

SPECIFICATION FOR APPROVAL

Customer : RCS Components LTD.
 Product name : AC ADAPTER (电源适配器)
 Customer Model No. :
 Customer Part No. :
 Supplier Model No. : FAP018-120S150E2
 Supplier Part No. :

CUSTOMER APPROVED SIGNATURE

Approved by:	Checked by:	Tested by:
Explain: Please return to us "SPECIFICATION FOR APPROVAL" with your approved signatures. (承认书确认后请回签一份)		

Supplier approval signature:

Prepared by:	Checked by:	Approved by:
加建林 2010.11.24	[Signature] 2010.11.24	[Signature] 2010.11.24



深圳市福瑞祥电器有限公司恒丰分厂
 SHENZHEN FEREX ELECTRICAL CO., LTD.

地址: 中国广东省深圳市宝安区西乡街道恒丰工业城 B7 栋 4-6 楼

Add: 4-6F, B7 Building, Hengfeng industrial park, Huangtian village, Xixiang town, Bao'an district, Shenzhen, Guangdong, China.

Tel: (0755) 27474030 27474044, 27474067, 27474073

Fax: (0755)27474076

E-mail: hiliu@ferex.com.cn

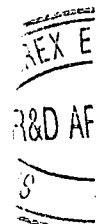
Website: <https://www.ferex.com.cn>

Table of contents

No.	Content	Page
0.	Revision control list	2
1.	Scope	3
2.	Input characteristics	3
3.	Output characteristics	3
4.	Energy Efficiency	3
5.	Protection characteristics	4
6.	Safety & EMC Standard	4
7.	Reliability & Quality control	4
8.	Environmental requirement	5
9.	Other requirements	5
10.	Mechanical characteristics:	5
11.	Certificate:	5
	APPENDIX A: Physical Dimensions	6
	APPENDIX B: Nameplate	7
	APPENDIX C: Packing	8
	APPENDIX D: Certificate	9

O. Revision control list:

Date	Description of Change	Revised by	Checked by	Approved by
2010-11-24	First release	贺彬	黄景东	刘红军



PRED. by	Hebin 2010-11-24	 福瑞祥 F E R E X	SHENZHEN FEREX ELECTRICAL CO.,LTD.	
CHKD. by	Hardy2010-11-24		Model: FAP018-120S150E2	Rev.:1.0
APVD. by	HJ.LIU 2010-11-24			

5. Protection characteristics

Input fuse	<input checked="" type="checkbox"/> T1A 250Vac Fuse <input type="checkbox"/> 4.7R/1W Wire-wound Fuse-resistor
Short-Circuit protection	The adapter must withstand a continuous short circuit on the output without damage and Auto-recovery when short-circuit moved.
Over-Current protection	In Overload mode, The output must drop to a low voltage.
Over-Voltage protection	Single component failure must not cause output voltage over <u>22V</u> , at <u>230</u> Vac input & <u>1.5A</u> output current,

6. Safety & EMC Standard

The adapter designed to meet the following standards:

Safety standards	<input type="checkbox"/> (CHINA) CCC GB4943-2001 <input type="checkbox"/> (CHINA) CCC GB8898-2001 <input type="checkbox"/> (U.S.) UL 60950-1, 2007 <input type="checkbox"/> (U.S.) UL 60065-1, 2007 <input checked="" type="checkbox"/> (CE) LVD 2006/95/EC Directive IEC 60950-1/EN 60950-1 <input type="checkbox"/> (CE) LVD 2006/95/EC Directive IEC 60065/EN 60065
EMC Standards	<input type="checkbox"/> (CHINA) CCC GB9254-2008 <input type="checkbox"/> (CHINA) CCC GB13837-2003 <input type="checkbox"/> (CHINA) CCC GB17625.1-2003 <input type="checkbox"/> (U.S.) FCC part 15 Class B /ICES-003:CLASS B <input checked="" type="checkbox"/> (CE) EMC 2004/108/EC Directive EN55022/EN55024/EN61000-3-2:2006/EN61000-3-3 <input type="checkbox"/> (CE) EMC 2004/108/EC Directive EN55020/EN55013/EN61000-3-2:2006/EN61000-3-3
Hi-Pot	Primary To Secondary: <u>3000Vac 10mA</u> 1 minute or <u>4242Vdc 10mA</u> 1 minute.
Insulation Resistance	Primary To Secondary: <u>10M ohm</u> Min. at <u>500Vdc</u> .
Leakage Current	0.25mA Max. at 100-240 Vac input / 50-60Hz

7. Reliability & Quality control

Item	Requirement
MTBF	<u>>20000</u> Hours at 25°C (Standard: MIL-HDBK-217F), <u>230</u> Vac input & <u>80%</u> Normal output current.
Burn-In	The power supply shall withstand a minimum of <u>2</u> hours Burn-In test at <u>230</u> Vac input & Normal output current with 35-40 °C room temperatures. After test, product shall operate normally.

