

접 수 번 호 : 23-079840-01-1
(Receipt No.)



안 전 인 증 서

Safety Certificate

안 전 인 증 번 호 : SZ11007-11008H
(Certificate No.)

제 조 업 자/수 입 업 자 명 : MEAN WELL Enterprises Co., Ltd.
(Manufacturer/importer)

주 소 : No.28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 248, Taiwan
(Address) (R.O.C.)

제 품 명 : 조명기구용컨버터(LED용)
(Product) (Electronic controlgear)

기 본 모 델 명 : HLG-320H-54A
(Basic Model)

파 생 모 델 명 : See the attachment 2
(Series Model)

정격/안전기준상의 모델구분 : AC 100-240 V, 50/60 Hz, 3.85-1.6 A, 385 W
(Rating) (Output : DC 54 V, 5.95 A)

시 험 기 준 : KC61347-1(2022-02), KC61347-2-13(2022-02)
(Standard)

본 인증서는 제 조 국 명 : 대만
제 조 업 자 명 : MEAN WELL Enterprises Co., Ltd.
제조공장의 주소 : No.28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 248,
Taiwan (R.O.C.)
다수 공장의 명 : “이면기재” 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.

2024 년 01 월 29 일
Year month day

한국산업기술시험원장
KOREA TESTING LABORATORY



※ 이 인증서는 「전기용품 및 생활용품 안전관리법 시행규칙」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)

다수 공장의 현황
(The status of Multiple Factories)

No	현 황	
1	다수 공장의 명 (Name)	MEAN WELL (Guangzhou) Electronics Co.,Ltd.
	주소 (Address)	No.11 Jingu South Road, Huadu District, Guangzhou 510890, Guangdong, China
	제조국명 (Origin)	중국

□ 첨부 1 : 전기용품의 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
Fuse (FS1)	Conquer	MST-series	T6.3 A, 250 Vac	VDE
Alt.	Conquer	MST-series	T6.3 A, 300 Vac	VDE
Alt.	Ever Island	2010	T6.3 A, 300 Vac	VDE
Varistor (ZNR1, ZNR2)	Joyin	JVT10N561K JVT10S561K	350 Vac, 450 Vdc	UL
Alt.	Joyin	JVT10N471K JVT10S471K	300 Vac, 385 Vdc	UL
Alt.	Joyin	JVT10N511K JVT10S511K JVT14S511K	320 Vac, 418 Vdc	UL
Alt.	Thinking	TVR10471-M TVR14471-M	300 Vac, 385 Vdc	UL
Alt.	Thinking	TVR10511-M TVR14511-M	320 Vac, 410 Vdc	UL
Alt.	Thinking	TVR10561-M TVR14561-M	350 Vac, 450 Vdc	UL
Alt.	Huiwan	V-511K-10D(E)H, V-511K-14D(E)H	320 Vac, 410 Vdc	UL
Y- Capacitors (C3, C4, C22)	Murata	KX, KH, KY	Min.250 Vac, Max.1000 pF	VDE
Alt.	Walsin	AC, AH	Min.250 Vac, Max.1000 pF	VDE
Alt.	Welson	KL, WD	Min.250 Vac, Max.1000 pF	VDE
Alt.	TDK-EPC	CD, CS	Min.250 Vac, Max.1000 pF	VDE
Alt.	Viahay	440L, VY1, WKP	Min.250 Vac, Max.1000 pF	VDE
Alt.	Wanming	HM	Min.250 Vac, Max.1000 pF	VDE
Alt.	Wanming	HJ	Min.250 Vac, Max.1000 pF	VDE
Y- Capacitors (C129)	Murata	KX, KH, KY	Min.250 Vac, Max.4700 pF	VDE
Alt.	Walsin	AC, AH	Min.250 Vac, Max.4700 pF	VDE
Alt.	Welson	KL, WD	Min.250 Vac, Max.4700 pF	VDE
Alt.	TDK-EPC	CD, CS	Min.250 Vac, Max.4700 pF	VDE
Alt.	Vishay	440L, VY1, WKP	Min.250 Vac, Max.4700 pF	VDE
Alt.	Wanming	HM	Min.250 Vac, Max.1000 pF	VDE

