

접수번호 : 16-030343-01  
(Receipt No.)



# 전기용품안전인증서

## Electrical Appliances Safety Certificate

안전인증번호 (Certificate No.)	: SU10509-16009
제조사명 (Manufacturer)	: SuZhou MEAN WELL Technology Co., Ltd.
대표자명 (President)	: Mr. Jerry Lin
제조공장의 주소 (Factory Address)	: No. 77, Jian-Min Road, Dong-Qiao, Pan-Yang Ind. Park, Huang-Dai Town, Xiang-Cheng District, Suzhou, Jiangsu 215152, P.R. China
제품명 (Product)	: 직류전원장치 (AC/DC Switching Adaptor)
기본모델명 (Basic Model)	: GST120A48
정격 (Rating)	: 100-240 Vac, 50/60 Hz, 1.4 A, Class I (Output: 48 Vdc, 2.5 A, 120 W MAX.)
파생모델명 (Series Model)	: See the attachment 2
적용기준 (Standard)	: K 60950-1 (2011-12)

「전기용품안전 관리법 시행규칙」 제6조제2항에 따라 위의 전기용품에 대하여 안전인증서를 발급합니다.

We Issue Electrical Appliances Safety Certification as above product by Article 6 Section 2 of the Electrical Appliances Safety Control Law Enforcement Regulation.

2016 년 06 월 17 일  
Year month day



한국산업기술시험원  
KOREA TESTING LABORATORY



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

- 첨부 :  
(Annex)
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  2. 기본모델·파생모델의 내용 (Descriptions of the basic and series model)
  3. 전기용품안전인증의 변경 현황 (Revisions Status)

□ 첨부 1 : 안전관리부품 및 재질목록  
List of Critical Components

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Plastic Enclosure	Sabic Innovative Plastics	945, 940	V-0, 120 °C, min. 2.6 mm thick	UL
AC Inlet	Pronic Electronics (Shenzhen) Co., Ltd.	PST-101	10 A, 250 Vac	VDE
(Alternate)	Rong Feng Industrial Co., Ltd.	SS-120	10 A, 250 Vac	VDE
(Alternate)	TECX-UNIONS Technology Corporation	TU-301-A, TU-301-AP, TU-301-S, TU-301-SP	10 A, 250 Vac	VDE
(Alternate)	Rong Feng Industrial Co., Ltd.	SS-3B	16 A, 250 Vac	VDE
Fuse (FS1)	Conquer Electronics Co., Ltd.	MST	T 3.15 A, 250 V	VDE
(Alternate)	Ever Island Electric Co., Ltd. and Walter Electric	2010 Serie(s)	T 3.15 A, 250 V	VDE
Y-Capacitors (C3, C4, C7) (Y1 or Y2 type)	Murata Mfg. Co., Ltd.	KH, KX, KY	Max. 4700 pF, min. 250 Vac, 125 °C	VDE
(Alternate)	TDK-EPC Corporation	CD, CS	Max. 4700 pF, min. 250 Vac, 125 °C	VDE
(Alternate)	Walsin Technology Corp	AH, AC	Max. 4700 pF, min. 250 Vac, 125 °C	VDE
(Alternate)	Welson Industrial Co., Ltd.	WD, KL	Max. 4700 pF, min. 250 Vac, 125 °C	VDE
Varistor (ZNR1) (optional)	Joyin Co., Ltd.	JVT10S471K, JVT14S471K	300 Vac, 385 Vdc (Flame class of body coating complied with V-0), 125 °C	VDE
(Alternate)	Joyin Co., Ltd.	JVT10S511K, JVT14S511K	320 Vac, 418 Vdc (Flame class of body coating complied with V-0), 125 °C	VDE

