



全漢企業股份有限公司

安規證書

料號 :
Model Name : FSP180-AJBU3,FSP180-ACBU3
版次 : 01
文件編號 : SFD-00007211
作者 : doration/田婷瑋(FSP)
Model No/Type : FSP180-AJBU3,FSP180-ACBU3
SFA NO. : SFA21121025,SFA211111082
Trade mark : -
安規種類 : KC/資訊類
發行日期 : 2022/01/19 13:40:22
備註 : NEW



안전인증서 Safety Certificate

안전인증번호: HU10142-22236A
(Certificate No.)

제조업자/수입업자명: Zhonghan Electronics (Shenzhen) Co.,Ltd.
(Manufacturer/importer)

주 소: Building A2 in Section A, Building 4,6,7 in Section C, JuYuan Industrial Zone, TangWei Village, FuYong Town, BaoAn Dist., Shenzhen City, Guangdong, China
(Address)

제 품 명: 직류전원장치
(Product)

기본모델명: FSP180-AJBU3
(Basic Model)

파생모델명 (Series Model):
FSP180-ACBU3

정격/안전기준상의 모델구분: 100-240 V~, 50-60 Hz, 2.4 A (O/P: 19.5 Vdc, 9.23 A)
(Rating)

시험기준: K 60950-1(2011-12)
(Standard)

본 인증서는 **제 조 국 명:** 중국

제조업자명: Zhonghan Electronics (Shenzhen) Co.,Ltd.

제조공장의 주소: Building A2 in Section A, Building 4,6,7 in Section C, JuYuan Industrial Zone, TangWei Village, FuYong Town, BaoAn Dist., Shenzhen City, Guangdong, China

다수 공장의 명: [별첨]의 제품에만 해당함

「전기용품 및 생활용품 안전관리법 시행규칙」 제9조제2항, 제4항, 제10조제2항 또는 제15조제2항에 따라 안전인증서를 발급합니다.

We issue this Safety Certificate for the above appliances in accordance with the Article 9(2), 9(4), 10(2) or 15(2) of the Enforcement Rule of the Electrical Appliances and Consumer Products Safety Control Act.



2022 년 01 월 12 일
(Year) (Month) (Day)

한국기계전기전자시험연구원
Korea Testing Certification Institute



※ 이 인증서는 「전기용품 및 생활용품 안전관리법」에 따른 제품의 안전성 확인에 한정된 것이며, 그 밖의 다른 법률이 적용되는 제품의 경우에는 해당 법률에 따라 추가로 인증·허가 등을 받아야 합니다.

첨부서류	1. 전기용품의 안전관리부품 및 재질목록 (List of Critical Components)	
	2. 기본모델 · 파생모델의 내용 (Descriptions of the basic and series model)	
	3. 안전인증의 변경 현황 (Revisions Status)	

[별첨]

다수의 공장 현황(The status of Multiple Factories)

No	현황	
1	다수의 공장의 명(Name)	Wuxi SPI Technology Co., Ltd.
	주 소(Address)	No.96, XinMei Road, New District, Wuxi City, Jiangsu, China
	제조국명(Origin)	중국

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1.기본모델 · 파생모델의 내용(General Descriptions of Certified Products)

1.1 제품의 설명 (Product description)

인증제품의 개요는 다음과 같다.

(Information on certified basic model product is as follow)

구분(Section)	내 용 (Description)
용도 (Normal use)	The apparatus designed to be used for converting AC main voltage to DC low voltage.
내부구조 (Internal construction)	The apparatus consists of Switching transformer, rectifying part etc.
외부구조 (External construction)	Providing with plastic fire enclosure having min.V-1 flammability and appliance inlet.
기타(Others)	Class I.

1.2 전기용품의 표시: 전기용품 및 생활용품 안전관리법 시행규칙 제20조(안전인증의 표시)에 따라 표시한다.

(Marking of KC Mark: Marking shall comply with the Article 20 of the Enforcement Rule of the Electrical Appliances and Consumer Products Safety Control Act.)

1.3 등록모델 (Registered Models)

구 분 (Class)	모 델 명 및 정 격 (Model / Rating)		기본모델과의 차이점 (Difference between basic model and series model)
기본모델 (Basic model)	FSP180-AJBU3	100-240 V~, 50-60 Hz, 2.4 A (O/P: 19.5 Vdc, 9.23 A)	
파생모델 (Series model)	FSP180-ACBU3		Identical to basic model except for model designation and output rating(20 Vdc, 9.0 A)