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	Wanming	HJ	Min.250 Vac, Max.1000 pF	VDE
X-capacitor (C1)	KEMET (Arcotronics)	R.46	Min.250 Vac, Max.1.5 uF	ENEC
Alt.	Epcos	B3292#-...	Min.250 Vac, Max.1.5 uF	VDE
Alt.	Liow Gu	GS-L	Min.250 Vac, Max.1.5 uF	VDE
Alt.	Ultra Tech	HQX	Min.250 Vac, Max.1.5 uF	VDE
Alt.	HUA JUNG	MKP	Min.250 Vac, Max. 1.5 uF	ENEC
Alt.	Carli Electronics	MPX	Min.250 Vac, Max. 1.5 uF	VDE
Alt.	Joey	MPX	Min.250 Vac, Max. 1.5 uF	VDE
Alt.	NISSEI	MP1	Min.250 Vac, Max. 1.5 uF	VDE
Relay (RY1)	OMRON	G5Q-14-DC12	10 A, 250 Vac, 12 Vdc	VDE
Alt.	HONGFA	HF33F	5 A, 250 Vac, 12 Vdc	VDE
Alt.	Tyco	PCH-112D2H	5 A, 250 Vac, 12 Vdc	VDE, UL
Bridging Capacitor (C31)	Murata	KX	Min.250 Vac, Max.2200 pF, Y1	VDE
Alt.	Walsin	AH	Min.250 Vac, Max.2200 pF, Y1	VDE
Alt.	TDK	CD	Min.250 Vac, Max.2200 pF, Y1	VDE
Photo Coupler (U3, U4)	Cosmo	K1010	dti=0.7 mm, Int. dcr=5.2 mm Ext. dcr=8 mm, thermal cycling test, 115 °C	VDE
Alt.	Lite-On	LTV-817, LTV-817M	dti=0.8 mm, Int.dcr=5.2 mm, Ent. dcr=7.8 mm, 110 °C	VDE
Alt.	Sharp	PC123	dti=0.7 mm Int. dcr=5 mm Ext. dcr=8 mm, thermal cycling test, 110 °C	VDE
Transformer(T1) (For HLG-320H- 12B)	Yu Jing	TF-2355	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
Alt.	Mean Well	TF-2355	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-12y, y=A, D or Blank)	Yu Jing	TF-2286	Class B	Tested with appliance
Alt.	Mean Well	TF-2286	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-15B)	Yu Jing	TF-2356	Class B	Tested with appliance
Alt.	Mean Well	TF-2356	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-15y, y=A, D or Blank)	Yu Jing	TF-2287	Class B	Tested with appliance
Alt.	Mean Well	TF-2287	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-20B)	Yu Jing	TF-2357	Class B	Tested with appliance
Alt.	Mean Well	TF-2357	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-20y, y=A, D or Blank)	Yu Jing	TF-2288	Class B	Tested with appliance
Alt.	Mean Well	TF-2288	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-24B)	Yu Jing	TF-2358	Class B	Tested with appliance
Alt.	Mean Well	TF-2358	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-24y, y=A, D or Blank)	Yu Jing	TF-2289	Class B	Tested with appliance
Alt.	Mean Well	TF-2289	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-30B)	Yu Jing	TF-2359	Class B	Tested with appliance
Alt.	Mean Well	TF-2359	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 HLG-320H-3 0y, y=A, D or Blank)	Yu Jing	TF-2290	Class B	Tested with appliance
Alt.	Mean Well	TF-2290	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 6B)	Yu Jing	TF-2360	Class B	Tested with appliance
Alt.	Mean Well	TF-2360	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 6y, y=A, D or Blank)	Yu Jing	TF-2291	Class B	Tested with appliance
Alt.	Mean Well	TF-2291	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 2B)	Yu Jing	TF-2361	Class B	Tested with appliance
Alt.	Mean Well	TF-2361	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 2y, y=A, D or Blank)	Yu Jing	TF-2292	Class B	Tested with appliance
Alt.	Mean Well	TF-2292	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 8B)	Yu Jing	TF-2362	Class B	Tested with appliance
Alt.	Mean Well	TF-2362	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 8y, y=A, D or Blank)	Yu Jing	TF-2293	Class B	Tested with appliance
Alt.	Mean Well	TF-2293	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-5 4B)	Yu Jing	TF-2363	Class B	Tested with appliance
Alt.	Mean Well	TF-2363	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-5 4y, y=A, D or Blank)	Yu Jing	TF-2294	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
Alt.	Mean Well	TF-2294	Class B	Tested with appliance
Line Filter (LF1)	Mean Well	TR-1010	130 ℃	Tested with appliance
Line Filter (LF2, L F3)	Mean Well	TR-890	125 ℃	Tested with appliance
Choke(L2)	Mean Well	TR-993	130 ℃	Tested with appliance
PFC Choke (L1)	Mean Well	TF-2295	130 ℃	Tested with appliance
PCB	SHUNDE JUNDA ELECTRONIC CO LTD	JD-D, JD-E	Min.V-1, 130 ℃	UL
Alt.	HONG SHIEN ENTERPRISE CO LTD	03V-0, -D, -M		
Alt.	HONG WEI ENTERPRISES CO LTD	79		
Alt.	HSU TZU ELECTRONIC CO LTD	4V0, DV2, MV1		
Alt.	Kunshan Wanyuantong Electronic Technology Co Ltd	SWZ-1		
Alt.	Guangzhou Taihe Printed Circuit Board Ltd.	THS, THD		
Power Cord	Dongguan Lucky United	245 IEC 57 H05RN-F	3C x 0.75 mm ² 3C x 1.0 mm ²	KC
Alt.	Dongguan Lucky United	245 IEC 51 H03RT-H	3C x 0.75 mm ² 3C x 1.0 mm ²	KC
Alt.	Guangdong Rifeng	60245 IEC 57 H05RN-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ²	KC
Alt.	I-sheng	60227 IEC 53	3G x 0.75 mm ² 3G x 1.0 mm ² 3G x 1.5 mm ² 3G x 2.5 mm ²	KC
Alt.	Foxconn	K60227 IEC 52 (H03VV-F)	3G x 0.75 mm ²	KC
Alt.	Foxconn	K60227 IEC 53 (H05VV-F)	3G x 0.75 mm ² 3G x 1.0 mm ²	KC
Alt.	Fuyu	K60227 IEC 52 (H03VV-F)	3G x 0.75 mm ²	KC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	Fuyu	K60227 IEC 53 (H05VV-F)	3G x 0.75 mm ² 3G x 1.0 mm ²	KC
Alt.	Dong Guan Well Shin	K60227 IEC 52 H03VV-F	3C x 0.75 mm ²	KC
Alt.	Dong Guan Well Shin	K60227 IEC 53 H05VVH-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ² 3C x 2.0 mm ² 3C x 2.5 mm ²	KC
Alt.	Ta Hsing Electric Wire & Cable	H05VV-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ² 3C x 2.0 mm ² 3C x 2.5 mm ²	KC
Alt.	Awin Wire & Ca ble Co., Ltd	60227IEC52 (H03VV-F) 3G 0.7 5 mm ²	3G×0.75 mm ² 3C×0.75 mm ²	KC
Alt.	Awin Wire & Ca ble Co., Ltd	60227IEC53 (H05VV-F) 3G 0.7 5 mm ² , 3 x 0.75/1.0 mm ²	3G×0.75 mm ² 3C×0.75 mm ²	KC
Alt.	Awin Wire & Ca ble Co., Ltd	60227IEC53 (H05VV-F) 3G 1.0 mm ²	3G×1.0 mm ² 3C×1.0 mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×0.75 mm ²	3G×0.75 mm ² 3C×0.75 mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×1.0 mm ²	3G×1.0 mm ² 3C×1.0 mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×1.5 mm ²	3G×1.5 mm ² 3C×1.5 mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×2.5 mm ²	3G×2.5 mm ² 3C×2.5 mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 52 (H03VV-F) 3X0.75 mm ²	3G×0.75 mm ² 3C×0.75 mm ²	KC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 57 H0 5RN-F 3G0.75 mm ² -1.0 mm ²	3G x 0.75 mm ² -1.0 mm ²	KC
Alt.	Dongguan Lucky United Electric Wire & Cable Co.,Ltd	245 IEC 57 H05RN-F 2C-3CX0.75 mm ² -1 mm ²	3C x 0.75 mm ² -1.0 mm ²	KC
Alt.	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 66 H07RN-F 3G1.0 mm ² -4 mm ²	3G x 1.0 mm ² -4.0 mm ²	KC
Alt.	DONGGUAN TAWANG ELECTRONICS CO LTD	60245 IEC 57 (H05RN-F) 3x1.0 mm ²	AC 300/500 V, 3 x 1.0 mm ²	KC
Potting Compound	DOW Corning Corp.	SYLGARD 160	Gray, rated 150 °C	UL
Alt.	Shin Etsu Silicone	KET-132A/B	Natural, rated 150 °C	UL
Alt.	GUANGZHOU Huitian	5299	Gray, rated 150 °C	UL
Alt.	Shin-Etsu Silicone	KET-132 A/B H	Natural, rated 150 °C	UL
Alt.	U-BOND MATERIAL TECHNOLOGY CO LTD	UB-5203A/B	Natural, rated 150 °C	UL

☐ 유의사항 (Attention) :

- 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 multiple listing or changing the items above, the certification revision shall be applied.

- 인증변경신청 없이 임의로 변경하는 경우는, 전기용품 및 생활용품 안전관리법 시행규칙 제 21 조제 1 항 또는 제 38 조제 1 항 규정에 의한 안전인증 취소 혹은 안전확인신고 효력상실 사유가 됨을 유의하시기 바랍니다.

The Safety Certification will be cancelled under the Article 21(1), 38(1) of the Enforcement Rule of the Electrical appliances and Consumer Products Safety Control Act if the contents of the Certification is altered without our authorization.

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

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-12A	O/P: DC12 V, 22 A, 264 W (Identical except for output rating, output wire with 14AWG*2C×1)
HLG-320H-12B	O/P: DC12 V, 22 A, 264 W (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)
HLG-320H-12D	O/P: DC12 V, 22 A, 264 W (Identical except for output rating, output wire with 14AWG*2C×1, type B top enclosure and type D dimming control board provided)
HLG-320H-12	O/P: DC12 V, 22 A, 264 W (Identical except for output rating, output wire with 14AWG*2C×1, type B top enclosure provided)
HLG-320H-15A	O/P: DC15 V, 19 A, 285 W (Identical except for output rating , output wire with 14AWG*2C×1)
HLG-320H-15B	O/P: DC15 V, 19 A, 285 W (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)
HLG-320H-15D	O/P: DC15 V, 19 A, 285 W (Identical except for output rating, output wire with 14AWG*2C×1, type B top enclosure and type D dimming control board provided)
HLG-320H-15	O/P: DC15 V, 19 A, 285 W (Identical except for output rating, output wire with 14AWG*2C×1, type B top enclosure provided)
HLG-320H-20A	O/P: DC20 V, 15 A, 300 W (Identical except for output rating, output wire with 14AWG*2C×1)
HLG-320H-20B	O/P: DC20 V, 15 A, 300 W (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)
HLG-320H-20D	O/P: DC20 V, 15 A, 300 W (Identical except for output rating, output wire with 14AWG*2C×1, type B top enclosure and type D dimming control board provided)
HLG-320H-20	O/P: DC20 V, 15 A, 300 W (Identical except for output rating, output wire with 14AWG*2C×1, type B top enclosure provided)
HLG-320H-24A	O/P: DC24 V, 13.34 A, 320.16 W (Identical except for output rating, output wire with 14AWG*2C×1)
HLG-320H-24B	O/P: DC24 V, 13.34 A, 320.16 W (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-24D	O/P: DC24 V, 13.34 A, 320.16 W (Identical except for output rating , output wire with 14AWG*2C×1, type B top enclosure and type D dimming control board provided)
HLG-320H-24	O/P: DC24 V, 13.34 A, 320.16 W (Identical except for output rating, output wire with 14AWG*2C×1, type B top enclosure provided)
HLG-320H-30A	O/P: DC30 V, 10.7 A, 321 W (Identical except for output rating, output wire with 14AWG*2C×1)
HLG-320H-30B	O/P: DC30 V, 10.7 A, 321 W (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)
HLG-320H-30D	O/P: DC30 V, 10.7 A, 321 W (Identical except for output rating, output wire with 14AWG*2C×1, type B top enclosure and type D dimming control board provided)
HLG-320H-30	O/P: DC30 V, 10.7 A, 321 W (Identical except for output rating, output wire with 14AWG*2C×1, type B top enclosure provided)
HLG-320H-36A	O/P: DC36 V, 8.9 A, 320.4 W (Identical except for output rating)
HLG-320H-36B	O/P: DC36 V, 8.9 A, 320.4 W (Identical except for output rating, type B top enclosure and type B dimming control board provided)
HLG-320H-36D	O/P: DC36 V, 8.9 A, 320.4 W (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-36	O/P: DC36 V, 8.9 A, 320.4 W (Identical except for output rating, type B top enclosure provided)
HLG-320H-42A	O/P: DC42 V, 7.65 A, 321.3 W (Identical except for output rating)
HLG-320H-42B	O/P: DC42 V, 7.65 A, 321.3 W (Identical except for output rating, type B top enclosure and type B dimming control board provided)
HLG-320H-42D	O/P: DC42 V, 7.65 A, 321.3 W (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-42	O/P: DC42 V, 7.65 A, 321.3 W (Identical except for output rating, type B top enclosure provided)
HLG-320H-48A	O/P: DC48 V, 6.7 A, 321.6 W (Identical except for output rating)
HLG-320H-48B	O/P: DC48 V, 6.7 A, 321.6 W (Identical except for output rating, type B top enclosure and type B dimming control board provided)

