



## 安規證書

料號 :  
Model Name : FSP120-ABBN3,FSP120-ABBN5  
版次 : 02  
文件編號 : SFD-00003492  
作者 : doration/田婷璋(FSP)  
Model No/Type : FSP120-ABBN3,FSP120-ABBN5  
SFA NO. : SFA21101097,SFA22031094  
Trade mark : -  
安規種類 : KC/資訊類  
發行日期 : 2022/04/12 09:27:34  
備註 : 補報備B結構



# 안전인증서 Safety Certificate

**안전인증번호** : HU10142-19190B  
(Application No.)

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

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

**제품명** : 직류전원장치  
(Product)

**기본모델명** : FSP120-ABBN3  
(Basic Model)

**파생모델명 (Series Model)** :  
FSP120-ABBN5

**정격/안전기준상의 모델구분** : 100-240 V~, 50-60 Hz, 1.8 A (O/P: 19 Vdc, 6.32 A)  
(Rating)

**시험기준** : K 60950-1(2011-12)  
(Standard)

본 인증서는 **제조국명** : 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

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 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 03 월 29 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(Description of the basic and series model)
3. 안전인증의 변경 현황(Revisions Status)



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(Certificate No)

접수번호 : KCA2022-00291  
(Receipt No)

## 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)

구 분 (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 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)

구분 (Class)	모 델 명 및 정 격 (Model / Rating)		기본모델과의 차이점 (Difference between basic model and series model)
기본모델 (Basic model)	FSP120-ABBN3	100-240 V~, 50-60 Hz, 1.8 A (O/P: 19 Vdc, 6.32 A)	
파생모델 (Variant model)	FSP120-ABBN5		Model name

## 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)
Plastic Enclosure (Topside)	Lotte Advanced Materials Co.,Ltd.	HN-1064	1.9 mm thick V-0 min., 130 ℃ min.	UL
(Alt.)	Sabic Innovative Plastics US L L C	945	1.9 mm thick V-0 min., 120 ℃ min.	UL
(Alt.)	Lotte Advanced Materials Co.,Ltd.	EN-1052	1.9 mm thick V-0 min., 130 ℃ min.	UL

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부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Plastic Enclosure (Bottom side)	Lotte Advanced Materials Co.,Ltd.	HN-1064	1.6 mm thick V-0 min., 130 ℃ min.	UL
(Alt.)	Sabic Innovative Plastics US L L C	945	1.6 mm thick V-0 min., 120 ℃ min.	UL
(Alt.)	Lotte Advanced Materials Co.,Ltd.	EN-1052	1.6 mm thick V-0 min., 130 ℃ min.	UL
AC Inlet (SC101) (C6 type)	Solteam Electronics Co., Ltd.	ST-03	250Vac, 2.5A	IEC
(Alt.)	Tecx-Unions Technology Corp.	TU-333	250Vac, 2.5A	IEC
(Alt.)	HCR Electronics Co., Ltd.	SK03	250Vac, 2.5A	IEC
(Alt.)	Canal Electronic Co., Ltd.	KC-101 series	250Vac, 2.5A	IEC
(Alt.)	Rich Bay Co., Ltd.	R-30790	250Vac, 2.5A	IEC
(Alt.)	Rong Feng Industrial Co., Ltd.	RF-190	250Vac, 2.5A	IEC
(Alt.)	Zhe Jiang Bei Er Jia Electronic Go., Ltd.	ST-A04-001	250Vac, 2.5A	IEC
(Alt.)	Inalways Corporation	0724 Series	250Vac, 2.5A	IEC
Fuse (F101)	Littelfuse, Inc. Wickmann - Werke	392	250Vac, T4.0AL	IEC
(Alt.)	Suzhou Walter Electronic Co.,Ltd	2010 series	250Vac, T4.0AL	IEC
(Alt.)	Conquer Electronics Co., Ltd.	MST-series	250Vac, T4.0AL	IEC
(Alt.)	BEL Fuse Ltd.	RST-series	250Vac, T4.0AL	IEC