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2. 안전관리 부품 및 재질목록(List of Critical Components)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Top plastic enclosure	Lotte Chemical Corporation	HN-1064(+)	Min. 1.7 mm thickness, min. V-0, min. 130 ℃	UL
Top plastic enclosure (alt)	SABIC JAPAN L L C	945(GG)	Min. 1.7 mm thickness, min. V-0, min. 120 ℃	UL
Top plastic enclosure (alt)	Formosa Chemicals & Fibre corp Plastics Div	AC3600	Min. 1.7 mm thickness, min. V-0, min. 130 ℃	UL
Bottom plastic enclosure	Lotte Chemical Corporation	HN-1064(+)	Min. 1.7 mm thickness, min. V-0, min. 130 ℃	UL
Bottom plastic enclosure (alt)	SABIC JAPAN L L C	945(GG)	Min. 1.7 mm thickness, min. V-0, min. 120 ℃	UL
Bottom plastic enclosure (alt)	Formosa Chemicals & Fibre corp Plastics Div	AC3600	Min. 1.7 mm thickness, min. V-0, min. 130 ℃	UL
AC Inlet (SC101) (C6 type)	Canal Electronic Co., Ltd.	KC-101 series	250 Vac, 2.5 A, 70 ℃	IEC
AC Inlet (SC101) (C6 type) (alt)	Rich Bay Co., Ltd.	R-30790	250 Vac, 2.5 A, 70 ℃	IEC
AC Inlet (SC101) (C6 type) (alt)	Solteam Electronics Co. Ltd.	ST-03	250 Vac, 2.5 A, 70 ℃	IEC
AC Inlet (SC101) (C6 type) (alt)	Zhe Jiang Bei Er Jia Electronic Go., Ltd.	ST-A04-001	250 Vac, 2.5 A, 70 ℃	IEC
AC Inlet (SC101) (C6 type) (alt)	Tecx-Unions Technology Corp.	TU-333	250 Vac, 2.5 A, 70 ℃	IEC
AC Inlet (SC101) (C6 type) (alt)	HCR Electronics Co., Ltd.	SK03	250 Vac, 2.5 A, 70 ℃	IEC
AC Inlet (SC101) (C6 type) (alt)	Inalways Corporation	0724 Series	250 Vac, 2.5 A, 70 ℃	IEC
AC Inlet (SC101) (C6 type) (alt)	Rong Feng Industrial Co., Ltd.	RF-190	250 Vac, 2.5 A, 70 ℃	IEC
Fuse (F101)	Littelfuse Inc.	392	250 Vac, T4.0 AL	IEC
Fuse (F101) (alt)	Suzhou Walter Electronic Co., Ltd.	2010 series	250 Vac, T4.0 AL	IEC
Fuse (F101) (alt)	Bel Fuse Ltd.	RST-series	250 Vac, T4.0 AL	IEC

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부품명 (회로기호) Components(Part no.)	제조사(상표명) Manufacturer (Brand)	모델명(형식) Model (Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Fuse (F101) (alt)	Conquer Electronics Co., Ltd.	MST-series	250 Vac, T4.0 AL	IEC
Fuse (F101) (alt)	Cooper Bussmann LLC	SS-5	250 Vac, T4.0 AL	IEC
Varistor (VA101) (optional)	Thinking Electronic Industrial Co., Ltd.	TVR10471-D, TVR10471-V, TVR10471-M, TVR14471, TVR14471-D, TVR14471-V, TVR14471-M	300 Vac, 385 Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA101) (optional) (alt)	Thinking Electronic Industrial Co., Ltd.	TVR10511-D, TVR10511-V, TVR10511-M, TVR14511, TVR14511-D, TVR14511-V, TVR14511-M	320 Vac, 410 Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA101) (optional) (alt)	Thinking Electronic Industrial Co., Ltd.	TVR10561-D, TVR10561-V, TVR10561-M, TVR14561, TVR14561-D, TVR14561-V, TVR14561-M	350 Vac, 450 Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA101) (optional) (alt)	Thinking Electronic Industrial Co., Ltd.	TVR10621-D, TVR10621-V, TVR10621-M TVR14621 TVR14621-D, TVR14621-V, TVR14621-M	395 Vac, 510 Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA101) (optional) (alt)	Thinking Electronic Industrial Co., Ltd.	TVR10681-D, TVR10681-V, TVR10681-M TVR14681 TVR14681-D, TVR14681-V, TVR14681-M	420 Vac, 560 Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA101) (optional) (alt)	Thinking Electronic Industrial Co., Ltd.	TVR10751-D, TVR10751-V, TVR10751-M TVR14751 TVR14751-D, TVR14751-V, TVR14751-M	465 Vac, 615 Vdc (Flame class of body coating complied with V-0)	IEC
X-Capacitor (CX101) (X1 or X2 type) (optional)	Carli Electronics Co., Ltd.	MPX	Max. 0.33 μ F, min. 250 Vac, min. 105 $^{\circ}$ C	IEC