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-48D	O/P: DC48 V, 6.7 A, 321.6 W (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-48	O/P: DC48 V, 6.7 A, 321.6 W (Identical except for output rating, type B top enclosure provided)
HLG-320H-54B	O/P: DC54 V, 5.95 A, 321.3 W (Identical except for type B top enclosure and type B dimming control board provided)
HLG-320H-54D	O/P: DC54 V, 5.95 A, 321.3 W (Identical except for type B top enclosure and type D dimming control board provided)
HLG-320H-54	O/P: DC54 V, 5.95 A, 321.3 W (Identical except for type B top enclosure provided)

제품특기사항 및 시험조건
Remarks & Test conditions

1. Test Report Ref. No. : 11-1920-5550 (2011.11.01.)

2. Products Description

- DC or AC supplied electronic controlgear for LEDs

- Rating - PRI : AC100-240 V 50/60 Hz 385 W

SEC : 54 Vd.c. 5.95 A

- PF : > 0.9

- Type of protection : IP 65

- tc : 90 °C, ta : 50 °C

- Protection class : Class I

- Thermally protected : 110 °C

- This product is totally enclosed electronic controlgear.

- Constant voltage type, Independent SELV equivalent

* factory information

- MEAN WELL (Guangzhou) Electronics Co.,Ltd.

No.11 Jingu South Road, Huadu District, Guangzhou 510890, Guangdong, China

□ 본 제품의 시험내용에 관하여 문의하실 사항이 있으시면 아래 연락처로 문의하시기 바랍니다.

시험 담당자 / 연락처 : 디지털산업본부 전기전자기술센터 남 상엽 / (02)860-1427

□ If you have any question on product testing, please contact the person below :

Job holder : S.M.A.R.T. Industry Division, Electrical and Electronic Technology Center, Sang-Yeop Nam/
+82 2 860-1427

FP511-05

☐ 첨부 3 : 안전인증의 변경 현황
Revisions Status

변경발급 내용 Contents of Certificate Revisions		
1 st Rev.) Addition/Delete of a component, Change of a component and PCB's pattern (15-041361-01)		
- Addition of a component		
Part no.	Manufacturer	Model
Fuse (FS1)	Conquer	MST-series
Varistor(ZNR1, ZNR2)	Joyin	10N561K, 10S561K
	Joyin	10N471K, 10S471K
	Joyin	10N511K, 10S511K
	Thinking	TVR10471-D TVR14471-D TVR10471-M TVR14471-M TVR10471 TVR14471 TVR10471-V TVR14471-V TVR10471-K TVR14471-K
	Thinking	TVR10511 TVR14511 TVR10511-D TVR14511-D TVR10511-V TVR14511-V TVR10511-M TVR14511-M TVR10511-K TVR14511-K
	Thinking	TVR10561 TVR10561 TVR10561-V TVR14561-V TVR10561-K TVR14561-K TVR10561-M TVR14561-M
	Centra Science	CNR-10D511K CNR-14D511K
	Centra Science	CNR-10D471K CNR-14D471K
	Centra Science	CNR-10D561K CNR-14D561K

변경발급 내용 Contents of Certificate Revisions			
	Relay(RY1)	Tyco	PCH-112D2H
	Photo Coupler(U3, U4)	Lite-On	LTV-817M
	PCB	SHUNDE JUNDA ELECTRONIC CO LTD	JD-E
		HONG SHIEN ENTERPRISE CO LTD	-D, -M
		HSU TZU ELECTRONIC CO LTD	DV2, MV1
		Guangzhou Taihe Printed Circuit Board Ltd.	THS, THD
		Jiin-Yu Enterprise Co Ltd	JY-001, JY-003
	Power Cord	Awin Wire & Cable Co., Ltd	60227IEC52 (H03VV-F) 3G 0.75 mm ²
		Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3G 0.75 mm ² , 3 x 0.75/1.0 mm ²
		Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3G 1.0 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x0.75 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x1.0 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x1.5 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x2.5 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 52 (H03VV-F) 3X0.75 mm ²
		Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3G 0.75 mm ²
		Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3G 1.0 mm ²
	Potting Compound	GUANGZHOU Huitian	5299

변경발급 내용
Contents of Certificate Revisions

- Delete of a component

Part no.	Manufacturer	Model
Fuse (FS1)	Conquer	MET-series
Varistor(ZNR1)	Centra Science	CNR14D361K
	Joyin	14N361K, 10S361K, 14S361K
	Thinking	TVR10361-D, TVR14361-D
Varistor(ZNR2)	Thinking	TVR14511-D, TVR10511-D
	Centra Science	CNR14D511K
	Joyin	10S511K, 14S511K, 14N511K

- Change of a component

Part no.	Model	Before	After
Y-Capacitors(C3, C4)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
Y-Capacitors(C22)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
Y-Capacitors(C129)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
X-Capacitors(C1)	R 46	Rating: 300 Vac	Rating: 250 Vac
	R 49	Rating: 310 Vac	Rating: 250 Vac
	B3292#-...	Rating: 305 Vac	Rating: 250 Vac
	KNB 1530	Rating: 300 Vac	Rating: 250 Vac
	KNB 1560	Rating: 300 Vac	Rating: 250 Vac
	GS-L	Rating: 275 Vac	Rating: 250 Vac
	PCX2 335M	Rating: 275 Vac	Rating: 250 Vac
	PCX2 337	Rating: 275 Vac	Rating: 250 Vac
	HQX	Rating: 275 Vac	Rating: 250 Vac
	CTX	Rating: 300 Vac	Rating: 250 Vac
Bridging Capacitor (C31)	CD	Manufacturer : TDK	Manufacturer : TDK-EPC
Photo Coupler (U3, U4)	K1010	Rating : Int. dcr=5.2mm	Rating : Int. dcr=5.3mm
	LTV-817	Rating: 100 °C	Rating: 110 °C
PCB	SWZ-1	Manufacturer : SHANGHAI WANZHENG CIRCUIT BOARD CO LTD	Manufacturer : Kunshan Wanyuantong Electronic Technology Co Ltd
Potting compound	SYLGARD 160	Rating: 105 °C	Rating: 150 °C
	KET-132A/B	Rating: 105 °C	Rating: 150 °C

변경발급 내용
Contents of Certificate Revisions

2nd Rev.) Addition of factory (16-015152-13 : 2016.03.24.)

- Factory name : Mean Well (Guangzhou) Electronics Co., Ltd.

Address : 2nd Floor No.A Building, Yuean Ind. Park, Dongpu Town, TianHe, Guangzhou,
P.R.China

3rd Rev.) Change Addition factory name, address and president (16-067872-18 : 2016.12.08.)

- Before: Mean Well (Guangzhou) Electronics Co., Ltd. / Wang Fei Long

2nd Floor No.A Building, Yuean Ind. Park, Dongpu Town, TianHe, Guangzhou, P.R.China

After : MEAN WELL (Guangzhou) Electronics Co., Ltd. Huadu branch / Yin Xiao Ming

No.11 Jingu South Road, Huadong Town, Huadu District, Guangzhou, P.R. China

4th Rev.) Addition of components (17-021470-02 : 2017.04.17.)

- Addition of components

Component	Manufacturer	Model(Type)	Characteristics
Power Cord	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 57 H05RN-F 3G0.75 mm ² -1.0 mm ²	3G x 0.75 mm ² -1.0 m m ²
	Dongguan Lucky United Electric Wire & Cable Co.,Ltd	245 IEC 57 H05RN-F 2C- 3CX0.75 mm ² -1 mm ²	3C x 0.75 mm ² -1.0 m m ²
	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 66 H07RN-F 3G1.0 mm ² -4 mm ²	3G x 1.0 mm ² -4.0 m m ²

변경발급 내용
Contents of Certificate Revisions

5th Rev.) Change of PCB layout construction and Components (20-065726-02-1 : 2020.11.10.)