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접수번호 : KCA2022-00291  
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부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
(Alt.)	Cooper Bussmann L L C	SS-5	250Vac, T4.0AL	IEC
Varistor (VA101) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR10471-D, TVR10471-V, TVR10471-M, TVR14471, TVR14471-D, TVR14471-V, TVR14471-M	300Vac, 385Vdc (Flame class of body coating complied with V- 0)	IEC
(Alt.)	Thinking Electronic Industrial Co., Ltd.	TVR10511-D, TVR10511-V, TVR10511-M, TVR14511, TVR14511-D, TVR14511-V, TVR14511-M	320 Vac,410Vdc (Flame class of body coating complied with V-0)	IEC
(Alt.)	Thinking Electronic Industrial Co., Ltd.	TVR10621-D, TVR10621-V, TVR10621-M, TVR14621, TVR14621-D, TVR14621-V, TVR14621-M	395Vac, 510Vdc (Flame class of body coating complied with V- 0)	IEC
(Alt.)	Thinking Electronic Industrial Co., Ltd.	TVR10561-D, TVR10561-V, TVR10561-M, TVR14561, TVR14561-D, TVR14561-V, TVR14561-M	350Vac, 450Vdc (Flame class of body coating complied with V- 0)	IEC
(Alt.)	Thinking Electronic Industrial Co., Ltd.	TVR10681-D, TVR10681-V, TVR10681-M, TVR14681, TVR14681-D, TVR14681-V, TVR14681-M	420Vac, 560Vdc (Flame class of body coating complied with V- 0)	IEC

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(Certificate No)

접수번호 : KCA2022-00291  
(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
(Alt.)	Thinking Electronic Industrial Co., Ltd.	TVR10751-D, TVR10751-V, TVR10751-M, TVR14751, TVR14751-D, TVR14751-V, TVR14751-M	465Vac, 615Vdc (Flame class of body coating complied with V-0)	IEC
(Alt.)	Guangxi New Future Information Industry Co., Ltd.	10D471K,14D471K	300Vac, 385Vdc (Flame class of body coating complied with V-0)	IEC
(Alt.)	Guangxi New Future Information Industry Co., Ltd.	10D511K,14D511K	320Vac, 415Vdc (Flame class of body coating complied with V-0)	IEC
(Alt.)	Guangxi New Future Information Industry Co., Ltd.	10D561K,14D561K	350Vac, 460Vdc (Flame class of body coating complied with V-0)	IEC
(Alt.)	Guangxi New Future Information Industry Co., Ltd.	10D621K,14D621K	385Vac, 505Vdc (Flame class of body coating complied with V-0)	IEC
(Alt.)	Guangxi New Future Information Industry Co., Ltd.	10D681K,14D681K	420Vac, 560Vdc (Flame class of body coating complied with V-0)	IEC
(Alt.)	Guangxi New Future Information Industry Co., Ltd.	14D751K	460Vac, 615Vdc (Flame class of body coating complied with V-0)	IEC
Choke (LF101) (Optional)	FSP/SPI	8LM00352	130 °C	-
X-Capacitor (CX101) (Optional)	Hua Jung Components Co., Ltd.	MKP	Max. 0.33 $\mu$ F, min. 250Vac	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)
(Alt.)	ZhuHai Sung Ho Electronics Co., Ltd.	CMPP	Max. 0.33 $\mu$ F, min. 250Vac	IEC
(Alt.)	Okaya Electric Industries Co., Ltd.	LE(-*)	Max. 0.33 $\mu$ F, min. 250Vac	IEC
(Alt.)	Carli Electronics Co., Ltd.	MPX	Max. 0.33 $\mu$ F, min. 250Vac	IEC
(Alt.)	Shiny Space Enterprise Co., Ltd.	SX1	Max. 0.33 $\mu$ F, min. 250Vac	IEC
(Alt.)	Chiefcon Electronics Co., Ltd.	CKX	Max. 0.33 $\mu$ F, min. 250Vac	IEC
(Alt.)	Ultra Tech Xiphi Enterprise Co Ltd	HQX	Max. 0.33 $\mu$ F, min. 250Vac	IEC
(Alt.)	Cheng Tung Industrial Co., Ltd.	CTX	Max. 0.33 $\mu$ F, min. 250Vac	IEC
(Alt.)	Okaya Electric Industries Co., Ltd.	RE-Series	Max. 0.33 $\mu$ F, min. 250Vac	IEC
(Alt.)	Wuxi Jiyang Electron Co., Ltd.	MKP	Max. 0.33 $\mu$ F, min. 250Vac	IEC
Choke (LF102) (Optional)	FSP/SPI	8LM05152	130 ℃	-
Choke (L603) (Optional)	FSP/SPI	8LM01758	130 ℃	-
(Alt.)	FSP/SPI	8LM05338	130 ℃	-
PFC choke (L601) (Optional)	FSP/SPI	8TI01942	130 ℃	-
(Alt.)	FSP/SPI	8TI01856	130 ℃	-
Transformer (T101)	FSP/SPI	8TT00568	Class B	-

