



全漢企業股份有限公司

安規證書

料號 :
Model Name : FSP090-AAAN3
版次 : 03
文件編號 : SFD-00002345
作者 : doration/田婷瑋(FSP)
Model No/Type : FSP090-AAAN3
SFA NO. : SFA21121064,SFA22061059
Trade mark : -
安規種類 : KC/資訊類
發行日期 : 2023/09/06 17:20:27
備註 : NXP 2016 IC 結構;仲漢廠地址更新



안전인증서 Safety Certificate

안전인증번호 : HU10142-18178C
(Application No.)

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

주 소 : Building 4(101) & Building 4,6,7 in Section C, JuYuan Industrial Zone, TangWei Village, FuHai
(Address) Town, BaoAn Dist., ShenZhen City, Guangdong, China

제 품 명 : 직류전원장치
(Product)

기본모델명 : FSP090-AAAN3
(Basic Model)

파생모델명 (Series Model) :

정격/안전기준상의 모델구분 : 100-240 V~, 50-60 Hz, 1.2 A (O/P: 24.0 Vdc, 3.75 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 4(101) & Building 4,6,7 in Section C, JuYuan Industrial Zone, TangWei
Village, FuHai 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.

2023 년 05 월 22 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

- 전기용품의 안전관리부품 및 재질목록(List of Critical Components)
- 기본모델·파생모델의 내용(Description of the basic and series model)
- 안전인증의 변경 현황(Revisions Status)

안전인증을 받은 자의 유의 사항 Notification for Recipients

1. 본 증명서는 기재된 제조공장에서 생산된 제품으로서 적용된 안전기준에 적합한 경우에 한하여 유효합니다.
(This certificate is valid only when the product meets the safety standards and is produced from the manufacturing factory that states on this certificate.)
2. 안전인증 마크는 본래의 의미와 다르게 사용자가 오해를 일으킬 수 있는 방법으로 광고, 카탈로그 등에 사용하면 인증정지 또는 취소의 사유가 됩니다.
(Cessation or cancellation of the certification may occur if the actual meaning of the Safety Certification Mark is misled to the public by false advertisement on a catalog of the product.)
3. 다음과 같은 사유가 발생할 경우에는 안전인증기관에 안전인증 변경 신청을 하여 안전인증서를 재교부 받아야 합니다.
(In case of the following events, the Safety Certificate shall be reapplied and reissued for revision)
 - 1) 제조자, 대표자, 주소 등 인증서 기재내용의 변경
(Revisions in contents of the certificate such as manufacturer representative, address and etc.)
 - 2) 파생모델의 추가, 변경 또는 삭제 (Additions, changes, or removals of series model)
 - 3) 안전관리 부품의 변경 또는 추가
(Additions or changes in components which are listed on the certificate)
4. 안전인증을 받은 자는 다음 사항을 이행하여야 합니다.
(Recipients of the Safety Certificate shall comply with the followings.)
 - 1) 안전인증 표시 등 인증요건의 유지관리
(Maintaining and preserving the Mark and other certification requirements)
* 안전인증을 받기 이전 또는 정지, 취소된 이후 생산된 제품에 안전인증 표시를 하면 법에 의거 처벌을 받게 됩니다.
(It will be punished by the law if the certification mark is used before the issue (or after suspension or cancellation) of the certification.)
 - 2) 자체 검사의 실시 및 그 기록관리 (Self-testing and record keeping)
* 안전인증을 받은 자는 제품검사를 철저히 실시하여 제품의 품질이 안전기준에 미달되지 않도록 유의.
(Recipients of the Safety Certificate shall conduct products inspection strictly for products to comply with the safety standards)
5. 안전인증을 받을자는 전기용품 및 생활용품 안전관리법 제 7조에 따라 2년에 1회 정기검사를 실시하여야 한다.
(Recipients of the Safety Certificate shall require to inspect once in two years according to the Article 7 section of the the Electrical Appliances and Consumer Products Safety Control Act.)
6. 인증서(증명서)에는 진위여부 확인을 위해 다음과 같은 사항이 적용되어 있습니다.
 - 1) 문서관리번호 (문서관리번호 노출시 CS홈페이지를 통해 기술문서 내용이 조회 가능함으로 사본 등 제출시 노출되지 않도록 주의하시기 바랍니다.)
 - 2) 시점확인필
 - 3) 2D바코드

안전인증시의 조건: 동 제품의 생산 시 자체검사를 실시하고 안전인증 시 등록된 부품누락 및 임의 변경하지 말 것.
Conditions of Certification : In the production of this product, conduct a self-test and do not miss and change the registered components.