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부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
X-Capacitor (CX101) (X1 or X2 type) (optional) (alt)	Hua Jung Components Co., Ltd.	MKP	Max. 0.33 μ F, min. 250 Vac, min. 105 $^{\circ}$ C	IEC
X-Capacitor (CX101) (X1 or X2 type) (optional) (alt)	Okaya Electric Industries Co., Ltd.	LE-(*)	Max. 0.33 μ F, min. 250 Vac, min. 105 $^{\circ}$ C	IEC
X-Capacitor (CX101) (X1 or X2 type) (optional) (alt)	Ultra Tech Xiphi Enterprise Co Ltd	HQX	Max. 0.33 μ F, min. 250 Vac, min. 105 $^{\circ}$ C	IEC
X-Capacitor (CX101) (X1 or X2 type) (optional) (alt)	Shiny Space Enterprise Co., Ltd.	SX1	Max. 0.33 μ F, min. 250 Vac, min. 105 $^{\circ}$ C	IEC
X-Capacitor (CX101) (X1 or X2 type) (optional) (alt)	ZhuHai Sung Ho Electronics Co., Ltd.	CMPP	Max. 0.33 μ F, min. 250 Vac, min. 105 $^{\circ}$ C	IEC
X-Capacitor (CX101) (X1 or X2 type) (optional) (alt)	Kemet Electronics Corporation	R.46	Max. 0.33 μ F, min. 250 Vac, min. 105 $^{\circ}$ C	IEC
X-Capacitor (CX101) (X1 or X2 type) (optional) (alt)	Wuxi Jiyang Electron Co., Ltd.	MKP	Max. 0.33 μ F, min. 250 Vac, min. 105 $^{\circ}$ C	IEC
Choke (LF101) (optional)	FSP/SPI	8LE00785	130 $^{\circ}$ C	-
Choke (LF101) (optional) (alt)	FSP/SPI	8LE00786	130 $^{\circ}$ C	-
Choke (L603) (optional)	FSP/SPI	8LM06062	130 $^{\circ}$ C	-
PFC choke (L601)	FSP/SPI	8LU00018	130 $^{\circ}$ C	-
IC Including Capacitor Discharge function (U101)	NXP SEMICONDUCTO RS NETHERLANDS B V	TEA2016YZTN (Y, Z could be A~Z or 0~9 or blank within for specific application; N could be any combination by / or A~Z or 0~9 or blank)	Tested voltage: 100~264 Vac, 60 Hz Total cap.: 0.1~4.6 μ F, Total resistors: min. 5 M Ω per capacitance discharge path, Diode (optional): Min. 400V, min. 0.5A	Tested by UL (DK-89478- UL)
Choke (L101) (optional)	FSP/SPI	8LU00019	130 $^{\circ}$ C	-
Transformer (T101)	FSP/SPI	8TI02394	Class B	-

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부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Transformer (T101) (alt)	FSP/SPI	8TI02395	Class B	-
Optical Isolator (PC101)	Everlight Electronics Co., Ltd.	EL1018, EL1019 (VDE)	Dti = 0.4mm min., Int. dcr =thermal cycling test, Ext. dcr =8.1mm, 110 °C, thermal cycling test.	VDE
Optical Isolator (PC101) (alt)	Lite-On Technology Corporation	LTV-1007, LTV-1008, LTV-1009	Dti = 0.4 mm min., Int. dcr =thermal cycling test, Ext. dcr =8.0 mm, 115 °C	VDE, UL
Optical Isolator (PC101) (alt)	Vishay Semiconductor GmbH	TCLT1008	Dti = 0.4 mm min., Int. dcr =thermal cycling test, Ext. dcr =8.0 mm, 110 °C	VDE, UL
Optical Isolator (PC101) (alt)	Vishay Semiconductor GmbH	VOL617A	Dti = 0.43 mm, Int. dcr=thermal cycling test, Ext. dcr =8.25mm, 110 °C	VDE, UL
Optical Isolator (PC101) (alt)	CRM ICBG (Wuxi) Co., Ltd.	PC817x	Dti = 0.4 mm min., Ext. dcr =7.62 mm, Vini,a / Vini,b = 7000 Vpeak, 110 °C	VDE, UL
Optical Isolator (PC101) (alt)	CT Micro International Corporation	CT817A, CT817B, CT817C (VDE)	Dti = 0.4 mm min., Int. Dcr =thermal cycling test, Ext. Dcr =7.0mm, 110 °C	VDE
Optical Isolator (PC101) (alt)	CT Micro International Corporation	CT1017, CT1018, CT1019 (VDE)	Dti = 0.4 mm min., Ext. dcr =8.0 mm, Vini,a / Vini,b = 4000 Vpeak, 110 °C	VDE
Optical Isolator (PC101) (alt)	Everlight Electronics Co., Ltd.	EL817S1 (VDE)	Dti = 0.4 mm min., Int. dcr =thermal cycling Ext. dcr =7.6mm, 110 °C, thermal cycling test.	VDE
Optical Isolator (PC101) (alt)	Everlight Electronics Co., Ltd.	EL817S2 (VDE)	Dti = 0.4 mm min., Int. dcr =thermal cycling Ext. dcr =8.0mm, 110 °C, thermal cycling test.	VDE
Bridging- Capacitor (CY102) (Y1 type) (optional)	Murata Mfg Co., Ltd.	KX	Max. 2200 pF, min. 250 V, min. 125 °C	IEC
Bridging- Capacitor (CY102) (Y1 type) (optional) (alt)	Murata Mfg Co., Ltd.	RA-series	Max. 2200 pF, min. 250 V, min. 125 °C	IEC
Bridging- Capacitor (CY102) (Y1 type) (optional) (alt)	Walsin Technology Corp.	AH, Series AS	Max. 2200 pF, min. 250 V, min. 125 °C	IEC
Bridging- Capacitor (CY102) (Y1 type) (optional) (alt)	Success Electronics Co., Ltd.	SB, SE, SF	Max. 2200 pF, min. 250 V, min. 125 °C	IEC