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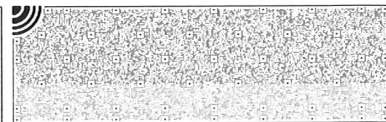
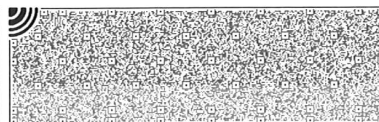
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부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
(Alt.)	FSP/SPI	8TT00548	Class B	-
Bridging-Capacitor (CY104) (optional) (Y1 type)	Walsin Technology Corp.	AH, Series AS	Max. 2200pF, min. 250V	IEC
(Alt.)	TDK Corporation	CD, CD (miniature series)	Max. 2200pF, min. 250V	IEC
(Alt.)	Murata Mfg Co., Ltd.	KX	Max. 2200pF,min. 250V	IEC
(Alt.)	Success Electronics Co., Ltd.	SE, SF, SB	Max. 2200pF,min. 250V	IEC
(Alt.)	Murata Mfg Co., Ltd.	RA-series	Max. 2200pF,min. 250V	IEC
(Alt.)	Guangdng Huiwan Electronics Technology Co., Ltd.	AR (ENEC) AR Series (VDE)	Max. 2200pF,min. 250V	IEC
Photo Coupler (PC101)	Cosmo Electronics Corp.	KT10XX(XX=00-ZZ )	Dti=0.7mm	VDE
(Alt.)	Everlight Electronics Co., Ltd.	EL1018, EL1019	Dti=0.4mm	VDE
(Alt.)	Lite-On Technology Corporation	LTV-1007, LTV-1008, LTV-1009	Dti=0.4mm	VDE
(Alt.)	Everlight Electronics Co., Ltd.	EL817S1	Dti=0.5mm	VDE
(Alt.)	Vishay Semiconductor GmbH	TCLT1008	Dti=0.43mm	VDE
(Alt.)	VISHAY Semiconductor GmbH	VOL617A	Dti=0.43mm	VDE
(Alt.)	Lite-On Technology Corporation	LTV-817	Dti=0.6mm	VDE

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부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
(Alt.)	Everlight Electronics Co., Ltd.	EL817S2	EL817 (UL) Dti = 0.4mm	VDE
(Alt.)	CT Micro International Corporation	CT817A, CT817B, CT817C	Dti=0.4 mm	VDE
(Alt.)	CT Micro International Corporation	CT1017, CT1018, CT1019	Dti=0.4 mm	VDE
ICX (controllor IC integrating capacitor discharging function) (U601) (for PCB type A)	NXP Semiconductor Taiwan Ltd.	TEA19162T/2	100-240 Vac, 47-63 Hz	Tested by UL (DK-52866-UL)
Thermistor (TH601) (optional)	Thinking Electronic Industrial Co., Ltd.	TSM1B473	Max. 47kΩ at 25°C	-
Heat Shrinkable Tubing (For secondary functional wire used) (For core of secondary functional wire used)	Tyco Electronics Corp.	Versafit V2, Versafit V4	VW-1, 300Vac min., 125°C min., 0.4mm thickness min.	UL
(Alt.)	Changyuan Electronics Group Co., Ltd.	CB-HFT, CYG-ZHP	VW-1, 300Vac min., 125°C min., 0.4mm thickness min.	UL
(Alt.)	Well One Co., Ltd.	GT-2, GH-2	VW-1, 300Vac min., 125°C min., 0.4mm thickness min.	UL
(Alt.)	Dongguan Salipt Co., Ltd.	SALIPT S-901-300, SALIPT S-901-600	VW-1, 300Vac min., 125°C min., 0.4mm thickness min.	UL
(Alt.)	Dongguan Quantai Industrial Co., Ltd.	T-2	VW-1, 300Vac min., 125°C min., 0.4mm thickness min.	UL
(Alt.)	Sumitomo Electric Fine Polymer Inc.	Sumitube F32, Sumitube F32(Z), Sumitube HF2	VW-1, 300Vac min., 125°C min., 0.4mm thickness min.	UL