- PCB layout: Added copper foil around the component holes for fixing components better.
- Addition of component:

Component	Manufacturer	Model(Type)	Characteristics
Input cord	DONGGUAN TAWANG ELECTRONICS CO LTD	60245 IEC 57 (H05RN-F) 3x1.0 mm ²	AC 300/500 V, 3 x 1.0 mm ²

- Change of components:

Component	Before	After
X-capacitor (C1)	KEMET(Arcotronics)/R.46 : 300 Vac, 1.0 μ F	KEMET(Arcotronics)/R.46 : 275/300 Vac, 1.0 μ F

6th Rev.) Change name, president and address of factory (21-082212-11-1 : 2022.01.11.)

- Before : MEAN WELL (Guangzhou) Electronics Co., Ltd. Huadu branch / Yin Xiao Ming
No.11 Jingu South Road, Huadong Town, Huadu District, Guangzhou, P.R. China
After : MEAN WELL (Guangzhou) Electronics Co.,Ltd. / Aden Wang
No.11 Jingu South Road, Huadu District, Guangzhou 510890, Guangdong, China

7th Rev.) Addition/Delete of a component, Change of a component.

Differences between the basic and derivative model of HLG-320H-54B correction.
(23-007485-01-1 : 2023.03.15.)

- Add additional component:

Component	Manufacturer	Model	Rating	Tested by
Fuse (FS1)	Conquer	MST-series	T6.3A, 300Vac	VDE
Potting Compound	U-BOND MATERIAL TECHNOLOGY CO LTD	UB- 5203A/B	Natural, rated 150 °C	UL

변경발급 내용
Contents of Certificate Revisions

- Change Critical components model or rating information

Component	Manufacturer	Model	Rating	Tested by
Varistor (ZNR1, ZNR2)	Joyin	10N561K, 10S561K 14N561K	350 Vac, 450 Vdc	UL
Y- Capacitors (C3, C4)	Murata	KX, KH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	440L	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	338 6	Min. 250 Vac, Max. 1000pF	ENEC
Y- Capacitors (C22)	Murata	KX, KH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	440L	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	338 6	Min. 250 Vac, Max. 1000pF	ENEC
Y- Capacitors (C129)	Murata	KX, KH	Min. 250 Vac, Max. 4700pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 4700pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 4700pF	VDE
Alt.	Vishay	440L	Min. 250 Vac, Max. 4700pF F	VDE

변경발급 내용
Contents of Certificate Revisions

Alt.	Vishay	338 6	Min.250 Vac, Max.4700pF	ENEC
X-capacitor (C1)	KEMET (Arcotronics)	R.46	Min.250Vac, Max.1.0 uF	ENEC
Alt.	KEMET(Arcotronics)	R.49	Min.250Vac, Max.1.0 uF	ENEC
Alt.	Epcos	B3292#-...	Min.250Vac, Max.1.0 uF	VDE
Alt.	ISKRA	KNB 1530	Min.250Vac, Max.1.0 uF	VDE
Alt.	ISKRA	KNB 1560	Min.250Vac, Max.1.0 uF	VDE
Alt.	Liow Gu	GS-L	Min.250Vac, Max.1.0 uF	VDE
Alt.	Pilkor	PCX2 335M	Min.250Vac, Max.1.0 uF	ENEC
Alt.	Pilkor	PCX2 337	Min.250Vac, Max.1.0 uF	VDE
Alt.	Ultra Tech	HQX	Min.250Vac, Max.1.0 uF	VDE
Alt.	Cheng Tung	CTX	Min.250Vac, Max.1.0 uF	VDE
Bridging Capacitor (C31)	Murata	KX	Min.250 Vac, Max.2200pF, Y1	VDE
Alt.	Walsin	AH	Min.250 Vac, Max.2200pF, Y1	VDE
Alt.	TDK	CD	Min.250 Vac, Max.2200pF, Y1	VDE

변경발급 내용
Contents of Certificate Revisions

- Change Critical components model or rating information

Component	Manufacturer	Model	Rating	Tested by
Varistor (ZNR1, ZNR2)	Joyin	10N561K, 10S561K 14N561K	350 Vac, 450 Vdc	UL
Y- Capacitors (C3, C4)	Murata	KX, KH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	440L	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	338 6	Min. 250 Vac, Max. 1000pF	ENEC
Y- Capacitors (C22)	Murata	KX, KH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	440L	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	338 6	Min. 250 Vac, Max. 1000pF	ENEC
Y- Capacitors (C129)	Murata	KX, KH	Min. 250 Vac, Max. 4700pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 4700pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 4700pF	VDE
Alt.	Vishay	440L	Min. 250 Vac, Max. 4700pF F	VDE

변경발급 내용
Contents of Certificate Revisions

- Differences between basic model and derivative model of HLG-320H-54B corrected as below;

HLG-320H-24	O/P: DC24 V, 13.34 A (Identical except for output rating , output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-30A	O/P: DC30 V, 10.7 A (Identical except for output rating , output wire with 14AWG*2C×1)
HLG-320H-30B	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1; 18AWG*2C×1 , type B top enclosure and type B dimming control board provided)
HLG-320H-30D	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure and type D dimming control board provided)
HLG-320H-30	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-36B	O/P: DC36 V, 8.9 A (Identical except for output rating, output wire with 14AWG*2C×1; 18AWG*2C×1 , type B top enclosure and type B dimming control board provided)
HLG-320H-42B	O/P: DC42 V, 7.65 A (Identical except for output rating, output wire with 14AWG*2C×1; 18AWG*2C×1 , type B top enclosure and type B dimming control board provided)
HLG-320H-48B	O/P: DC48 V, 6.7 A (Identical except for output rating, output wire with 14AWG*2C×1; 18AWG*2C×1 , type B top enclosure and type B dimming control board provided)
HLG-320H-54B	O/P: DC54 V, 5.95 A (Identical except for output wire with 14AWG*2C×1; 18AWG*2C×1 , type B top enclosure and type B dimming control board provided)

변경발급 내용
Contents of Certificate Revisions

8th Rev.) Addition/Delete of a component, Change of a component,
PCB upgrade: added alternative schematic diagram and PCB layout,
update of KC standards (23-079840-01-1 : 2024.01.29.)

- Addition of component:

Component	Manufacturer	Model	Rating	Tested by
Fuse (FS1)	Ever Island	2010	T6.3A, 300Vac	VDE
Varistor (ZNR1, ZNR2)	Joyin	JVT10N561K JVT10S561K	350 Vac, 450 Vdc	UL
	Joyin	JVT10N471K JVT10S471K	300 Vac, 385 Vdc	UL
	Joyin	JVT10N511K JVT10S511K JVT14S511K	320 Vac, 418 Vdc	UL
	Huiwan	V-511K-10D(E)H, V-511K-14D(E)H	320 Vac, 410 Vdc	UL
Y- Capacitors (C3, C4, C22)	Murata	KY	Min.250 Vac, Max.1000 pF	VDE
	Welson	KL, WD	Min.250 Vac, Max.1000 pF	VDE
	Viahay	VY1, WKP	Min.250 Vac, Max.1000 pF	VDE
	Wanming	HM	Min.250 Vac, Max.1000 pF	VDE
	Wanming	HJ	Min.250 Vac, Max.1000 pF	VDE
Y-Capacitors (C129)	Murata	KY	Min.250 Vac, Max.4700 pF	VDE

변경발급 내용
Contents of Certificate Revisions

	Welson	KL, WD	Min.250 Vac, Max.4700 pF	VDE
	Vishay	VY1, WKP	Min.250 Vac, Max.4700 pF F	VDE
	Wanming	HM	Min.250 Vac, Max.1000 pF	VDE
	Wanming	HJ	Min.250 Vac, Max.1000 pF	VDE
X-capacitor (C1)	HUA JUNG	MKP	Min.250 Vac, Max. 1.5 uF	ENEC
	Carli Electronics	MPX	Min.250 Vac, Max. 1.5 uF	VDE
	Joey	MPX	Min.250 Vac, Max. 1.5 uF	VDE
	NISSEI	MP1	Min.250 Vac, Max. 1.5 uF	VDE
Relay (RY1)	OMRON	G5Q-14-DC12	10 A, 250 Vac, 12 Vdc	VDE
	HONGFA	HF33F	5A,250Vac, 12Vdc	VDE