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3. 전기용품안전인증의 변경현황(Status of Certificate Revisions)

일자(Date)	발급현황(Status of issues)
	변경내용(Modification of Contents)
2022/01/12	기본+파생+복수공장추가

4. 기타(Carefully Informed Note)

- 1) 안전관리부품 및 재질목록에 기재된 사항은 안전에 직접적인 영향을 주는 부분이므로 내용을 변경 또는 복수등재를 원하는 경우 안전인증변경신청 또는 안전확인변경신고를 하여야 합니다. 안전인증변경신청 또는 안전확인변경신고를 하지 않고 임의로 변경하는 경우에는 전기용품 및 생활용품 안전관리법에 따라 행정조치 될 수 있습니다.
The certificate holder should apply for a revision of the certificate if the registered critical components are to be changed, modified or alternated. Should the contents of Certificate are altered without the application for the modification, the administrative measures can occur according to the Electrical Appliances and Consumer Products Safety Control Act.
- 2) 정기검사(시료채취포함)를 거부, 방해 또는 기피하는 경우에는 전기용품 및 생활용품 안전관리법 제11조에 따라 안전인증이 취소될 수 있습니다.
If Follow-up Factory Inspection, including sampling representative model by 11 categories of the certified product at factory-site for re-testing, should not has been arranged by Certificate holder, Safety Certification(KC Mark) may be withdrawn according to the Article 11 of the Electrical Appliances and Consumer Products Safety Control Act.
- 3) 공장주소(전화번호포함), 대표자, 상호 및 부품변경, 신고인정보 등 안전인증 또는 안전확인신고의 내용이 변경되었을 때, 안전인증변경신청 또는 안전확인변경신고를 하지 않을 경우에는 전기용품 및 생활용품 안전관리법에 따라 행정조치 될 수 있습니다.
Should a factory address, president name, manufacturer name and critical component are altered without the application for the modification, the administrative measures can occur according to the Electrical Appliances and Customer Products Safety Control Act.
- 4) 조건부 인증사항 (Conditional certification items):

[서식 CP401-18-00]