PRED. by	Hebin 2010-11-24	 SHENZHEN FEREX ELECTRICAL CO.,LTD.		
CHKD. by	Hardy2010-11-24			
APVD. by	HJ.LIU 2010-11-24	Model: FAP018-120S150E2	Rev.:1.0	Page4 Of 9

8. Environmental requirement

Item	Requirement
Operating Environmental	Temperature: 0°C - 40 °C Relative Humidity: 20%-85%,noncondensing Altitude: Sea level to 2,000 M.
Storage (Non-operating) Environmental	Temperature: -20°C - 60°C Relative Humidity: 5%-95%,noncondensing Altitude: Sea level to 2,000 M.
Cooling	Natural convection cooling
Vibration and Shock	(Non-operating, with packing) Reference to IEC 68-2-6 Frequency: 5-500 Hz Sweep:2houre,each axis (X, Y, Z) Acceleration: 0.6G (5~50 Hz, peak - peak), 1.5G (50~500 Hz, peak - peak) Displacement: 0.4 mm (5~50 Hz)

9. Other requirements

Item	Requirement
Hazardous substances	The components and materials shall be in compliance with <input checked="" type="checkbox"/> EU Directive 2002/95/EC "ROHS" <input checked="" type="checkbox"/> EU Directive 2002/96/ec "WEEE"