- Combine Y-Capacitors (C22) to Y-Capacitors (C3, C4, C22)
- Rating correction

: X-capacitor (C1) Max. 1.0 μ F to Max. 1.5 μ F

Relay(RY1) / Tyco / PCH-112D2H / 277 V to 250 Vac, 12 Vdc

변경발급 내용
Contents of Certificate Revisions

- Delete of components

Component	Manufacturer	Model	Rating	Tested by
Varistor (ZNR1, ZNR2)	Joyin	10N561K, 10S561K, 14N561K	350 Vac, 450 Vdc	UL
	Joyin	10N471K, 10S471K	300 Vac, 385 Vdc	UL
	Joyin	10N511K, 10S511K	320 Vac, 418 Vdc	UL
	Thinking	TVR10471-D TVR14471-D TVR10471 TVR14471 TVR10471-V TVR14471-V TVR10471-K TVR14471-K	300 Vac, 385 Vdc	UL
	Thinking	TVR10511 TVR14511 TVR10511-D TVR14511-D TVR10511-V TVR14511-V TVR10511-K TVR14511-K	320 Vac, 410 Vdc	UL
	Thinking	TVR10561 TVR10561 TVR10561-V TVR14561-V TVR10561-K TVR14561-K	350 Vac, 450 Vdc	UL
	Centra Science	CNR-10D511K CNR-14D511K	320 Vac, 410 Vdc	UL
	Centra Science	CNR-10D471K CNR-14D471K	300 Vac, 385 Vdc	UL
	Centra Science	CNR-10D561K CNR-14D561K	350 Vac, 450 Vdc	UL

변경발급 내용
Contents of Certificate Revisions

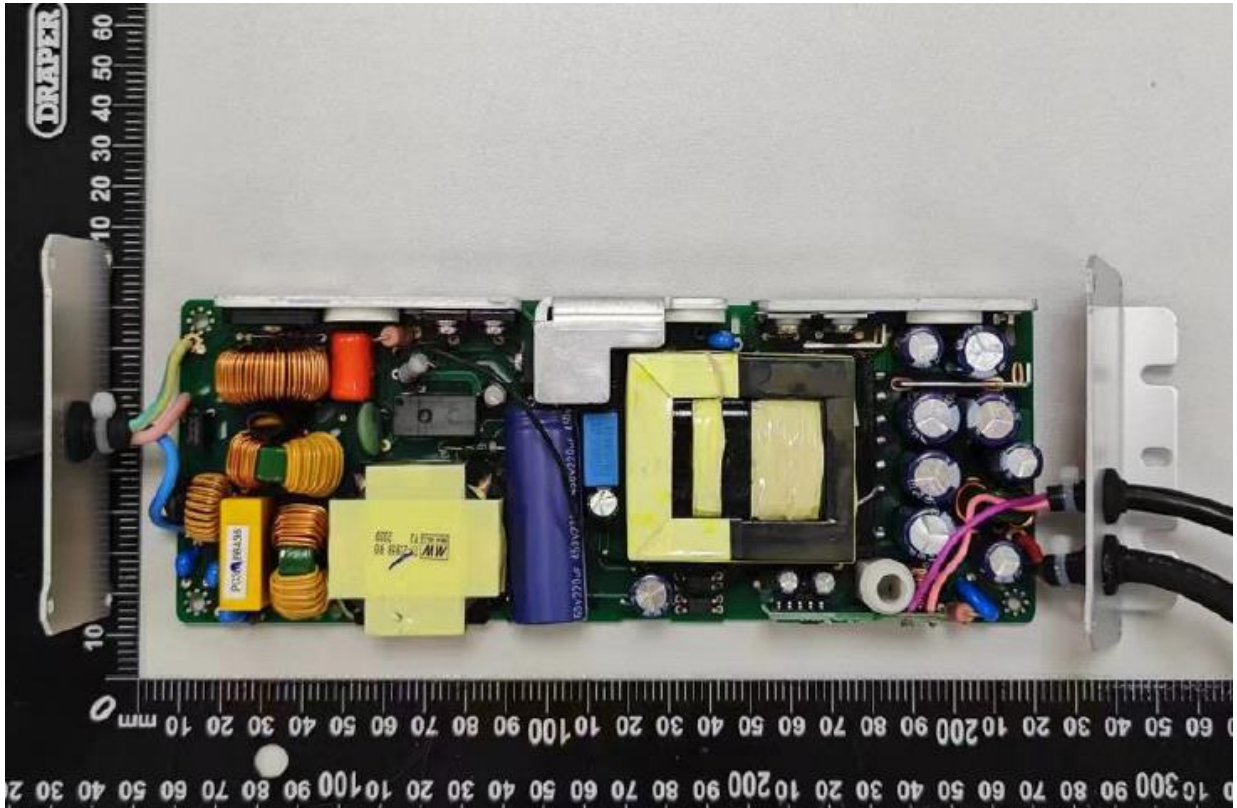
Y- Capacitors (C3, C4, C22)	Viahay	338 6	Min.250 Vac, Max.1000 pF	ENEC
Y- Capacitors (C129)	Vishay	338 6	Min.250 Vac, Max.4700 pF	ENEC
X-capacitor (C1)	KEMET(Arcotronics)	R.49	Min.250 Vac, Max. 1.0 uF	ENEC
	ISKRA	KNB 1530	Min.250 Vac, Max. 1.0 uF	VDE
	ISKRA	KNB 1560	Min.250 Vac, Max. 1.0 uF	VDE
	Pilkor	PCX2 335M	Min.250 Vac, Max. 1.0 uF	ENEC
	Pilkor	PCX2 337	Min.250 Vac, Max. 1.0 uF	VDE
	Cheng Tung	CTX	Min.250 Vac, Max. 1.0 uF	VDE
Relay (RY1)	Tyco	OJE-SH-112LMH, OJE-SS-112LMH	8 A, 250 V	TUV, UL
	Tyco	OJE-SH-112HMF, OJE-SS-112HMF	10 A, 250 V	TUV, UL
	Song Chuan	835-1A-B-C	10 A, 250 V	VDE, TUV, UL
PCB	BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	DGV0-3A	Min.V-1, 130 °C	UL
	HSIANG KUO INDUSTRIAL CO LTD	76V0A	Min.V-1, 130 °C	UL
	Jiin-Yu Enterprise Co Ltd	JY-001, JY-003	Min.V-1, 130 °C	UL
Power Cord	Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05 RN-F) 3G 0.75 mm ²	3G×0.75 mm ² 3C×0.75 mm ²	KC
	Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05 RN-F) 3G 1.0 mm ²	3G×1.0 mm ² 3C×1.0 mm ²	KC

- Update of KC standards to KC61347-1(2022-02), KC61347-2-13(2022-02)