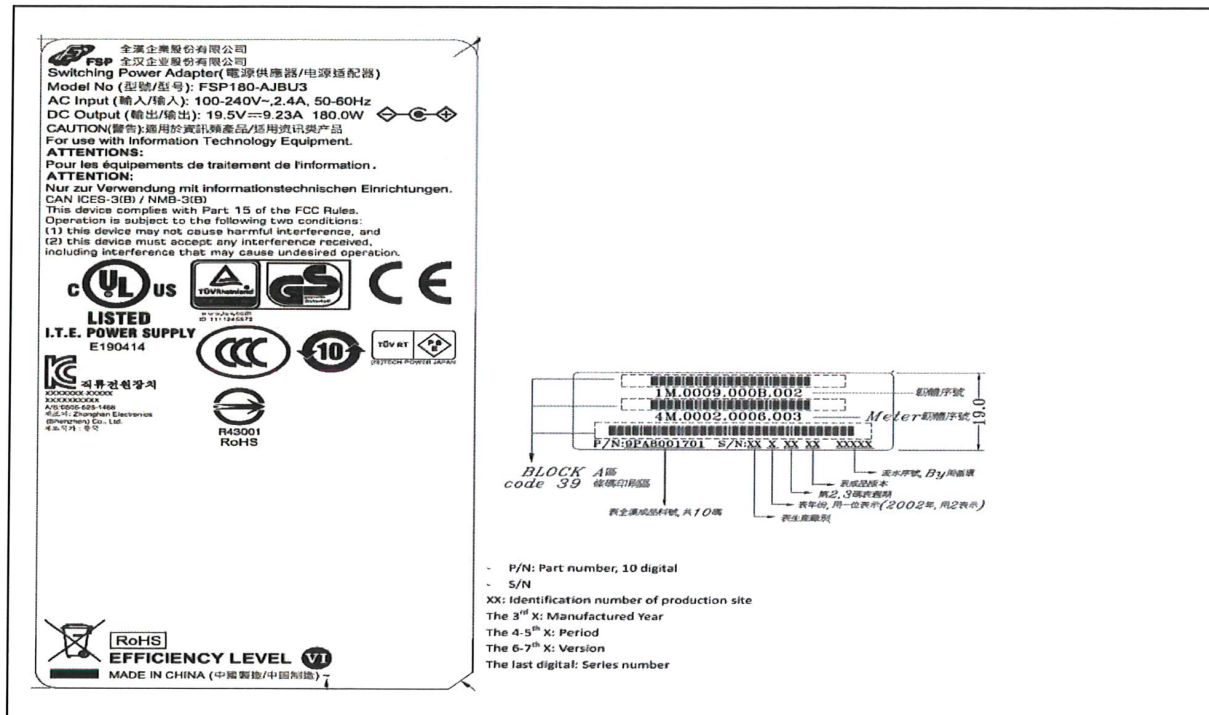


기술문서붙임자료

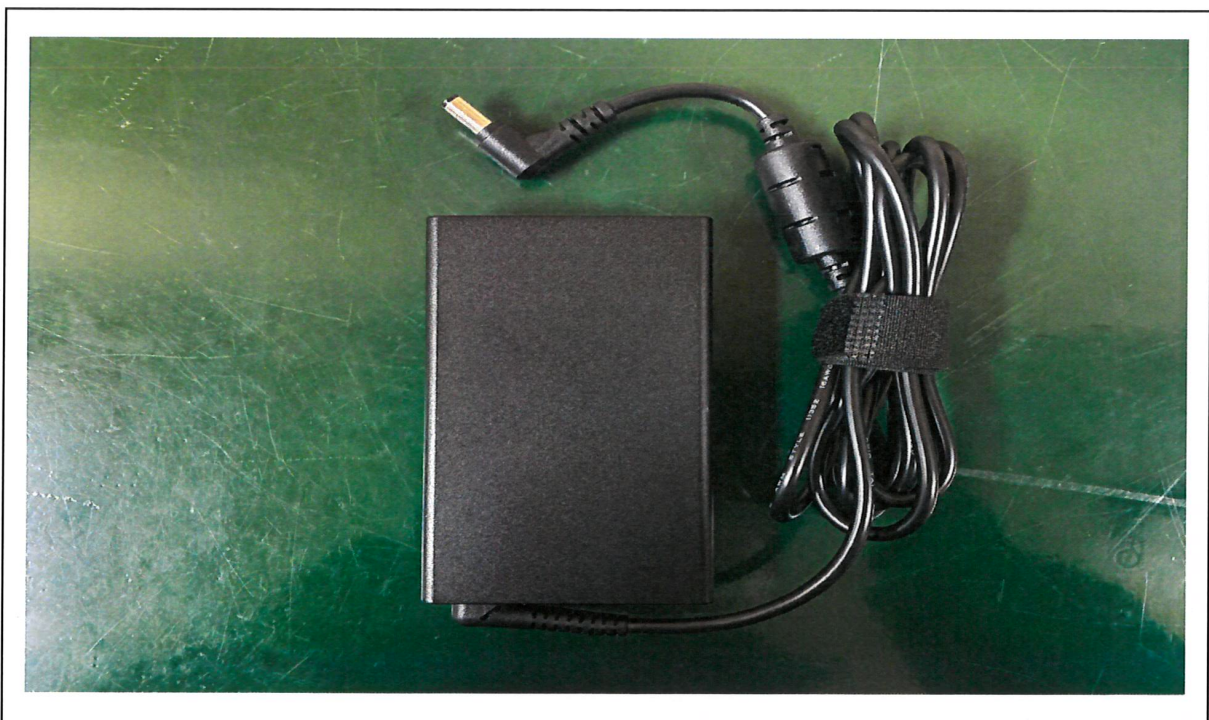
안전인증번호: HU10142-22236A

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No.1 표시사항



No.2 제품외관



한국기계전기전자시험연구원
Korea Testing Certification



기술문서붙임자료

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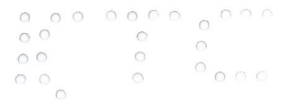
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No.4 제품외관