10. Mechanical characteristics:

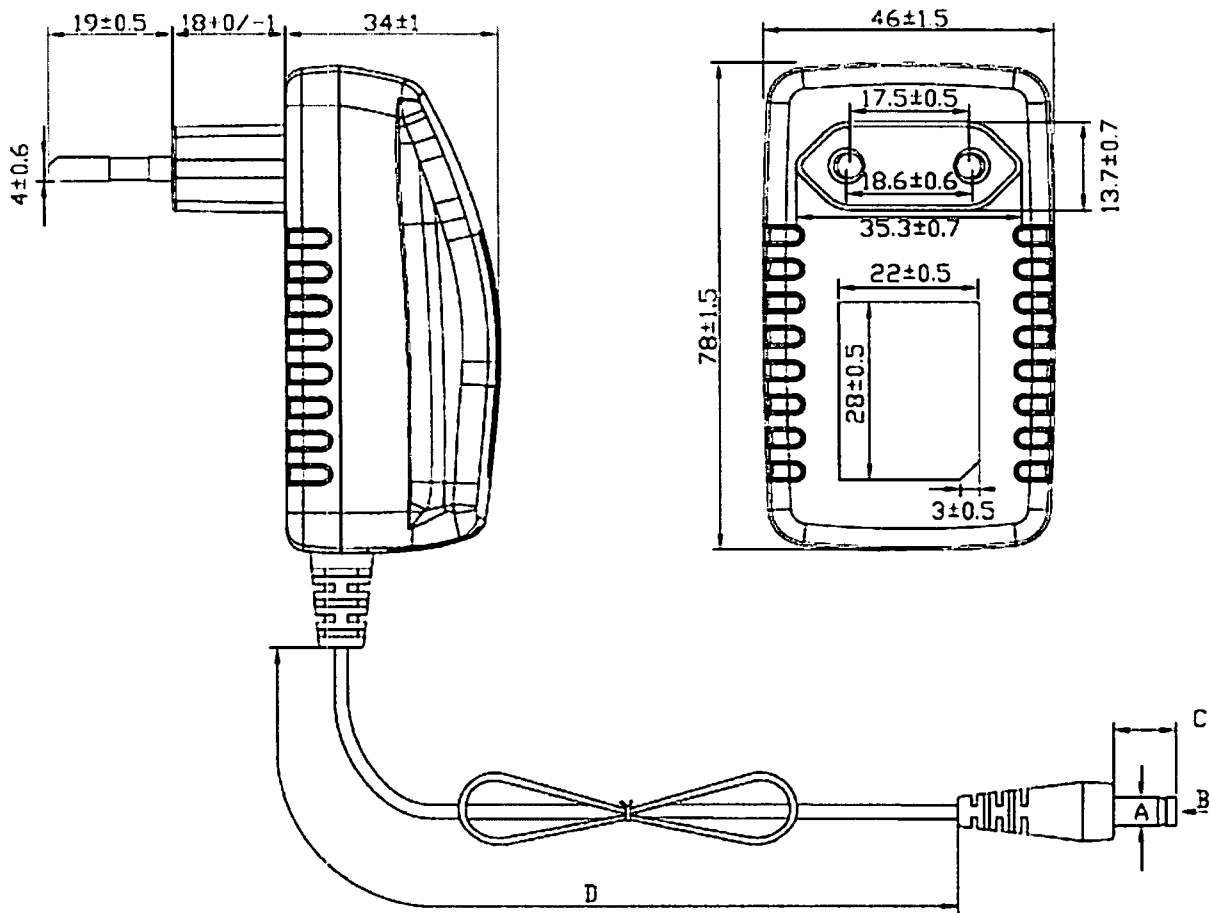
Item	Requirement
Drop test	Dropped freely from 1 m(for wall mount product) height onto the surface is consisted of hardwood 13 mm thick, mounted on two layers of plywood each 19-20 mm thick, all supported on concrete floor once from 3 different surfaces. After testing, the product should not be damaged.
Physical dimensions	The detail dimension of product see APPENDIX A.
Input plug type	<input type="checkbox"/> Wall-mount type, CCC-pin, 2 Conductors, <Live, Neutral> <input checked="" type="checkbox"/> Wall-mount type, EU-pin, 2 Conductors, <Live, Neutral> <input type="checkbox"/> Wall-mount type, US-pin, 2 Conductors, <Line, Neutral>
Output cord	Wire: <u>UL2468 22AWG/2C 1500mm Black</u> Plug: (OD) <u>5.5mm</u> *(ID) <u>2.1mm</u> *(length) <u>10mm</u> Center (+) <u>180°</u>
Nameplate	The detail information of Nameplate see APPENDIX B.
Packing	The detail information of packing see APPENDIX C.

11. Certificate:

Type of Certificate	<input type="checkbox"/> CCC <input checked="" type="checkbox"/> CE <input type="checkbox"/> GS <input type="checkbox"/> FCC <input type="checkbox"/> UL The detail Certificate of product see APPENDIX D.
---------------------	---

PRED. by	Hebin 2010-11-24	 福瑞祥 SHENZHEN FEREX ELECTRICAL CO.,LTD. F E R E X		
CHKD. by	Hardy2010-11-24			
APVD. by	H.J.LIU 2010-11-24	Model: FAP018-120S150E2	Rev.:1.0	Page5 Of 9

APPENDIX A: Physical dimensions



	ϕA	ϕB	C	D
DIMENSION	5.5	2.1	10	1500
TOLERANCE	± 0.1	$+0.1 / - 0$	± 0.5	Nor
REMARK	UL2468 22AWG/2C 300VAC 80°C BLACK			

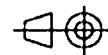
DESCRIPTION
REVISER
DATE

FAP018-VDE
REV A0
2010-11-24

DESIGN BY:
CHECKED BY:
APPROVED BY:

SHENZHEN FEREX ELECTRICAL.,LTD

Hebin



UNIT: MM

PRED. by Hebin 2010-11-24

CHKD. by Hardy2010-11-24

APVD. by HJ.LIU 2010-11-24



福瑞祥
FEREX

SHENZHEN FEREX ELECTRICAL CO.,LTD.