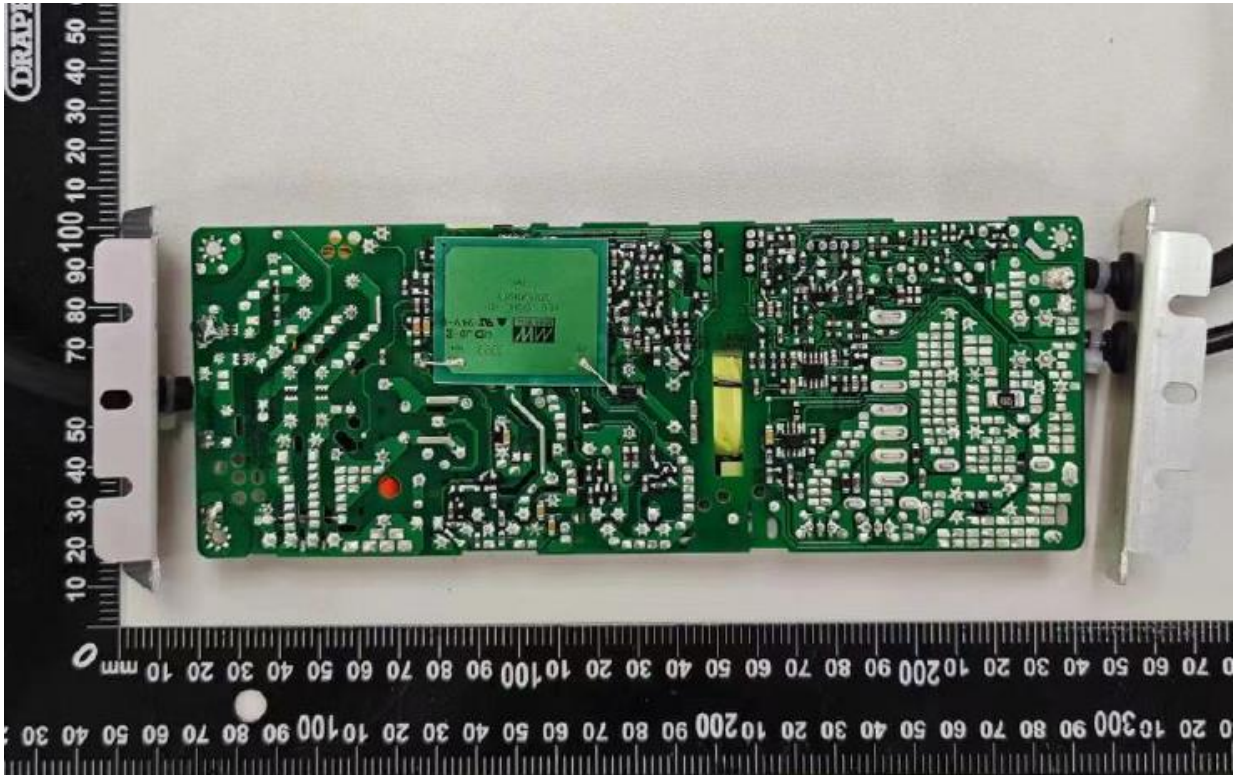
: based on CB Certificate Ref. No.: DE 2-034869, DE 2-034869-M1(TUV Rheinland LGA Products GmbH) and CB report No. CN21UCFI 001, CN21UCFI 002(TUV Rheinland (Guangdong) Ltd.)

☐ 첨부 : 제품사진
Photographs

<23-079840-01-2>



<23-079840-01-2>



접 수 번 호 : 23-007485-01-1
(Receipt No.)



안 전 인 증 서

Safety Certificate

안 전 인 증 번 호 : SZ11007-11008G
(Certificate No.)

제 조 업 자/수 입 업 자 명 : MEAN WELL Enterprises Co., Ltd.
(Manufacturer/importer)

주 소 : No.28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 248, Taiwan
(Address) (R.O.C.)

제 품 명 : 조명기구용컨버터(LED용)
(Product) (Electronic controlgear)

기 본 모 델 명 : HLG-320H-54A
(Basic Model)

파 생 모 델 명 : See the attachment 2
(Series Model)

정격/안전기준상의 모델구분 : AC 100-240 V, 50/60 Hz, 3.85-1.6 A, 385 W
(Rating) (Output : DC 54 V, 5.95 A)

시 험 기 준 : KC61347-1(2015-09), KC61347-2-13(2015-09)
(Standard)

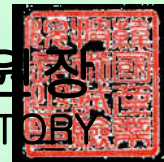
본 인증서는 제 조 국 명 : 대만
제 조 업 자 명 : MEAN WELL Enterprises Co., Ltd.
제조공장의 주소 : No.28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 248,
Taiwan (R.O.C.)
다수 공장의 명 : “이면기재” 의 제품에만 해당함

「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.

2023 년 03 월 15 일
Year month day

한국산업기술시험원
KOREA TESTING LABORATORY



※ 이 인증서는 「전기용품 및 생활용품 안전관리법 시행규칙」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)

다수 공장의 현황
(The status of Multiple Factories)

No	현 황	
1	다수 공장의 명 (Name)	MEAN WELL (Guangzhou) Electronics Co.,Ltd.
	주소 (Address)	No.11 Jingu South Road, Huadu District, Guangzhou 510890, Guangdong, China
	제조국명 (Origin)	중국

□ 첨부 1 : 전기용품의 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
Fuse (FS1)	Conquer	MST-series	T6.3 A, 250 Vac	VDE
Alt.	Conquer	MST-series	T6.3A, 300Vac	VDE
Varistor (ZNR1, ZNR2)	Joyin	10N561K, 10S561K 14N561K	350 Vac, 450 Vdc	UL
Alt.	Joyin	10N471K, 10S471K	300 Vac, 385 Vdc	UL
Alt.	Joyin	10N511K, 10S511K	320 Vac, 418 Vdc	UL
Alt.	Thinking	TVR10471-D TVR14471-D TVR10471-M TVR14471-M TVR10471 TVR14471 TVR10471-V TVR14471-V TVR10471-K TVR14471-K	300 Vac, 385 Vdc	UL
Alt.	Thinking	TVR10511 TVR14511 TVR10511-D TVR14511-D TVR10511-V TVR14511-V TVR10511-M TVR14511-M TVR10511-K TVR14511-K	320 Vac, 410 Vdc	UL
Alt.	Thinking	TVR10561 TVR10561 TVR10561-V TVR14561-V TVR10561-K TVR14561-K TVR10561-M TVR14561-M	350 Vac, 450 Vdc	UL
Alt.	Centra Science	CNR-10D511K CNR-14D511K	320 Vac, 410 Vdc	UL
Alt.	Centra Science	CNR-10D471K CNR-14D471K	300 Vac, 385 Vdc	UL
Alt.	Centra Science	CNR-10D561K CNR-14D561K	350 Vac, 450 Vdc	UL

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Y- Capacitors (C3, C4)	Murata	KX, KH	Min.250 Vac, Max.1000pF	VDE
Alt.	Walsin	AC, AH	Min.250 Vac, Max.1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min.250 Vac, Max.1000pF	VDE
Alt.	Viahay	440L	Min.250 Vac, Max.1000pF	VDE
Alt.	Viahay	338 6	Min.250 Vac, Max.1000pF	ENEC
Y- Capacitors (C22)	Murata	KX, KH	Min.250 Vac, Max.1000pF	VDE
Alt.	Walsin	AC, AH	Min.250 Vac, Max.1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min.250 Vac, Max.1000pF	VDE
Alt.	Viahay	440L	Min.250 Vac, Max.1000pF	VDE
Alt.	Viahay	338 6	Min.250 Vac, Max.1000pF	ENEC
Y- Capacitors (C129)	Murata	KX, KH	Min.250 Vac, Max.4700pF	VDE
Alt.	Walsin	AC, AH	Min.250 Vac, Max.4700pF	VDE
Alt.	TDK-EPC	CD, CS	Min.250 Vac, Max.4700pF	VDE
Alt.	Vishay	440L	Min.250 Vac, Max.4700pF	VDE
Alt.	Vishay	338 6	Min.250 Vac, Max.4700pF	ENEC
X-capacitor (C1)	KEMET (Arcotronics)	R.46	Min.250Vac, Max.1.0 uF	ENEC
Alt.	KEMET(Arcotronics)	R.49	Min.250Vac, Max.1.0 uF	ENEC
Alt.	Epcos	B3292#-...	Min.250Vac, Max.1.0 uF	VDE
Alt.	ISKRA	KNB 1530	Min.250Vac, Max.1.0 uF	VDE
Alt.	ISKRA	KNB 1560	Min.250Vac, Max.1.0 uF	VDE
Alt.	Liow Gu	GS-L	Min.250Vac, Max.1.0 uF	VDE
Alt.	Pilkor	PCX2 335M	Min.250Vac, Max.1.0 uF	ENEC
Alt.	Pilkor	PCX2 337	Min.250Vac, Max.1.0 uF	VDE
Alt.	Ultra Tech	HQX	Min.250Vac, Max.1.0 uF	VDE
Alt.	Cheng Tung	CTX	Min.250Vac, Max.1.0 uF	VDE