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
(Alternate)	Joyin Co., Ltd.	JVT10S561K, JVT14S561K	350 Vac, 460 Vdc (Flame class of body coating complied with V-0), 125 °C	VDE
(Alternate)	Thinking Electronic Industrial Co., Ltd.	TVR10511-M, TVR14511-M	320 Vac, 410 Vdc (Flame class of body coating complied with V-0), 125 °C	VDE
(Alternate)	Thinking Electronic Industrial Co., Ltd.	TVR10471-M, TVR14471-M	300 Vac, 385 Vdc (Flame class of body coating complied with V-0), 125 °C	VDE
(Alternate)	Thinking Electronic Industrial Co., Ltd.	TVR10561-M, TVR14561-M	350 Vac, 450 Vdc (Flame class of body coating complied with V-0), 125 °C	VDE
X-Capacitor (C2) (X1 or X2 type)	Kemet Electronics Italia Srl (Arcotronics SPA)	R.46	0.82 uF, Min. 250 Vac, 110/125 °C	ENEC
(Alternate)	Kemet Electronics Italia Srl (Arcotronics SPA)	R.49	0.82 uF, Min. 250 Vac, 110 °C	ENEC
(Alternate)	EPCOS Electronic Components S.A.	B3292#	0.82 uF, Min. 250 Vac, 105 °C	VDE
(Alternate)	ISKRA SISTEMI, d.d.	KNB 1530	0.82 uF, Min. 250 Vac, 100 °C	VDE
(Alternate)	ISKRA SISTEMI, d.d.	KNB 1560	0.82 uF, 275 V, 110 °C or 300 V, 125 °C	VDE
(Alternate)	Liow Gu Electronics Industry Co. Ltd.	GS-L	0.82 uF, Min. 250 Vac, 110 °C	ENEC
(Alternate)	Pilkor Electronics Ltd.	PCX2 335M	0.82 uF, Min. 250 Vac, 105 °C	ENEC
(Alternate)	Pilkor Electronics Ltd.	PCX2 337	0.82 uF, Min. 250 Vac, 110 °C	ENEC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
(Alternate)	Ultra Tech Xiphi Enterprise Co. Ltd.	HQX	0.82 uF, Min. 250 Vac, 100 °C	VDE
(Alternate)	VISHAY Capacitors Belgium NV	339	0.82 uF, Min. 250 Vac, 110 °C	ENEC
(Alternate)	Cheng Tung Industrial Co., Ltd.	CTX	0.82 uF, Min. 250 Vac, 100 °C	VDE
(Alternate)	Shiny Space Enterprise Co., Ltd.	SX1	0.82 uF, Min. 250 Vac, 100 °C	VDE
(Alternate)	Xiamen Faratronic	MKP62	0.82 uF, Min. 250 Vac, 110 °C	VDE
(Alternate)	Hua Jung	MKP	0.82 uF, Min. 250 Vac, 110 °C	VDE
(Alternate)	Carli	MPX	0.82 uF, Min. 250 Vac, 100 or 110 °C	VDE
(Alternate)	Joey	MPX	0.82 uF, Min. 250 Vac, 105 °C	VDE
(Alternate)	EPCOS Electronic Components S.A.	B3292#CD series	0.82 uF, Min. 250 Vac, 110 °C	ENEC
Bridge Capacitor (C31) (Y1 type)	Murata Mfg. Co., Ltd.	KX	Max. 2200 pF, Min. 250 Vac, 125 °C	VDE
(Alternate)	TDK-EPC Corporation	CD	Max. 2200 pF, Min. 250 Vac, 125 °C	VDE
(Alternate)	Walsin Technology Corp	AH	Max. 2200 pF, Min. 250 Vac, 125 °C	VDE
(Alternate)	Welson Industrial Co., Ltd.	WD	Max. 2200 pF, Min. 250 Vac, 125 °C	VDE
Photo Coupler (U2, U3)	Lite-On Technology Corporation	LTV-817, LTV-817M, LTV817	Dti=0.4 mm, Int. dcr=5.2 mm, Ext. dcr=7.0 mm, thermal cycling test, 115 °C	VDE, FIMKO

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
(Alternate)	Sharp Corporation Electronic Components and Devices Division	PC123	Dti=0.4 mm, Ext. dcr=8.0 mm, thermal cycle test, 110 °C	VDE, Semko
(Alternate)	COSMO Electronics Corporation	K1010	Dti=0.7 mm, Ext. dcr=8.0 mm, thermal cycle test, 100 °C	VDE, Semko
(Alternate)	Toshiba Corp, Semiconductor Co Discrete Semiconductor Div	TLP785F	Di=0.6 mm, Int. dcr=5.0 mm, Ext. dcr=8 mm, thermal cycling test, 115 °C	VDE
(Alternate)	Toshiba Corp, Semiconductor Co Discrete Semiconductor Div	TLP785	Di=0.6 mm, Int. dcr=5.0 mm, Ext. dcr=6.5 mm, thermal cycling test, 115 °C	VDE
(Alternate)	Toshiba Corp, Semiconductor Co Discrete Semiconductor Div	TLP781F	Di=0.6 mm, Int. dcr=5.0 mm, Ext. dcr=8 mm, thermal cycling test, 115 °C	VDE
(Alternate)	Toshiba Corp, Semiconductor Co Discrete Semiconductor Div	TLP781	Di=0.6 mm, Int. dcr=5.0 mm, Ext. dcr=6.5 mm, thermal cycling test, 115 °C	VDE
Transformer (T1) (For Model GST120A12)	Mean Well	TF-2128A	Class B	Tested with appliance
(Alternate)	Ten Well	TF-2128A	Class B	Tested with appliance
(Alternate)	Jet Signal	TF-2128A	Class B	Tested with appliance
Transformer (T1) (For Model GST120A15)	Mean Well	TF-2129A	Class B	Tested with appliance
(Alternate)	Ten Well	TF-2129A	Class B	Tested with appliance
(Alternate)	Jet Signal	TF-2129A	Class B	Tested with appliance

