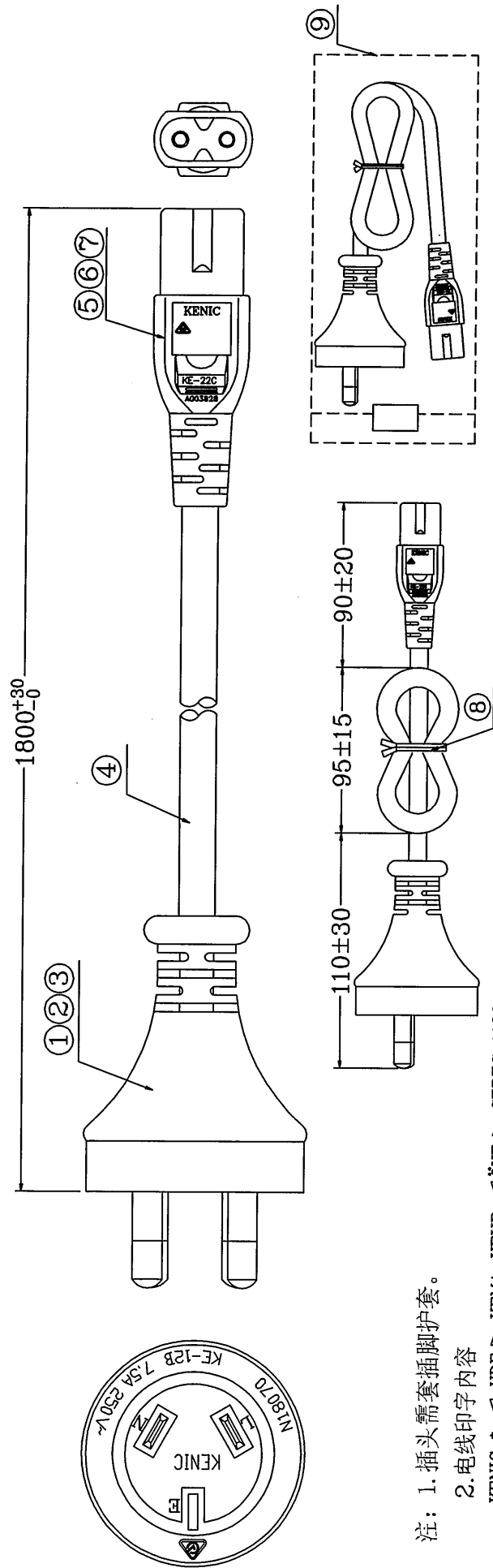
SR规格:

编号: YX951

材质: 65+/-5P PVC 黑色

技术要求:

1. 线材SR/DC头可靠性测试依据: 《进料检验标准附件8》
2. 产品必须符合ROHS+PAHS+16P+PR65+Dphp:53306_54_0管控要求。
3. 注意公差要求。