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Relay (RY1)	Tyco	OJE-SH-112LMH, OJE-SS-112LMH	8A, 250V	TUV, UL
Alt.	Tyco	OJE-SH-112HMF, OJE-SS-112HMF	10A, 250V	TUV, UL
Alt.	Song Chuan	835-1A-B-C	10A, 250V	VDE, TUV, UL
Alt.	Tyco	PCH-112D2H	5A, 277V	VDE, UL
Bridging Capacitor (C31)	Murata	KX	Min.250 Vac, Max.2200pF, Y1	VDE
Alt.	Walsin	AH	Min.250 Vac, Max.2200pF, Y1	VDE
Alt.	TDK	CD	Min.250 Vac, Max.2200pF, Y1	VDE
Photo Coupler (U3, U4)	Cosmo	K1010	dti=0.7mm, Int. dcr=5.2mm Ext. dcr=8mm, thermal cycling test, 115 °C	VDE
Alt.	Lite-On	LTV-817, LTV-817M	dti=0.8mm, Int.dcr=5.2mm, Ent. dcr=7.8mm, 110 °C	VDE
Alt.	Sharp	PC123	dti=0.7mm Int. dcr=5mm Ext. dcr=8mm, thermal cycling test, 110 °C	VDE
Transformer(T1) (For HLG-320H-12B)	Yu Jing	TF-2355	Class B	Tested with appliance
Alt.	Mean Well	TF-2355	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-12y, y=A, D or Blank)	Yu Jing	TF-2286	Class B	Tested with appliance
Alt.	Mean Well	TF-2286	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-15B)	Yu Jing	TF-2356	Class B	Tested with appliance
Alt.	Mean Well	TF-2356	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 HLG-320H-1 5y, y=A, D or Blank)	Yu Jing	TF-2287	Class B	Tested with appliance
Alt.	Mean Well	TF-2287	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-2 0B)	Yu Jing	TF-2357	Class B	Tested with appliance
Alt.	Mean Well	TF-2357	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-2 0y, y=A, D or Blank)	Yu Jing	TF-2288	Class B	Tested with appliance
Alt.	Mean Well	TF-2288	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-2 4B)	Yu Jing	TF-2358	Class B	Tested with appliance
Alt.	Mean Well	TF-2358	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-2 4y, y=A, D or Blank)	Yu Jing	TF-2289	Class B	Tested with appliance
Alt.	Mean Well	TF-2289	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 0B)	Yu Jing	TF-2359	Class B	Tested with appliance
Alt.	Mean Well	TF-2359	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 0y, y=A, D or Blank)	Yu Jing	TF-2290	Class B	Tested with appliance
Alt.	Mean Well	TF-2290	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 6B)	Yu Jing	TF-2360	Class B	Tested with appliance
Alt.	Mean Well	TF-2360	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 6y, y=A, D or Blank)	Yu Jing	TF-2291	Class B	Tested with appliance
Alt.	Mean Well	TF-2291	Class B	Tested with

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
				appliance
Transformer(T1) (For HLG-320H-4 2B)	Yu Jing	TF-2361	Class B	Tested with appliance
Alt.	Mean Well	TF-2361	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 2y, y=A, D or Blank)	Yu Jing	TF-2292	Class B	Tested with appliance
Alt.	Mean Well	TF-2292	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 8B)	Yu Jing	TF-2362	Class B	Tested with appliance
Alt.	Mean Well	TF-2362	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 8y, y=A, D or Blank)	Yu Jing	TF-2293	Class B	Tested with appliance
Alt.	Mean Well	TF-2293	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-5 4B)	Yu Jing	TF-2363	Class B	Tested with appliance
Alt.	Mean Well	TF-2363	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-5 4y, y=A, D or Blank)	Yu Jing	TF-2294	Class B	Tested with appliance
Alt.	Mean Well	TF-2294	Class B	Tested with appliance
Line Filter (LF1)	Mean Well	TR-1010	130 ℃	Tested with appliance
Line Filter (LF2, L F3)	Mean Well	TR-890	125 ℃	Tested with appliance
Choke(L2)	Mean Well	TR-993	130 ℃	Tested with appliance
PFC Choke (L1)	Mean Well	TF-2295	130 ℃	Tested with appliance
PCB	SHUNDE JUNDA ELECTRONIC CO LTD	JD-D, JD-E	Min.V-1, 130 ℃	UL

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	DGV0-3A		
Alt.	HONG SHIEN ENTERPRISE CO LTD	03V-0, -D, -M		
Alt.	HONG WEI ENTERPRISES CO LTD	79		
Alt.	HSU TZU ELECTRONIC CO LTD	4V0, DV2, MV1		
Alt.	Kunshan Wanyuantong Electronic Technology Co Ltd	SWZ-1		
Alt.	HSIANG KUO INDUSTRIAL CO LTD	76V0A		
Alt.	Guangzhou Taihe Printed Circuit Board Ltd.	THS, THD		
Alt.	Jiin-Yu Enterprise Co Ltd	JY-001, JY-003		
Power Cord	Dongguan Lucky United	245 IEC 57 H05RN-F	3C x 0.75 mm ² 3C x 1.0 mm ²	KC
Alt.	Dongguan Lucky United	245 IEC 51 H03RT-H	3C x 0.75 mm ² 3C x 1.0 mm ²	KC
Alt.	Guangdong Rifeng	60245 IEC 57 H05RN-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ²	KC
Alt.	I-sheng	60227 IEC 53	3G x 0.75 mm ² 3G x 1.0 mm ² 3G x 1.5 mm ² 3G x 2.5 mm ²	KC
Alt.	Foxconn	K60227 IEC 52 (H03VV-F)	3G x 0.75 mm ²	KC
Alt.	Foxconn	K60227 IEC 53 (H05VV-F)	3G x 0.75 mm ² 3G x 1.0 mm ²	KC
Alt.	Fuyu	K60227 IEC 52 (H03VV-F)	3G x 0.75 mm ²	KC
Alt.	Fuyu	K60227 IEC 53 (H05VV-F)	3G x 0.75 mm ² 3G x 1.0 mm ²	KC
Alt.	Dong Guan Well Shin	K60227 IEC 52 H03VV-F	3C x 0.75 mm ²	KC
Alt.	Dong Guan Well Shin	K60227 IEC 53 H05VVH-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ²	KC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
			3C x 2.0 mm ² 3C x 2.5 mm ²	
Alt.	Ta Hsing Electric Wire & Cable	H05VV-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ² 3C x 2.0 mm ² 3C x 2.5 mm ²	KC
Alt.	Awin Wire & Cable Co., Ltd	60227IEC52 (H03VV-F) 3G 0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3G 0.75 mm ² , 3 x 0.75/1.0 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3G 1.0 mm ²	3G×1.0mm ² 3C×1.0mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×1.0 mm ²	3G×1.0mm ² 3C×1.0mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×1.5 mm ²	3G×1.5mm ² 3C×1.5mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×2.5 mm ²	3G×2.5mm ² 3C×2.5mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 52 (H03VV-F) 3X0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3G 0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3G 1.0 mm ²	3G×1.0mm ² 3C×1.0mm ²	KC
Alt.	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 57 H05RN-F 3G0.75 mm ² -1.0 mm ²	3G x 0.75 mm ² -1.0 mm ²	KC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	Dongguan Lucky United Electric Wire & Cable Co.,Ltd	245 IEC 57 H05RN-F 2C-3CX0.75 mm ² -1 mm ²	3C x 0.75 mm ² -1.0 mm ²	KC
Alt.	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 66 H07RN-F 3G1.0 mm ² -4 mm ²	3G x 1.0 mm ² -4.0 mm ²	KC
Alt.	DONGGUAN TAWANG ELECTRONICS CO LTD	60245 IEC 57 (H05RN-F) 3x1.0 mm ²	AC 300/500 V, 3 x 1.0 mm ²	KC
Potting Compound	DOW Corning Corp.	SYLGARD 160	Gray, rated 150 °C	UL
Alt.	Shin Etsu Silicone	KET-132A/B	Natural, rated 150 °C	UL
Alt.	GUANGZHOU Huitian	5299	Gray, rated 150 °C	UL
Alt.	Shin-Etsu Silicone	KET-132 A/B H	Natural, rated 150 °C	UL
Alt.	U-BOND MATERIAL TECHNOLOGY CO LTD	UB-5203A/B	Natural, rated 150 °C	UL

☐ 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 multiple listing or changing the items above, the certification revision shall be applied.

2. 인증변경신청 없이 임의로 변경하는 경우는, 전기용품 및 생활용품 안전관리법 시행규칙 제 21 조제 1 항 또는 제 38 조제 1 항 규정에 의한 안전인증 취소 혹은 안전확인신고 효력상실 사유가 됨을 유의하시기 바랍니다.

The Safety Certification will be cancelled under the Article 21(1), 38(1) of the Enforcement Rule of the Electrical appliances and Consumer Products Safety Control Act if the contents of the Certification is altered without our authorization.