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Transformer (T1) (For Model GST120A20)	Mean Well	TF-2130A	Class B	Tested with appliance
(Alternate)	Ten Well	TF-2130A	Class B	Tested with appliance
(Alternate)	Jet Signal	TF-2130A	Class B	Tested with appliance
Transformer (T1) (For Model GST120A24)	Mean Well	TF-2131A	Class B	Tested with appliance
(Alternate)	Ten Well	TF-2131A	Class B	Tested with appliance
(Alternate)	Jet Signal	TF-2131A	Class B	Tested with appliance
Transformer (T1) (For Model GST120A48)	Mean Well	TF-2132A	Class B	Tested with appliance
(Alternate)	Ten Well	TF-2132A	Class B	Tested with appliance
(Alternate)	Jet Signal	TF-2132A	Class B	Tested with appliance
Discharging IC (U2)	Fuji Electric Co., Ltd	FA3A00N	VH pin : 650 V/10 mA, VCC pin: 28 V/15 mA (Applicable for use to mains supply 100-240 Vac 60-50 Hz)  X-Caps.: Total capacitance: 0.1-2.2 $\mu$ F, 250 Vmin. 85 °C min. Min. X2 type  Resistors: Total resistance: 2 k $\Omega$ - 100 k $\Omega$	NEMKO
PCB	Interchangeable	Interchangeable	V-1 or better, min. 130°C	UL
Bleeder Resistors (R47, R48, R52)	Interchangeable	Interchangeable	Total 2-100 k $\Omega$ , min. 1/4 W	Tested with appliance

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
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유의사항 (Attention) :

1. 안전관리부품은 전기적인 안전에 직접적인 영향을 주는 부품으로서 안전인증기관이 정기공장검사 시 확인 관리 하는 사항입니다. 따라서 상기목록에 기재된 사항을 변경하거나 또는 복수등재를 원하시는 경우는 안전인증기관에 인증변경신청을 하여야 합니다.

*As the "Critical components" are parts in directly related with safety, these components shall be checked during a factory inspection by the certification body. In case of applying multiful listing or changing the items above, the certification revision shall be applied.*

2. 인증변경신청 없이 임의로 변경하는 경우는, 전기용품안전관리법 제 8 조제 1 항의 규정에 의한 안전인증취소 사유가 됨을 유의하시기 바랍니다.

*The Safety Certification will be cancelled under the Safety Control Law for Electrical Appliances, Paragraph 1 of Article 8 if the contents of the Certification is altered without our authorization.*

FP511-10-00

□ 첨부 2 : 기본모델 · 파생모델의 내용  
General description of Certified Products

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
GST120A12	Same as basic model except for transformer type, output rating and model designation. Output rating: 12 Vdc, 8.5 A, 102 W MAX.
GST120A15	Same as basic model except for transformer type, output rating and model designation. Output rating: 15 Vdc, 7.0 A, 105 W MAX.
GST120A20	Same as basic model except for transformer type, output rating and model designation. Output rating: 20 Vdc, 6.0 A, 120 W MAX.
GST120A24	Same as basic model except for transformer type, output rating and model designation. Output rating: 24 Vdc, 5.0 A, 120 W MAX.
제품특기사항 및 시험조건 Remarks & Test conditions	
<p>1. Test Report Ref. No. : 16-030343-01 (2016.06.16)</p> <p>2. Product Description</p> <ul style="list-style-type: none"> <li>- Measured power consumption: 132 W</li> <li>- Class of equipment: Class I</li> <li>- Protection against ingress of water: IPX0</li> <li>- Mass of equipment (kg): 0.6 kg</li> </ul>	
<p>□ 본 제품의 시험내용에 관하여 문의하실 사항이 있으시면 아래 연락처로 문의하시기 바랍니다.            시험담당자 : 디지털산업본부 정보조명평가센터 박일우 / 02-860-1436            □ If you have any question on product testing, please contact the person below :            Job holder : S.M.A.R.T. Industry Division, IT &amp; Lighting Testing Center, Park Il-Woo / +82 2 860-1436</p>	

FP511-09-00



**첨부 3 : 전기용품안전인증의 변경 현황**  
Status of Certificate Revisions

변경발급 내용 Contents of Certificate Revisions
Not applicable

FP511-11-00

첨부 : 제품사진  
Photographs