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부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Bridge Diode (BD101)	Interchangeable	Interchangeable	Min. 4A, min. 600V	-
PCB	Interchangeable	Interchangeable	V-0 or better, 130°C min.	UL
ICX (controllor IC integrating capacitor discharging function) (U101) (for PCB type B)	NXP SEMICONDUCT ORS 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 - 264Vac, 60 Hz Total cap.: 0.1 - 4.6 F, Total resistors: min. 5 M , Diode: Min. 400V, min. 0.5A (optional)	Tested by UL (DK-89478-UL )

### 3. 전기용품안전인증의 변경현황(Status of Certificate Revisions)

일자(Date)	발급현황(Status of issues)
	변경내용(Modification of Contents)
2019/05/08	기본+파생모델등록(Basic + Series Model)
2022/03/29	부품변경

### 4. 기타(Carefully Informed Note)

- 안전관리부품 및 재질목록에 기재된 사항은 안전에 직접적인 영향을 주는 부분이므로 내용을 변경 또는 복수등록을 원하는 경우 안전인증변경신청 또는 안전확인변경신고를 하여야 합니다. 안전인증변경신청 또는 안전확인변경신고를 하지 않고 임의로 변경하는 경우에는 전기용품 및 생활용품 안전관리법에 따라 행정조치 될수 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.

[서식 CP401-18-00]



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- 2) 정기검사(시료채취포함)를 거부, 방해 또는 기피하는 경우에는 전기용품 및 생활용품 안전관리법 제 11조에 따라 안전인증이 취소될수 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.

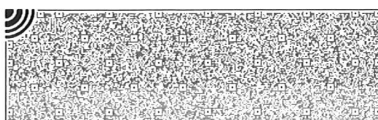
- 3) 공장주소(전화번호포함), 대표자, 상호 및 부품변경, 신고인정보 등 안전인증 또는 안전확인신고의 내용이 변경되었을 때, 안전인증변경신청 또는 안전확인변경신고를 하지 않을 경우에는 전기용품 및 생활용품 안전관리법에 따라 행정조치 될 수 있습니다.

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) :

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[서식 CP401-18-00]