기술 문서
Technical Document

page : 1 / 14

안전인증번호 : HU10142-18178C
(Certificate No)

접수번호 : KCA2023-05660
(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)	FSP090-AAAN3	100-240 V~, 50-60 Hz, 1.2 A (O/P: 24.0 Vdc, 3.75 A)	

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)
PCB Layout type		3BS04429		
Top Plastic Enclosure	Lotte Chemical Corporation	EN-1052(+)	V-0 or better, min. 1.9 mm, 130 ℃	UL
Top Plastic Enclosure (alt)	Lotte Chemical Corporation	HN-1064(+)	V-0 or better, min. 1.9 mm, 130 ℃	UL

[서식 CP401-18-00]

기 술 문 서
Technical Document

page : 2 / 14

안전인증번호 : HU10142-18178C

(Certificate No)

접수번호 : KCA2023-05660

(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Top Plastic Enclosure (alt)	Sabic Innovative Plastics US L L C	945(GG)	V-0 or better, min. 1.9 mm, 120 °C	UL
Bottom Plastic Enclosure	Lotte Chemical Corporation	EN-1052(+)	V-0 or better, min. 1.75 mm, 130 °C	UL
Bottom Plastic Enclosure (alt)	Lotte Chemical Corporation	HN-1064(+)	V-0 or better, min. 1.75 mm, 130 °C	UL
Bottom Plastic Enclosure (alt)	Sabic Innovative Plastics US L L C	945(GG)	V-0 or better, min. 1.75 mm, 120 °C	UL
Appliance Inlet (SC101) (C14 type)	HCR Electronics Co., Ltd.	SK01	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Tecx-Unions Technology Corp.	TU-301-A, TU-301-S, TU-301-SP series	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Inalways Corporation	0711 Series	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Inalways Corporation	0714-... Series	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Solteam Electronics Co. Ltd.	ST-01	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Rong Feng Industrial Co., Ltd.	SS-120, SS-7B	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Rich Bay Co., Ltd.	R-301, R-301SN	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Zhe Jiang Bei Er Jia Electronic Co., Ltd.	ST-A01-001L, ST-A01-002L, ST-A01-003J, ST-A01-003K	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Canal Electronic Co., Ltd.	KS-101, KS-201, KS-202, KS-303, KS-406	10 A, 250 Vac	IEC

[서식 CP401-18-00]

기 술 문 서
Technical Document

page : 3 / 14

안전인증번호 : HU10142-18178C
(Certificate No)

접수번호 : KCA2023-05660
(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Fuse (F101) (Optional) (Provided together with VA101)	Suzhou Walter Electronic Co., Ltd.	2010 series	T6.3 AL, 250 Vac	IEC
Fuse (F101) (Optional) (Provided together with VA101) (alt)	Conquer Electronics Co., Ltd.	MST-series	T6.3 AL, 250 Vac	IEC
Fuse (F101) (Optional) (Provided together with VA101) (alt)	Littelfuse Inc.	392	T6.3 AL, 250 Vac	IEC
Fuse (F101) (Optional) (Provided together with VA101) (alt)	Cooper Bussmann LLC	SS-5	T6.3 AL, 250 Vac	IEC
Fuse (F101) (Optional) (Provided together with VA101) (alt)	Bel Fuse Ltd.	RST-series	T6.3 AL, 250 Vac	IEC
Fuse (F102)	Suzhou Walter Electronic Co., Ltd.	2010 series	T2.5 AL, 250 Vac	IEC
Fuse (F102) (alt)	Conquer Electronics Co., Ltd.	MST-series	T2.5 AL, 250 Vac	IEC
Fuse (F102) (alt)	Littelfuse Inc.	392	T2.5 AL, 250 Vac	IEC
Fuse (F102) (alt)	Cooper Bussmann LLC	SS-5	T2.5 AL, 250 Vac	IEC
Fuse (F102) (alt)	Bel Fuse Ltd.	RST-series	T2.5 AL, 250 Vac	IEC
Varistor (VA101) (Optional) (VA101 provided together with F101)	Thinking Electronic Industrial Co., Ltd.	TVR10471-D, TVR10471-V, TVR14471, TVR14471-D	300Vac, 385Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA101) (Optional) (VA101 provided together with F101) (alt)	Thinking Electronic Industrial Co., Ltd.	TVR10561-D, TVR10561-V, TVR14561, TVR14561-D	350Vac, 450Vdc (Flame class of body coating complied with V-0)	IEC