注：1. 插头需套插脚护套。

2. 电线印字内容

KENIC * < VDE > KEMA-KEUR < ØVE > CEEC 1139

+ 0 + 0 + 0 IEMMEQU < Ø > NF-USE

1327 KELF-75 N15075 H03VVH2-F 2X0.75mm²

300/300V RŠ

特殊要求备注：

1. 每条电线用一头通PE袋103(W)X290(L)mm包装并用透明胶纸封口。

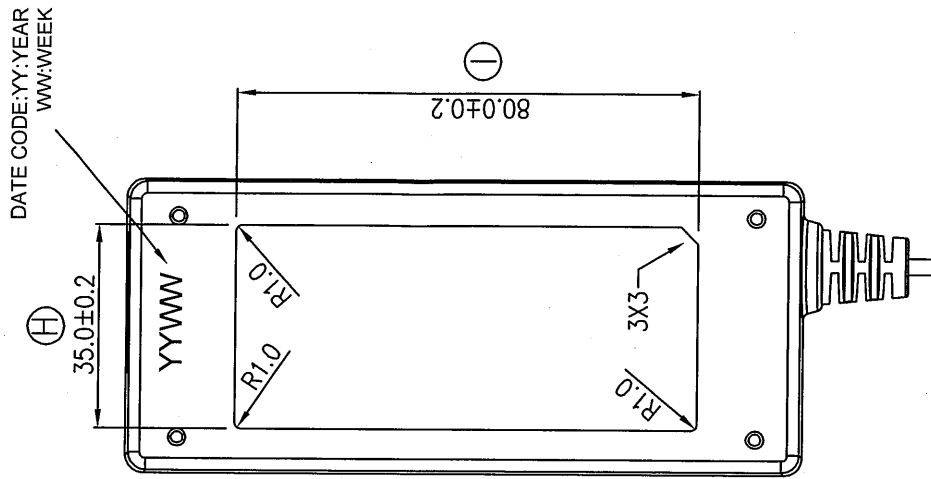
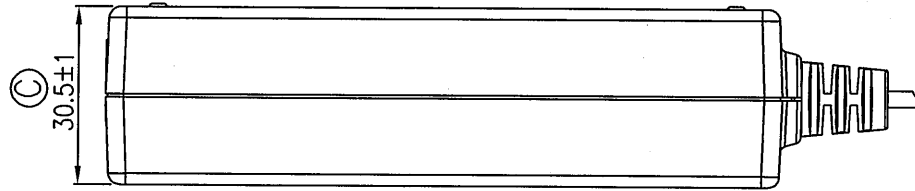
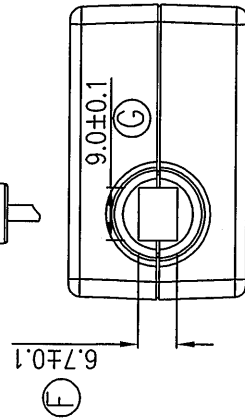
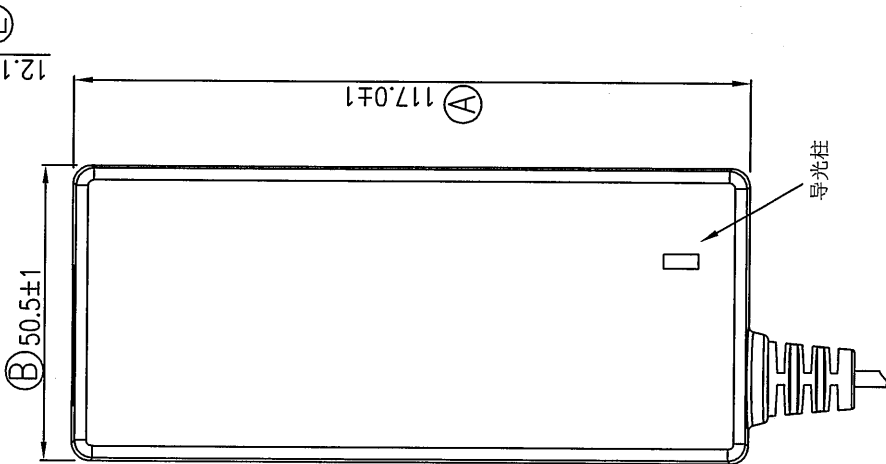
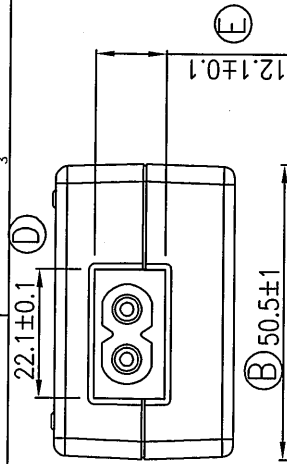
2. 环保要求：符合ROHS, REACH (各项SVHC<1000PPM)

9	PE布袋	——	一头通PE袋103(W)X290(L)mm		
8	扎带	——	PE扎带	1PCS	黑色
7	外模	KPBK00104EX0	KE-22C(SAA)注塑外模 PVC	——	黑色
6	内套	KHPPCBK00013	内套	1PCS	黑色
5	端子	KMA2Q0110059	ø3.05梅花磷铜端子	2PCS	——
4	电线	KWBK00102DX0	H03VVH2-F 2X0.75mm ² 3k(印字)	1785 ^{±5} ₋₀	黑色
3	外模	KPBK00104EX0	KE-12B(澳洲 SAA)注塑外模 PVC	——	黑色
2	内套	KHPPBBK00006	内套	1PCS	黑色
1	五金插脚	KMA1C0050202	SAA半绝缘铜片	2PCS	——
序号	名称	物料料号	描述	数量	颜色
				2	3

选择	颜色	料号
●	黑色	10-060D-0001
	白色 (183436)	10-060D-0002
	苹果白 (AB301))185669	10-060D-0003
	AB30	