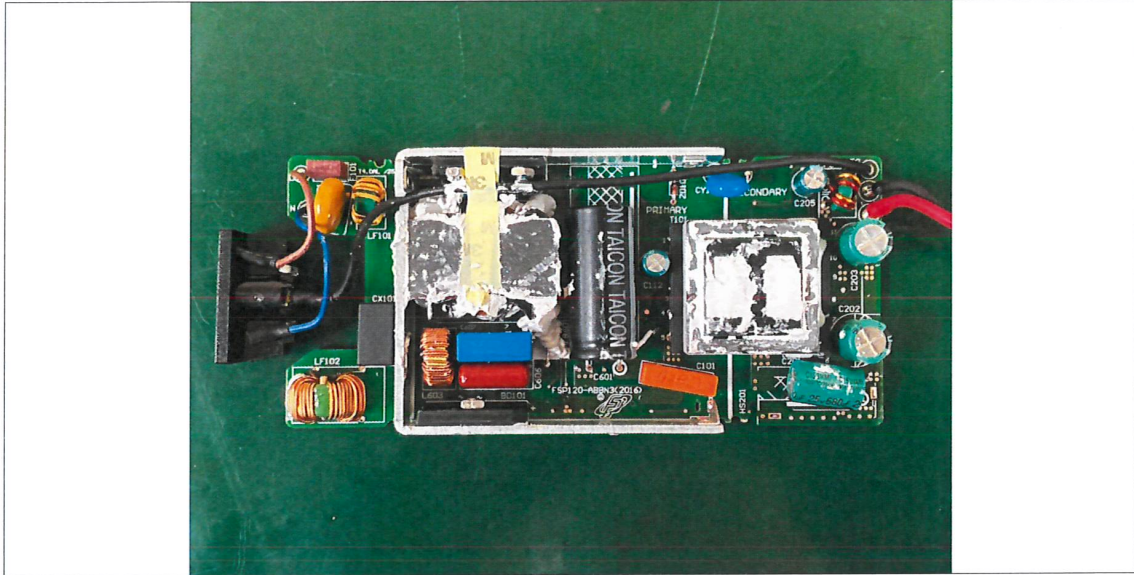


# 기술문서붙임자료

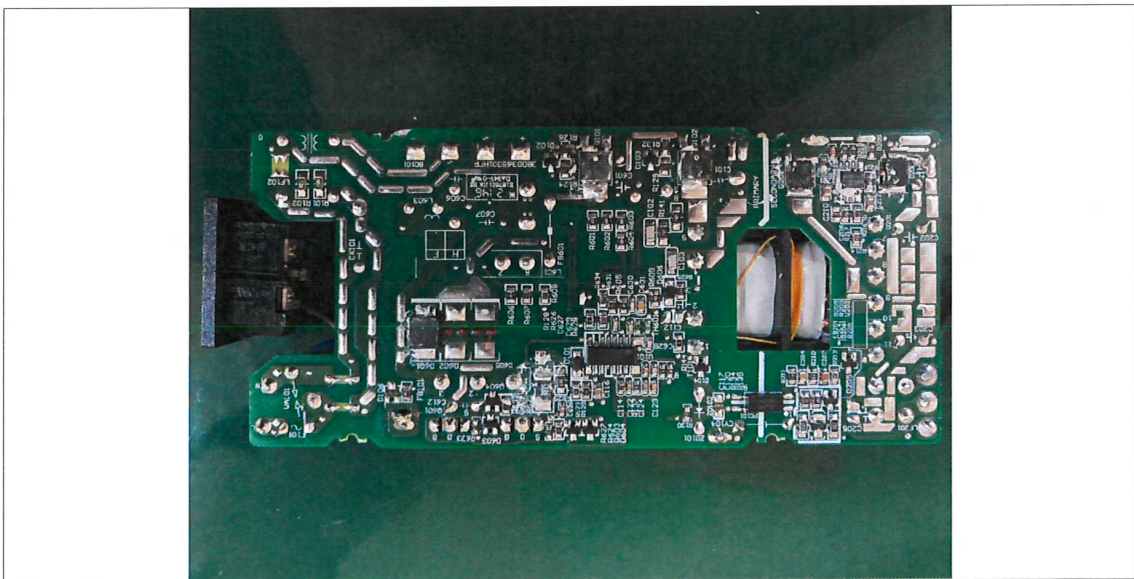
안전인증번호 : HU10142-19190B

접수번호 : KCA2022-00291

NO. 1 1. Alternative schematic / PCB layout (type B)




NO. 2 2. Alternative schematic / PCB layout (type B)



한국기계전기전자시험연구원  
Korea Testing Certification



3B7E-F1BE-9952-D18A

변경신고 처리결과 통보서				
전자민원신청번호		202217210000105099	접수일자	2022-04-04
대상기기	상호 또는 성명	Zhonghan Electronics (Shenzhen) Co., Ltd.	적합성평가 분야	적합등록
	기자재 명칭	Switching Power Adapter	기본모델명	FSP120-ABBN3
	적합성평가 번호	R-R-FSZ-FSP120-ABBN3	적합성평가 연 월 일	2022-04-04
기술기준	Mainboard changing : Version 1		Alternate new PCB Layout and ICX (controllor IC integrating capacitor discharging function)  Mainboard changing : Version 1 Mainboard changing : Version 2  <기술적용분야: EMC>	
<p>「방송통신기자재등의 적합성평가에 관한 고시」 제16조에 따른 적합성평가 사항의 변경신고 건에 대하여 위와 같이 변경처리 되었음을 알려드립니다.</p> <p>2022년(Year) 04월(Month) 04일(Date)</p> <p style="text-align: center;">국립전파연구원장 </p>				



3524-37A1-FE64-C3D5

# 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	IMI31
기본모델명 Basic Model Number	FSP120-ABBN3
파생모델명 Series Model Number	FSP120-ABBN5
등록번호 Registration No.	R-R-FSZ-FSP120-ABBN3
제조사/제조국가 Manufacturer/Country of Origin	Zhonghan Electronics (Shenzhen) Co., Ltd. / 중국
등록연월일 Date of Registration	2019-04-30
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) 04월(Month) 04일(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.