[서식 CP401-18-00]

기 술 문 서

Technical Document

page : 4 / 14

안전인증번호 : HU10142-18178C
(Certificate No)

접수번호 : KCA2023-05660
(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Varistor (VA101) (Optional) (VA101 provided together with F101) (alt)	Thinking Electronic Industrial Co., Ltd.	TVR10621-D, TVR10621-V, TVR14621, TVR14621-D	395Vac, 510Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA101) (Optional) (VA101 provided together with F101) (alt)	Thinking Electronic Industrial Co., Ltd.	TVR10681-D, TVR10681-V, TVR14681, TVR14681-D	420Vac, 560Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA101) (Optional) (VA101 provided together with F101) (alt)	Thinking Electronic Industrial Co., Ltd.	TVR10751-D, TVR10751-V, TVR14751, TVR14751-D	465Vac, 615Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA101) (Optional) (VA101 provided together with F101) (alt)	Guangxi New Future Information Industry Co., Ltd.	10D471K, 14D471K	300Vac, 385Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA101) (Optional) (VA101 provided together with F101) (alt)	Guangxi New Future Information Industry Co., Ltd.	10D561K, 14D561K	350Vac, 460Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA101) (Optional) (VA101 provided together with F101) (alt)	Guangxi New Future Information Industry Co., Ltd.	10D621K, 14D621K	385Vac, 505Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA101) (Optional) (VA101 provided together with F101) (alt)	Guangxi New Future Information Industry Co., Ltd.	10D681K, 14D681K	420Vac, 560Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA101) (Optional) (VA101 provided together with F101) (alt)	Guangxi New Future Information Industry Co., Ltd.	14D751K	460Vac, 615Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA102) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR10471-M, TVR14471-M	300Vac, 385Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA102) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR10511-M, TVR14511-M	320Vac, 410Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA102) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR10561-M, TVR14561-M	350Vac, 450Vdc (Flame class of body coating complied with V-0)	IEC

[서식 CP401-18-00]

기 술 문 서
Technical Document

page : 5 / 14

안전인증번호 : HU10142-18178C

(Certificate No)

접수번호 : KCA2023-05660

(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Varistor (VA102) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR10621-M, TVR14621-M	395Vac, 510Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA102) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR10681-M, TVR14681-M	420Vac, 560Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA102) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR10751-M TVR14751-M	465Vac, 615Vdc (Flame class of body coating complied with V-0)	IEC
Varistor (VA102) (Optional)	Guangxi New Future Information Industry Co., Ltd.	10D511K, 14D511K	320Vac, 415Vdc (Flame class of body coating complied with V-0)	IEC
X-Capacitor (CX101) (Optional)	Ultra Tech Xiphi Enterprise Co Ltd	HQX	0.33 μ F max., 250 Vac min.	IEC
X-Capacitor (CX101) (Optional)	ZhuHai Sung Ho Electronics Co., Ltd.	CMPP	0.33 μ F max., 250 Vac min.	IEC
X-Capacitor (CX101) (Optional)	Carli Electronics Co., Ltd.	MPX	0.33 μ F max., 250 Vac min.	IEC
X-Capacitor (CX101) (Optional)	Hua Jung Components Co., Ltd.	MKP	0.33 μ F max., 250 Vac min.	IEC
X-Capacitor (CX101) (Optional)	Okaya Electric Industries Co., Ltd.	LE-(*)	0.33 μ F max., 250 Vac min.	IEC
X-Capacitor (CX101) (Optional)	Okaya Electric Industries Co., Ltd.	RE-Series	0.33 μ F max., 250 Vac min.	IEC
X-Capacitor (CX101) (Optional)	Okaya Electric Industries Co., Ltd.	PA	0.33 μ F max., 250 Vac min.	IEC
X-Capacitor (CX101) (Optional)	Kemet Electronics Corporation	R.46, R.49	0.33 μ F max., 250 Vac min.	IEC
X-Capacitor (CX101) (Optional)	Chiefcon Electronics Co., Ltd.	CKX	0.33 μ F max., 250 Vac min.	IEC