한국기계전기전자시험연구원
Korea Testing Certification

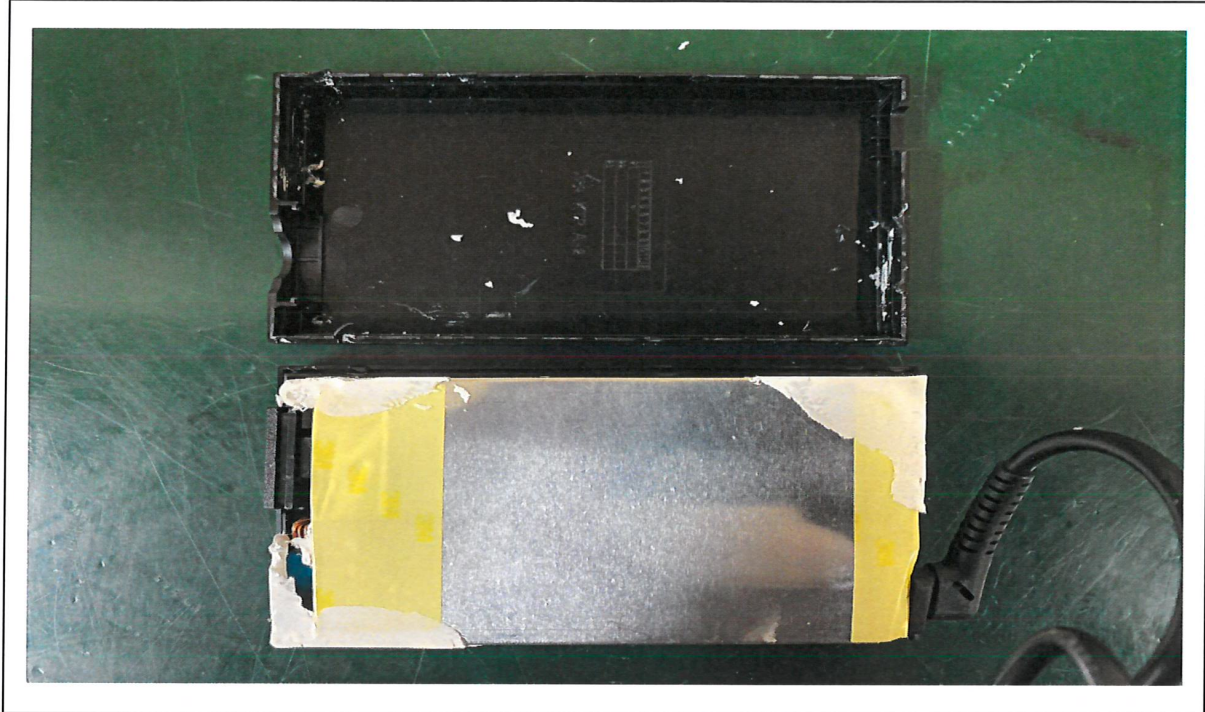


기술문서붙임자료

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No.5 제품내부



No.6 제품내부



한국기계전기전자시험연구원