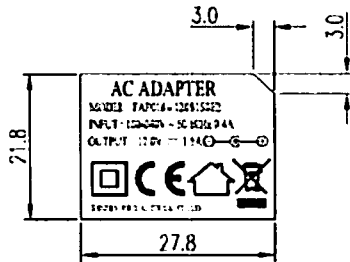
Model: FAP018-120S150E2

Rev.:1.0

Page6 Of 9

APPENDIX B: Nameplate

FILE NAME :



AC ADAPTER

MODEL : FAP018 - 120S150E2

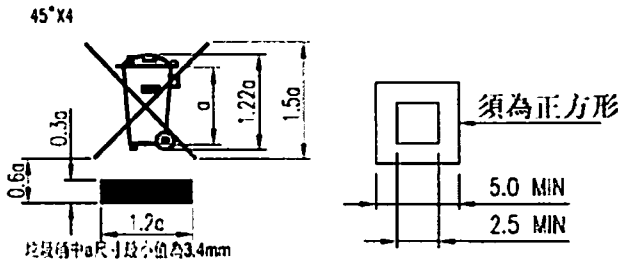
INPUT : 100-240V ~ 50/60Hz 0.4A

OUTPUT : 12.0V $\overline{\text{---}}$ 1.5A \ominus \oplus

SHENZHEN FEREX ELECTRICAL CO., LTD

NOTES:

1. SCALE: 1/1;
2. Thickness: 0.1~0.2mm;
3. Tolerance +0/-0.2;
4. Material: 8#PP synthetic paper or better;
5. COLOR: (WHITE CHARACTERS ON BLACK);
6. OPERATING TEMPERATURE: -20°C-80°C.

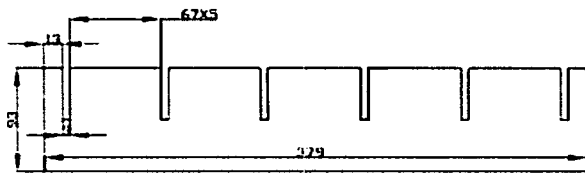


Department	Signature
Safety	
Sales	

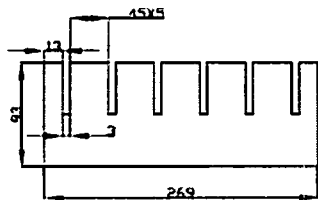
					UNIT	TOLERANCE: X ± 3	XX ± 1
					SCALE	1:1	ISSUED DATE 2010-10-11
					DRAWN BY	Wang Peng	CHECKED BY
REV.	DATE	DESCRIPTION	ECN NO.	DESIGNED BY	APPROVE BY		
ITEM NO. :				DRAWING NO		SHEET	

PRED. by	Hebin 2010-11-24	福瑞祥 SHENZHEN FEREX ELECTRICAL CO.,LTD.			
CHKD. by	Hardy 2010-11-24		Model: FAP018-120S150E2	Rev.: 1.0	Page 7 Of 9
APVD. by	HJ.LIU 2010-11-24				

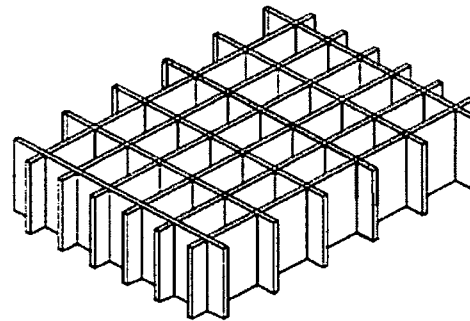
APPENDIX C: Packing



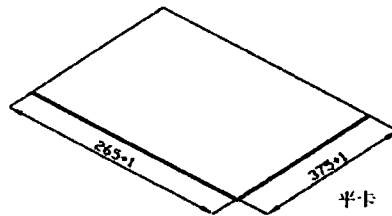
刀卡1 (5刀卡)



刀卡2 (5刀卡)

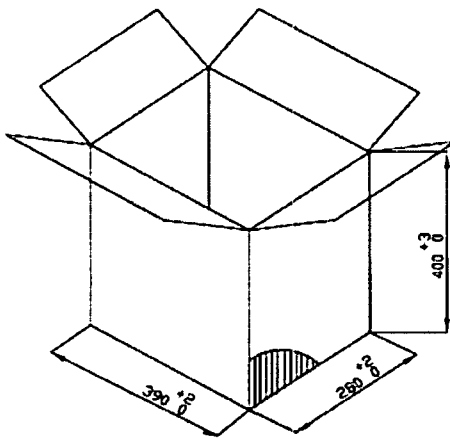


刀卡组表示意图



平卡

平卡



卡运箱

箱唛

NOTE:

1. 纸箱材质为A=A, 每箱4层, 每层25台, 共计100台, 标示尺寸(390MM X 280MM X 395MM) 为外尺寸;
2. 平卡材质为B3B, 数量: 5片;
3. 刀卡1: 材质为B3B, 数量: 20片;
4. 刀卡2: 材质为B3B, 数量: 20片;
5. 注意波纹方向, 勿沿纹路纵向切割;
6. 接口钉合;
7. 进料前需先送样承认OK方可;
8. 使用材料要符合环保要求, 禁止使用危害物质;
9. 尺寸以标注为准, 切勿实际测量;
10. 刀卡的公差为1mm.