[서식 CP401-18-00]

기 술 문 서
Technical Document

page : 6 / 14

안전인증번호 : HU10142-18178C

접수번호 : KCA2023-05660

(Certificate No)

(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
IC including capacitor discharge function (U102) (Optional)	Champion Microelectronic Corp.	CMD02 series (CMD02XIUTR SOD123 package)	Tested for rated 90-270 Vac, 47-63 Hz, equivalent capacity for group of X-cap.: 0.1-8 μ F, Resistor under capacitive discharge path: 20 k Ω -6 M Ω	IEC
Choke (LF102) (Optional) (No bobbin used)	FSP/SPI	8LM04537	105 $^{\circ}$ C min.	-
Choke (L603) (Optional) (No bobbin used)	FSP/SPI	8LM04536	105 $^{\circ}$ C min.	-
PFC Choke (L601)	FSP/SPI	8TI01996	105 $^{\circ}$ C min.	-
Optical Isolator (PC101)	Lite-On Technology Corp.	LTV-817	Dti = 0.4 mm	VDE
Optical Isolator (PC101) (alt)	Everlight Electronics Co., Ltd.	EL817.	Dti = 0.5 mm	VDE
Optical Isolator (PC101) (alt)	Renesas Electronics Corporation.	PS2561DL1-1	Dti = 0.4 mm	VDE
Optical Isolator (PC101) (alt)	Renesas Electronics Corporation.	PS2561BL1-1	Dti = 0.4 mm	VDE
Optical Isolator (PC101) (alt)	Cosmo Electronics Corp.	K1010	Dti = 0.5 mm	VDE
Optical Isolator (PC101) (alt)	Sharp Corporation Electronic Components and Devices Division	PC123	Dti = 0.4 mm	VDE
Optical Isolator (PC101) (alt)	Vishay Semiconductor GmbH	TCET1114G	Dti = 0.5 mm	VDE
Bridge Capacitor (CY103, CY104) (Y1 type only)	Murata Mfg. Co., Ltd.	KX	Max. 1500 pF max., 250 V min.	IEC

[서식 CP401-18-00]

기 술 문 서
Technical Document

page : 7 / 14

안전인증번호 : HU10142-18178C

접수번호 : KCA2023-05660

(Certificate No)

(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Bridge Capacitor (CY103, CY104) (Y1 type only) (alt)	Murata Mfg. Co., Ltd.	RA-series	Max. 1500 pF max., 250 V min.	IEC
Bridge Capacitor (CY103, CY104) (Y1 type only) (alt)	Walsin Technology Corp.	AH	Max. 1500 pF max., 250 V min.	IEC
Bridge Capacitor (CY103, CY104) (Y1 type only) (alt)	TDK Corporation	CD, CD (miniature series)	Max. 1500 pF max., 250 V min.	IEC
Bridge Capacitor (CY103, CY104) (Y1 type only) (alt)	Success Electronics Co., Ltd.	SE, SB, SF	Max. 1500 pF max., 250 V min.	IEC
Transformer (T101)	FSP/SPI	8TV00431	Class B	-
Bleeder Resistors (R101, R102)	Interchangeable	Interchangeable	Each rated 2 M Ω max., 1/4 W min.	-
Bleeder Resistors (R103, R104) (Provided with Discharge IC (U102))	Interchangeable	Interchangeable	Each rated 910 k Ω max., 1/4 W min.	-
Bleeder Resistors (R103, R104) (Provided without Discharge IC (U102))	Interchangeable	Interchangeable	Each rated 1.5 M Ω max., 1/4 W min.	-
Bridge Diode (BD101)	Interchangeable	Interchangeable	3A min., 800V min.	-
Electrolytic Capacitor (C601)	Interchangeable	Interchangeable	82 μ F, 420V min., 105 $^{\circ}$ C min.	-
PCB	Interchangeable	Interchangeable	V-1 min., 130 $^{\circ}$ C min.	UL
PCB Layout type		3BD03704		
Top Plastic Enclosure	Lotte Chemical Corporation	HN-1064(+)	V-0 or better, min. 1.9 mm, 130 $^{\circ}$ C	UL
Top Plastic Enclosure (alt)	Formosa Chemicals & Fibre corp Plastics Div	AC3600	V-0 or better, min. 1.9 mm, 130 $^{\circ}$ C	UL