Korea Testing Certification

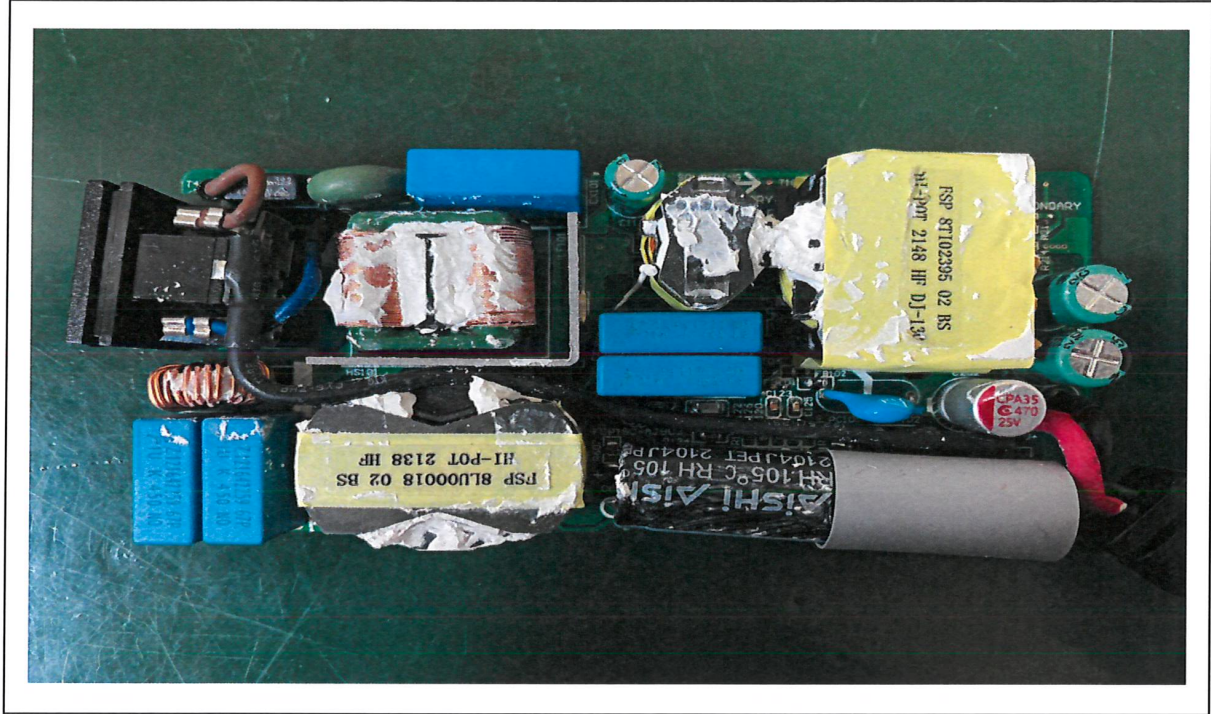


기술문서붙임자료

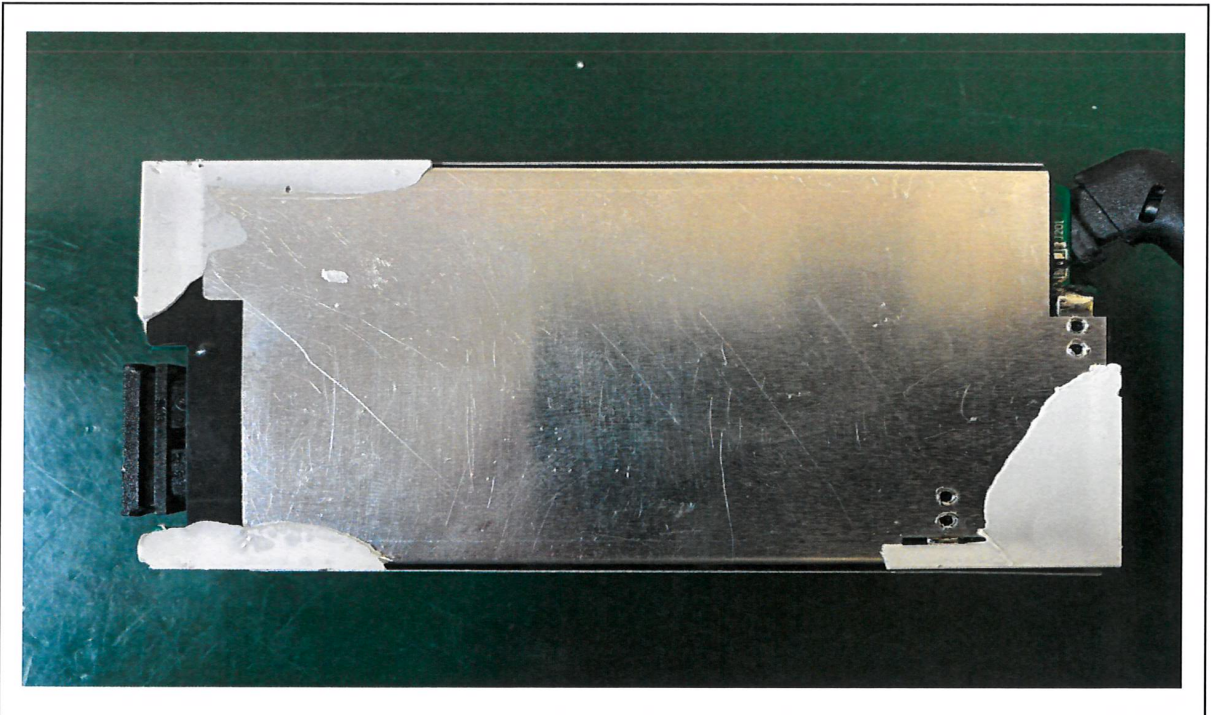
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No.7 제품내부