未标尺寸参考 3D
材料: PC
纹面与光面参照样板

版本	变更内容	变更人	变更时间



1

2

3

4

5

6

版本	变更内容	变更人	变更时间

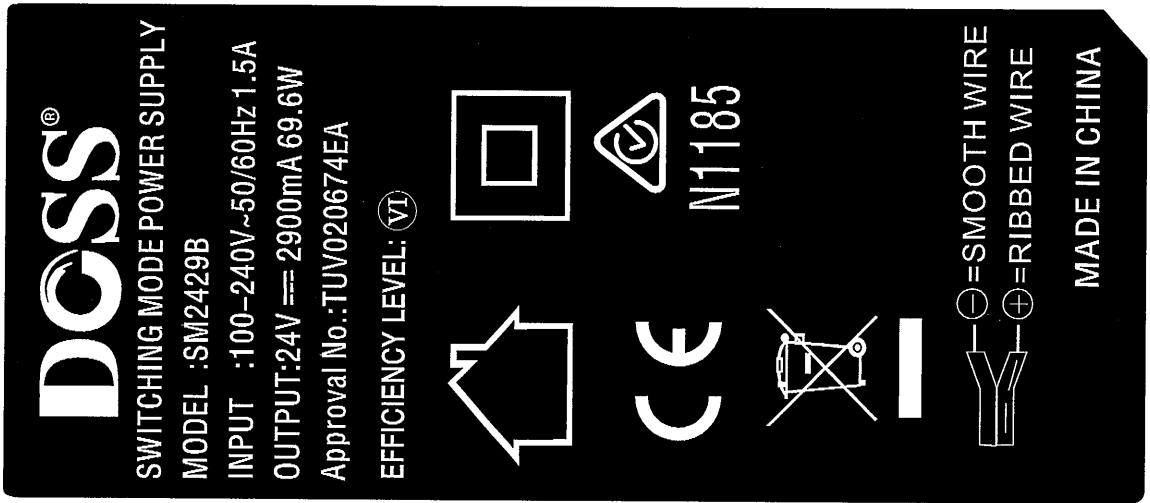
A

B

C

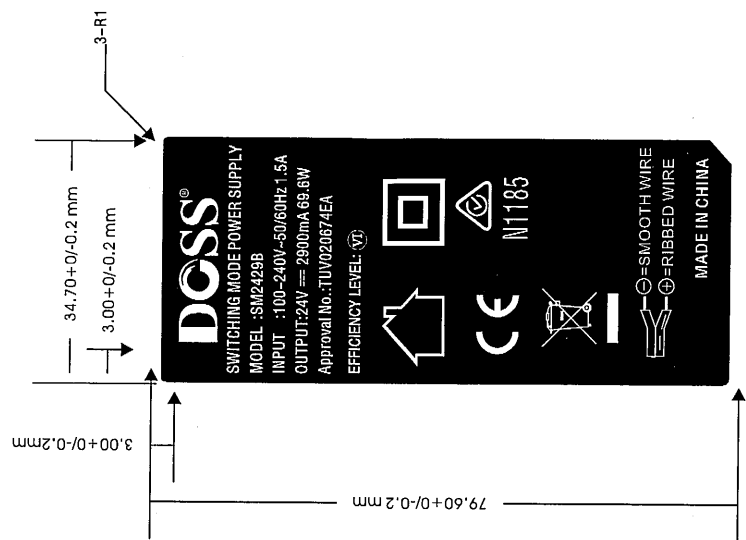
D

E



此图放大2:1

注：版面为黑底白字
材质为100#白亮特多龙+雾面
耐温80℃
厚度为0.13±0.01mm



此图为1:1之图型模板

1

2

3

4

INSTRUCTION MANUAL

说明书

Please keep reading the following safety notes before use or examination.

使用或检验前需细读下列安全说明:

i). Primary technical specification of the marking on the product.

产品铭牌上标识的主要技术参数:

Model型号: GPE060D-240290D

Input输入: 100V-240V~50/60Hz 1.5 A

Output输出: 24 V $\equiv$ 2900 mA

Total output power/额定功率: 69.6 W

ii). Operation instruction

使用说明:

1. The product is used only within doors or at the dry location.

本产品仅适用于户内或干燥处使用。

2. Don't store or use this product in the erodent condition.

不要在有腐蚀性的环境中存放或使用此产品。

3. The ambient temperature around the product must be kept for room temperature because overcool can effect on the feature and working life of product.

产品周围环温应保持在室温状态, 应避免过热过冷, 以免影响产品性能与寿命。

4. According to the technical specification of product, it must be connected with correct power input and specified out put load or terminal appliance so that it can't be broken. Pay attention to the input voltage & frequency.

请依据产品的技术指标要求, 正确接通电源, 指定负载或终端产品, 以免损坏产品。尤其要注意输入电压与频率的匹配。

5. The disconnection from line voltage is taken by pulling the mains plug.

若需断电, 请从插座处拔出产品电源插头。

6. The product is not intended to be repaired by service personnel in case of failure including component defect of crack of the enclosure and external flexible cord damaged etc, it must be discarded.

如果产品出现故障如元件损坏, 外壳裂开, 引出线身损伤等, 则不可维修再用, 必须报废。

7. If you have any technical question, please do not hesitate to consult he supplier directly.

如有技术疑难, 请直接咨询产品供应商。

8. Fuses replaceable only by service personnel.

保险管的更换必须由专业维修人员完成。