[서식 CP401-18-00]

기 술 문 서
Technical Document

page : 8 / 14

안전인증번호 : HU10142-18178C
(Certificate No)

접수번호 : KCA2023-05660
(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Top Plastic Enclosure (alt)	Sabic Japan L L C	945(GG)	V-0 or better, min. 1.9 mm, 120 °C	UL
Bottom Plastic Enclosure	Lotte Chemical Corporation	HN-1064(+)	V-0 or better, min. 1.75 mm, 130 °C	UL
Bottom Plastic Enclosure (alt)	Formosa Chemicals & Fibre corp Plastics Div	AC3600	V-0 or better, min. 1.75 mm, 130 °C	UL
Bottom Plastic Enclosure (alt)	Sabic Japan L L C	945(GG)	V-0 or better, min. 1.75 mm, 130 °C	UL
Appliance Inlet (SC101) (C14 type)	Inalways Corporation	0711 Series	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Inalways Corporation	0714-..... Series	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Canal Electronic Co., Ltd.	KS-101, KS-201, KS-202, KS-303, KS-406	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	HCR Electronics Co., Ltd.	SK01	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Zhe Jiang Bei Er Jia Electronic Co., Ltd.	ST-A01-001L, ST-A01-002L, ST-A01-003J, ST-A01-003K	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Tecx-Unions Technology Corp.	TU-301-A, TU-301-S, TU-301-SP series	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Solteam Electronics Co. Ltd.	ST-01	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Rong Feng Industrial Co., Ltd.	SS-120	10 A, 250 Vac	IEC
Appliance Inlet (SC101) (C14 type) (alt)	Rong Feng Industrial Co., Ltd.	SS-7B	10 A, 250 Vac	IEC

[서식 CP401-18-00]

기 술 문 서
Technical Document

page : 9 / 14

안전인증번호 : HU10142-18178C
(Certificate No)

접수번호 : KCA2023-05660
(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Fuse (F101)	Littelfuse Inc.	392	T4.0 AL, 250 Vac	IEC
Fuse (F101) (alt)	Suzhou Walter Electronic Co., Ltd.	2010 series	T4.0 AL, 250 Vac	IEC
Fuse (F101) (alt)	Bel Fuse Ltd.	RST-series	T4.0 AL, 250 Vac	IEC
Fuse (F101) (alt)	Conquer Electronics Co., Ltd.	MST-series	T4.0 AL, 250 Vac	IEC
Fuse (F101) (alt)	Cooper Bussmann LLC	SS-5	T4.0 AL, 250 Vac	IEC
Varistor (VA101, VA102) (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)	VDE
Varistor (VA101, VA102) (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)	VDE
Varistor (VA101, VA102) (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)	VDE
Varistor (VA101, VA102) (Optional) (alt)	Thinking Electronic Industrial Co., Ltd.	TVR10621-D, TVR10621-V, TVR10621-M, TVR14621, TVR14621-D, TVR14621-V, TVR14621-M	395 Vac, 510Vdc (Flame class of body coating complied with V-0)	VDE

[서식 CP401-18-00]

기 술 문 서
Technical Document

page : 10 / 14

안전인증번호 : HU10142-18178C

(Certificate No)

접수번호 : KCA2023-05660

(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Varistor (VA101, VA102) (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)	VDE
Varistor (VA101, VA102) (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)	VDE
X-Capacitor (CX101) (X1 or X2 type) (Optional)	Carli Electronics Co., Ltd.	MPX	Max. 0.33 μ F, min. 250 Vac	IEC
X-Capacitor (CX101) (X1 or X2 type) (Optional) (alt)	Hua Jung Components Co., Ltd.	MKP	Max. 0.33 μ F, min. 250 Vac	IEC
X-Capacitor (CX101) (X1 or X2 type) (Optional) (alt)	Okaya Electric Industries Co., Ltd.	LE-(*)	Max. 0.33 μ F, min. 250 Vac	IEC
X-Capacitor (CX101) (X1 or X2 type) (Optional) (alt)	Okaya Electric Industries Co., Ltd.	RE-Series	Max. 0.33 μ F, min. 250 Vac	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	IEC
X-Capacitor (CX101) (X1 or X2 type) (Optional) (alt)	Shiny Space Enterprise Co., Ltd.	SX1	Max. 0.33 μ F, min. 250 Vac	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	IEC
X-Capacitor (CX101) (X1 or X2 type) (Optional) (alt)	Kemet Electronics Corporation	R.46	Max. 0.33 μ F, min. 250 Vac	IEC
X-Capacitor (CX101) (X1 or X2 type) (Optional) (alt)	Wuxi Jiyang Electron Co., Ltd.	MKP	Max. 0.33 μ F, min. 250 Vac	IEC
Choke (LF101) (Optional)	FSP/SPI	8LM05314	Min. 130 $^{\circ}$ C	-