No.8 제품내부



한국기계전기전자시험연구원
Korea Testing Certification

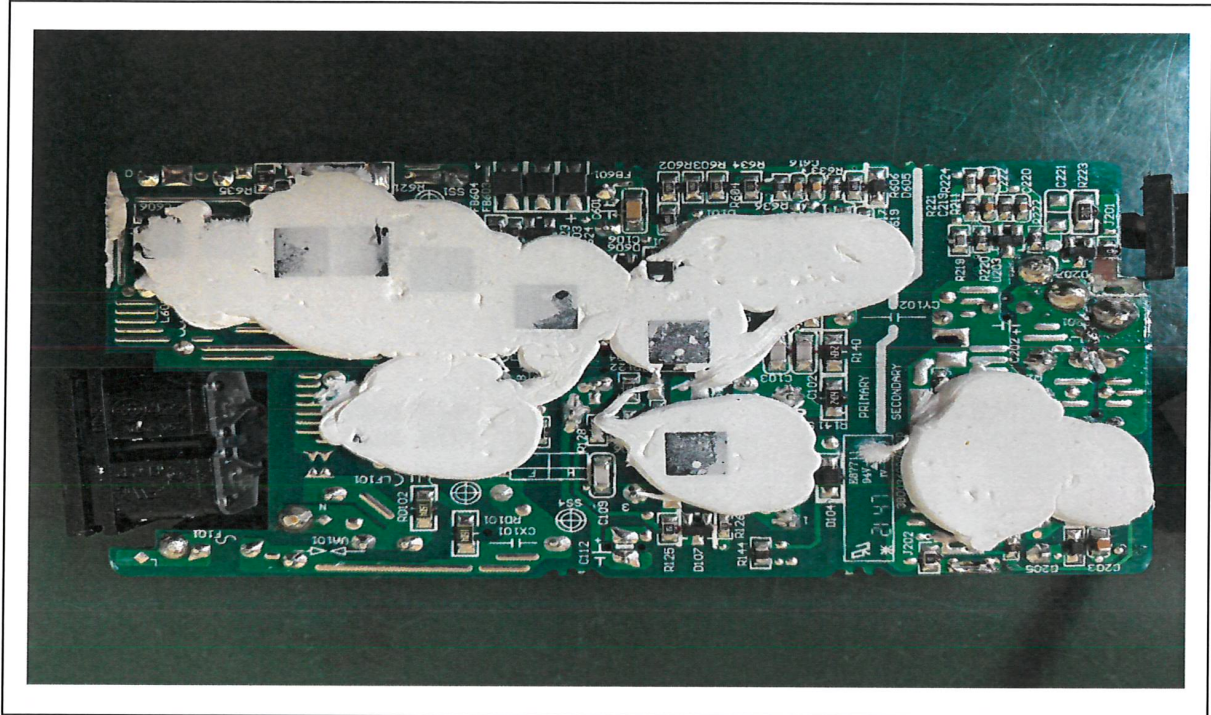


기술문서붙임자료

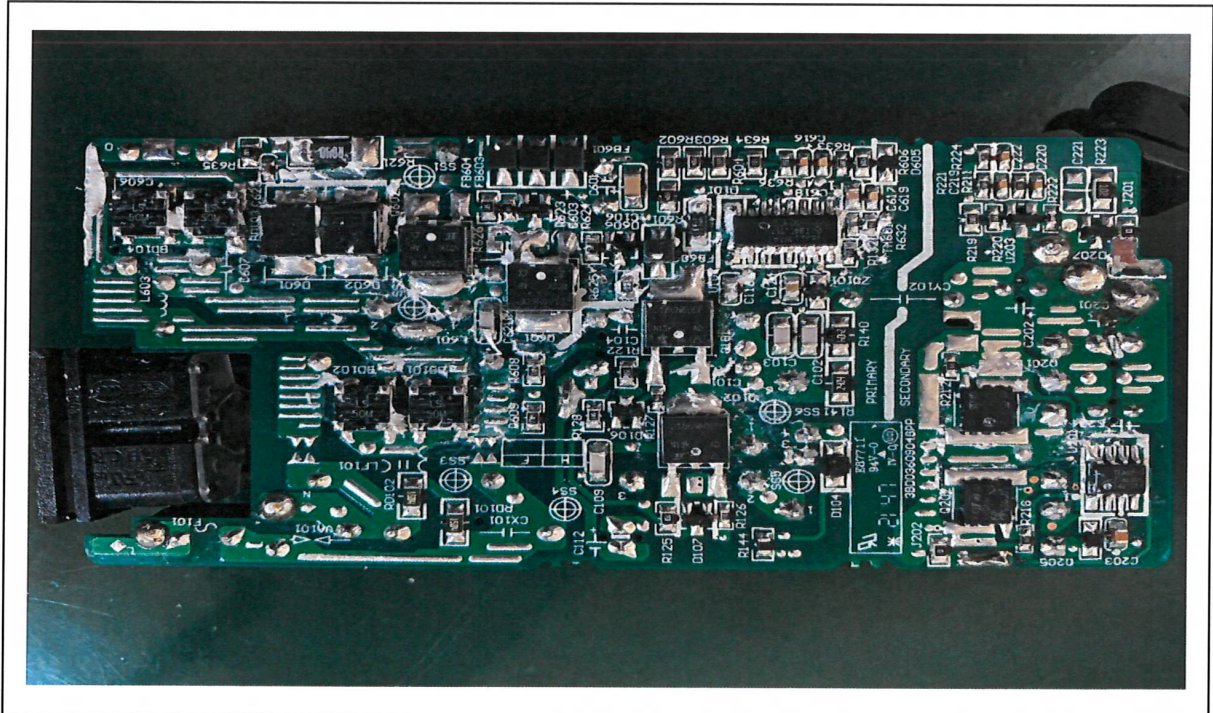
안전인증번호: HU10142-22236A

접수번호: 20211229-0119

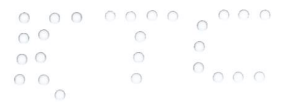
No.9 제품내부



No.10 제품내부



한국기계전기전자시험연구원
Korea Testing Certification



C583-8537-DBF0-E537

방송통신기자재등의 적합등록 필증

Registration of Broadcasting and Communication Equipments

상호 또는 성명 Trade Name or Registrant	Zhonghan Electronics (Shenzhen) Co., Ltd.
기자재명칭(제품명칭) Equipment Name	Switching Power Adapter
기기부호/추가 기기부호 Equipment code /Additional Equipment code	PWR11
기본모델명 Basic Model Number	FSP180-AJBU3
파생모델명 Series Model Number	FSP180-ACBU3
등록번호 Registration No.	R-R-FSZ-FSP180-AJBU3
제조사/제조국가 Manufacturer/Country of Origin	Zhonghan Electronics (Shenzhen) Co., Ltd., Wuxi SPI Technology Co.,Ltd. / 중국
등록연월일 Date of Registration	2022-01-13
기타 Others	

위 기자재는 「전파법」 제58조의2 제3항에 따라 등록되었음을 증명합니다.
It is verified that foregoing equipment has been registered under the Clause 3, Article 58-2 of Radio Waves Act.

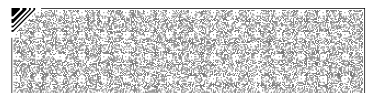
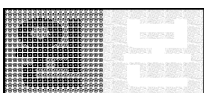
2022년(Year) 01월(Month) 14일(Day)

국립전파연구원장



Director General of National Radio Research Agency

※ 적합등록 방송통신기자재는 반드시 "적합성평가표시" 를 부착하여 유통하여야 합니다.
위반시 과태료 처분 및 등록이 취소될 수 있습니다.



553A-E76D-8F2C-FD16

변경신고 처리결과 통보서				
전자민원신청번호		202217210000021097	접수일자	2022-01-14
대상기기	상호 또는 성명	Zhonghan Electronics (Shenzhen) Co., Ltd.	적합성평가 분야	적합등록
	기자재 명칭	Switching Power Adapter	기본모델명	FSP180-AJBU3
	적합성평가 번호	R-R-FSZ-FSP180-AJBU3	적합성평가 연 월 일	2022-01-14
기술기준 모델명		1) AC 전원 라인에 GND 없음 2) AC 전원 라인에 GND 있음 FSP180-ACBU3		
「방송통신기자재등의 적합성평가에 관한 고시」 제16조에 따른 적합성평가 사항의 변경신고 건에 대하여 위와 같이 변경처리 되었음을 알려드립니다. 2022년(Year) 01월(Month) 14일(Date) 국립전파연구원장 				