<p>福瑞祥 FEREX 开关电源·适配器 SMPS & ADAPTER</p> <p>深圳市福瑞祥电器有限公司 SHENZHEN FEREX ELECTRICAL CO., LTD.</p> <p>地址: 深圳市宝安区西乡街道铁岗社区铁岗工业区11栋101室 ADD: No. 1101 Industrial Park, (Bao'an) District, Shenzhen</p>	<p>型号(MODEL): _____ 数量(QTY): _____ PCS 规格(SIZE): 390x280x395 MM</p> <p>空箱回收</p>	<p>福瑞祥 FEREX 开关电源·适配器 SMPS & ADAPTER</p> <p>深圳市福瑞祥电器有限公司 SHENZHEN FEREX ELECTRICAL CO., LTD.</p> <p>地址: 深圳市宝安区西乡街道铁岗社区铁岗工业区11栋101室 ADD: No. 1101 Industrial Park, (Bao'an) District, Shenzhen</p>	<p>型号(MODEL): _____ 数量(QTY): _____ PCS 规格(SIZE): 390x280x395 MM</p> <p>空箱回收</p>
--	--	--	--

390MM

280MM

SHENZHEN FEREX ELECTRICAL.,LTD

DESCRIPTION	FAP018-120S150E2 包装箱	DESIGN BY:	
REVISER	REV A0	CHECKED BY:	
DATE	2010-07-27	APPROVED BY:	



UNIT: mm

PRED. by Hebin 2010-11-24

CHKD. by Hardy 2010-11-24

APVD. by HJ.LIU 2010-11-24



福瑞祥
FEREX

SHENZHEN FEREX ELECTRICAL CO.,LTD.

Model: FAP018-120S150E2

Rev.:1.0


Page8 Of 9



SHENZHEN SETEK TECHNOLOGY CO., LTD.

Declaration of Conformity

Certificate Number: LVD0704029

Applicant : SHENZHEN FEREX ELECTRONICS CO., LTD
 Address : 4-6F, Block B7, HengFeng Industrial Town, HeZhou, XiXiang,
 Shenzhen, China
 EUT : AC adapter
 Trademark : FEREX, , HUSHAN, METRONIC
 M/N : FAP018-XXSYYYE2 ("018" represent 18W series, the max output power is 18W; suffix "XXX" could be 030-300, represent output voltage is 3V-30V, the step voltage is 0.1V, "YYY" could be 050-300, represent output current is 0.5A-3.0A, the step current is 10mA)
 Manufacturer : SHENZHEN FEREX ELECTRONICS CO., LTD
 Address : 4-6F, Block B7, HengFeng Industrial Town, HeZhou, XiXiang,
 Shenzhen, China

Complies with the requirements of the
 EC LVD directive 2006/95/EC with amendments.

Test Standards:

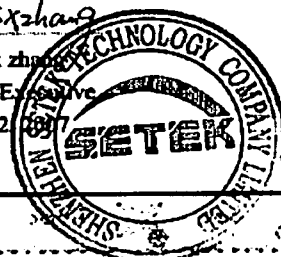
EN60950-1: 2006 Information technology equipment - safety -
 part 1: General requirements

Remarks:

The CE markings as shown below can be affixed on the product after preparation of necessary conformity documentation, as stipulated in article 10 of the Council Directive 93/68/EEC.



Phenix zhang
 Phenix zhang
 For Chief Executive
 June 02, 2010



PRED. by	Hebin 2010-11-24	 福瑞祥 SHENZHEN FEREX ELECTRICAL CO.,LTD. F E R E X		
CHKD. by	Hardy2010-11-24			
APVD. by	HJ.LIU 2010-11-24	Model: FAP018-120S150E2	Rev.:1.0	Page9 Of 9