[서식 CP401-18-00]

기술문서
Technical Document

page : 11 / 14

안전인증번호 : HU10142-18178C
(Certificate No)

접수번호 : KCA2023-05660
(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Choke (L603) (Optional)	FSP/SPI	8LM04536	Min. 130 ℃	-
PFC Choke (L601) (Optional)	FSP/SPI	8LU00017	Min. 130 ℃	-
Choke (L101) (Optional)	FSP/SPI	8LU00003	Min. 130 ℃	-
Transformer (T101)	FSP/SPI	8TI02451	Class B	-
IC including capacitor discharge function (U101) (Optional)	NXP Semiconductors 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 for rated 100-264 Vac, 60 Hz, Total Cap.: 0.1-4.6 μ F, Total Resistors: min. 5 MΩ, Diode: Min. 400 V, min. 0.5 A (optional)	IEC
IC including capacitor discharge function (U101) (Optional) (Alt)	NXP Semiconductors Taiwan Ltd.	TEA2016YZT (Y, Z = 0 to 9, A to Z or Blank)	Application for mains supply: 100-240 Vac, 47-63 Hz, Total Cap.: 0.1-4.6 μ F, Total Resistors: min. 5-24 MΩ per capacitance discharge path, Diode: Min. 400 V, min. 1 A (optional)	IEC
Optical Isolator (PC101)	Everlight Electronics Co., Ltd.	EL1018, EL1019	Dti = min. 0.4 mm	VDE
Optical Isolator (PC101) (alt)	Lite-On Technology Corp.	LTV-1007, LTV-1008, LTV-1009	Dti = min. 0.4 mm	VDE
Optical Isolator (PC101) (alt)	Vishay Semiconductor GmbH	TCLT1008	Dti = 0.43 mm	VDE

[서식 CP401-18-00]

기 술 문 서
Technical Document

page : 12 / 14

안전인증번호 : HU10142-18178C

접수번호 : KCA2023-05660

(Certificate No)

(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Optical Isolator (PC101) (alt)	VISHAY Semiconductor GmbH	VOL617A	Dti = 0.43 mm	VDE
Optical Isolator (PC101) (alt)	CRM ICBG (Wuxi) Co., Ltd.	PC817x	Dti = min. 0.4 mm	VDE
Optical Isolator (PC101) (alt)	CT Micro International Corporation	CT817A, CT817B, CT817C	Dti = 0.4 mm	VDE
Optical Isolator (PC101) (alt)	CT Micro International Corporation	CT1017 CT1018, CT1019	Dti = min. 0.4 mm	VDE
Optical Isolator (PC101) (alt)	Everlight Electronics Co., Ltd.	EL817S1	Dti = min. 0.4 mm	VDE
Optical Isolator (PC101) (alt)	Everlight Electronics Co., Ltd.	EL817S2	Dti = min. 0.4 mm	VDE
Bridge Capacitor (CY102) (Y1 type) (Optional)	Murata Mfg. Co., Ltd.	KX	Max. 2200 pF max., 250 V min.	IEC
Bridge Capacitor (CY102) (Y1 type) (Optional) (alt)	Murata Mfg. Co., Ltd.	RA-series	Max. 2200 pF max., 250 V min.	IEC
Bridge Capacitor (CY102) (Y1 type) (Optional) (alt)	Walsin Technology Corp.	AH, Series AS	Max. 2200 pF max., 250 V min.	IEC
Bridge Capacitor (CY102) (Y1 type) (Optional) (alt)	Success Electronics Co., Ltd.	SE, SB, SF	Max. 2200 pF max., 250 V min.	IEC
Bridge Capacitor (CY102) (Y1 type) (Optional) (alt)	TDK Corporation	CD, CD (miniature series)	Max. 2200 pF max., 250 V min.	IEC
Bridge Capacitor (CY102) (Y1 type) (Optional) (alt)	Guangdng Huiwan Electronics Technology Co., Ltd.	AR, AR Series	Max. 2200 pF max., 250 V min.	IEC

[서식 CP401-18-00]

기술 문서
Technical Document

page : 13 / 14

안전인증번호 : HU10142-18178C
(Certificate No)

접수번호 : KCA2023-05660
(Receipt No)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Resistors (RD101, RD102) (optional)	Interchangeable	Interchangeable	Max. 1.5 MΩ, min. 1/4 W	-
Resistors (R606, R607, R608, R609)	Interchangeable	Interchangeable	The equivalent group resistance value is 5-24 MΩ, each rated 1/8 W min.	-
PCB	Interchangeable	Interchangeable	V-1 min., 130℃ min.	UL

3. 전기용품안전인증의 변경현황(Status of Certificate Revisions)

일자(Date)	발급현황(Status of issues)
	변경내용(Modification of Contents)
2018/07/16	기본모델(Basic Model)
2022/10/06	부품변경
2023/05/19	주소(제조사),분실재발급

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 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.

- 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.

[서식 CP401-18-00]

기 술 문 서 Technical Document

page : 14 / 14

안전인증번호 : HU10142-18178C
(Certificate No)

접수번호 : KCA2023-05660
(Receipt No)

- 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.

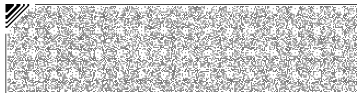
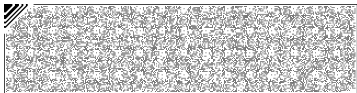
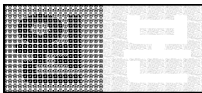
- 4) 조건부 인증사항 (Conditional certification items) :



[서식 CP401-18-00]

A555-33A4-2C33-08DA

방송통신기자재등의 적합등록 필증 <i>Registration of Broadcasting and Communication Equipments</i>	
상호 또는 성명 <i>Trade Name or Registrant</i>	Zhonghan Electronics (Shenzhen) Co., Ltd.
기자재명칭(제품명칭) <i>Equipment Name</i>	Switching Power Adapter
기기부호/추가 기기부호 <i>Equipment code /Additional Equipment code</i>	IMI31
기본모델명 <i>Basic Model Number</i>	FSP090-AAAN3
파생모델명 <i>Series Model Number</i>	
등록번호 <i>Registration No.</i>	R-REM-FSZ-FSP090-AAAN3
제조사/제조국가 <i>Manufacturer/Country of Origin</i>	Zhonghan Electronics (Shenzhen) Co., Ltd. / 중국
등록연월일 <i>Date of Registration</i>	2018-06-28
기타 <i>Others</i>	
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) 10월(Month) 11일(Day) 국립전파연구원장 <i>Director General of National Radio Research Agency</i> ※ 적합등록 방송통신기자재는 반드시 "적합성평가표시" 를 부착하여 유통하여야 합니다. 위반시 과태료 처분 및 등록이 취소될 수 있습니다.	



BA54-DFED-4334-5273

변경신고 처리결과 통보서				
전자민원신청번호		202217210000297662	접수일자	2022-10-11
대상기기	상호 또는 성명	Zhonghan Electronics (Shenzhen) Co., Ltd.	적합성평가 분야	적합등록
	기자재 명칭	Switching Power Adapter	기본모델명	FSP090-AAAN3
	적합성평가 번호	R-REM-FSZ-FSP090-AAA N3	적합성평가 연 월 일	2022-10-11
기술기준		Main Board : 1) 3BS0442901GP Main Board : 1) 3BS0442901GP 2) 3BD0370401FPP		
「방송통신기자재등의 적합성평가에 관한 고시」 제16조에 따른 적합성평가 사항의 변경신고 건에 대하여 위와 같이 변경처리 되었음을 알려드립니다. 2022년(Year) 10월(Month) 11일(Date) 국립전파연구원장 				