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

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-12A	O/P: DC12 V, 22 A (Identical except for output rating, output wire with 14AWG*2C×1)
HLG-320H-12B	O/P: DC12 V, 22 A (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)
HLG-320H-12D	O/P: DC12 V, 22 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure and type D dimming control board provided)
HLG-320H-12	O/P: DC12 V, 22 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-15A	O/P: DC15 V, 19 A (Identical except for output rating , output wire with 14AWG*2C×1)
HLG-320H-15B	O/P: DC15 V, 19 A (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)
HLG-320H-15D	O/P: DC15 V, 19 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure and type D dimming control board provided)
HLG-320H-15	O/P: DC15 V, 19 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-20A	O/P: DC20 V, 15 A (Identical except for output rating, output wire with 14AWG*2C×1)
HLG-320H-20B	O/P: DC20 V, 15 A (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)
HLG-320H-20D	O/P: DC20 V, 15 A (Identical except for output rating, output wire with 14AWG*2C×1 type B top enclosure and type D dimming control board provided)
HLG-320H-20	O/P: DC20 V, 15 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-24A	O/P: DC24 V, 13.34 A (Identical except for output rating, output wire with 14AWG*2C×1)
HLG-320H-24B	O/P: DC24 V, 13.34 A (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-24D	O/P: DC24 V, 13.34 A (Identical except for output rating , output wire with 14AWG*2C×1 , type B top enclosure and type D dimming control board provided)
HLG-320H-24	O/P: DC24 V, 13.34 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-30A	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1)
HLG-320H-30B	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-30D	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure and type D dimming control board provided)
HLG-320H-30	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-36A	O/P: DC36 V, 8.9 A (Identical except for output rating)
HLG-320H-36B	O/P: DC36 V, 8.9 A (Identical except for output rating, type B top enclosure and type B dimming control board provided)
HLG-320H-36D	O/P: DC36 V, 8.9 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-36	O/P: DC36 V, 8.9 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-42A	O/P: DC42 V, 7.65 A (Identical except for output rating)
HLG-320H-42B	O/P: DC42 V, 7.65 A (Identical except for output rating, type B top enclosure and type B dimming control board provided)
HLG-320H-42D	O/P: DC42 V, 7.65 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-42	O/P: DC42 V, 7.65 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-48A	O/P: DC48 V, 6.7 A (Identical except for output rating)
HLG-320H-48B	O/P: DC48 V, 6.7 A (Identical except for output rating, type B top enclosure and type B dimming control board provided)

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-48D	O/P: DC48 V, 6.7 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-48	O/P: DC48 V, 6.7 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-54B	O/P: DC54 V, 5.95 A (Identical except for type B top enclosure and type B dimming control board provided)
HLG-320H-54D	O/P: DC54 V, 5.95 A (Identical except for type B top enclosure and type D dimming control board provided)
HLG-320H-54	O/P: DC54 V, 5.95 A (Identical except for type B top enclosure provided)

제품특기사항 및 시험조건
Remarks & Test conditions

1. Test Report Ref. No. : 11-1920-5550 (2011.11.01.)

2. Products Description

- DC or AC supplied electronic controlgear for LEDs
- Rating - PRI : AC100-240 V 50/60 Hz 385 W

SEC : 54 Vd.c. 5.95 A

- PF : > 0.9
- Type of protection : IP 65
- tc : 90 °C, ta : 50 °C
- Protection class : Class I
- Thermally protected : 110 °C
- This product is totally enclosed electronic controlgear.
- Constant voltage type, Independent SELV equivalent

* factory information

- MEAN WELL (Guangzhou) Electronics Co.,Ltd.

No.11 Jingu South Road, Huadu District, Guangzhou 510890, Guangdong, China

□ 본 제품의 검토내용에 관하여 의문사항이 있으시면 아래 연락처로 문의하시기 바랍니다.

검토 담당자 : 고객지원본부 인증융합평가센터 신 종욱 / 02-8601-1473

□ *If you have any question on product review, please contact the person below :*

Job holder: Customer Support Division, Certification Convergence Evaluation Center, J.U.Shin / +82 2 860-1473

FP511-05

☐ 첨부 3 : 안전인증의 변경 현황
Revisions Status

변경발급 내용 Contents of Certificate Revisions		
1 st Rev.) Addition/Delete of a component, Change of a component and PCB's pattern (15-041361-01)		
- Addition of a component		
Part no.	Manufacturer	Model
Fuse (FS1)	Conquer	MST-series
Varistor(ZNR1, ZNR2)	Joyin	10N561K, 10S561K
	Joyin	10N471K, 10S471K
	Joyin	10N511K, 10S511K
	Thinking	TVR10471-D TVR14471-D TVR10471-M TVR14471-M TVR10471 TVR14471 TVR10471-V TVR14471-V TVR10471-K TVR14471-K
	Thinking	TVR10511 TVR14511 TVR10511-D TVR14511-D TVR10511-V TVR14511-V TVR10511-M TVR14511-M TVR10511-K TVR14511-K
	Thinking	TVR10561 TVR10561 TVR10561-V TVR14561-V TVR10561-K TVR14561-K TVR10561-M TVR14561-M
	Centra Science	CNR-10D511K CNR-14D511K
	Centra Science	CNR-10D471K CNR-14D471K
	Centra Science	CNR-10D561K CNR-14D561K

변경발급 내용 Contents of Certificate Revisions			
	Relay(RY1)	Tyco	PCH-112D2H
	Photo Coupler(U3, U4)	Lite-On	LTV-817M
	PCB	SHUNDE JUNDA ELECTRONIC CO LTD	JD-E
		HONG SHIEN ENTERPRISE CO LTD	-D, -M
		HSU TZU ELECTRONIC CO LTD	DV2, MV1
		Guangzhou Taihe Printed Circuit Board Ltd.	THS, THD
		Jiin-Yu Enterprise Co Ltd	JY-001, JY-003
	Power Cord	Awin Wire & Cable Co., Ltd	60227IEC52 (H03VV-F) 3G 0.75 mm ²
		Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3G 0.75 mm ² , 3 x 0.75/1.0 mm ²
		Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3G 1.0 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x0.75 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x1.0 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x1.5 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x2.5 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 52 (H03VV-F) 3X0.75 mm ²
		Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3G 0.75 mm ²
		Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3G 1.0 mm ²
	Potting Compound	GUANGZHOU Huitian	5299

변경발급 내용
Contents of Certificate Revisions

- Delete of a component

Part no.	Manufacturer	Model
Fuse (FS1)	Conquer	MET-series
Varistor(ZNR1)	Centra Science	CNR14D361K
	Joyin	14N361K, 10S361K, 14S361K
	Thinking	TVR10361-D, TVR14361-D
Varistor(ZNR2)	Thinking	TVR14511-D, TVR10511-D
	Centra Science	CNR14D511K
	Joyin	10S511K, 14S511K, 14N511K

- Change of a component

Part no.	Model	Before	After
Y-Capacitors(C3, C4)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
Y-Capacitors(C22)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
Y-Capacitors(C129)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
X-Capacitors(C1)	R 46	Rating: 300 Vac	Rating: 250 Vac
	R 49	Rating: 310 Vac	Rating: 250 Vac
	B3292#-...	Rating: 305 Vac	Rating: 250 Vac
	KNB 1530	Rating: 300 Vac	Rating: 250 Vac
	KNB 1560	Rating: 300 Vac	Rating: 250 Vac
	GS-L	Rating: 275 Vac	Rating: 250 Vac
	PCX2 335M	Rating: 275 Vac	Rating: 250 Vac
	PCX2 337	Rating: 275 Vac	Rating: 250 Vac
	HQX	Rating: 275 Vac	Rating: 250 Vac
	CTX	Rating: 300 Vac	Rating: 250 Vac
Bridging Capacitor (C31)	CD	Manufacturer : TDK	Manufacturer : TDK-EPC
Photo Coupler (U3, U4)	K1010	Rating : Int. dcr=5.2mm	Rating : Int. dcr=5.3mm
	LTV-817	Rating: 100 °C	Rating: 110 °C
PCB	SWZ-1	Manufacturer : SHANGHAI WANZHENG CIRCUIT BOARD CO LTD	Manufacturer : Kunshan Wanyuantong Electronic Technology Co Ltd
Potting compound	SYLGARD 160	Rating: 105 °C	Rating: 150 °C
	KET-132A/B	Rating: 105 °C	Rating: 150 °C

변경발급 내용
Contents of Certificate Revisions

2nd Rev.) Addition of factory (16-015152-13 : 2016.03.24.)

- Factory name : Mean Well (Guangzhou) Electronics Co., Ltd.

Address : 2nd Floor No.A Building, Yuean Ind. Park, Dongpu Town, TianHe, Guangzhou,
P.R.China

3rd Rev.) Change Addition factory name, address and president (16-067872-18 : 2016.12.08.)

- Before: Mean Well (Guangzhou) Electronics Co., Ltd. / Wang Fei Long

2nd Floor No.A Building, Yuean Ind. Park, Dongpu Town, TianHe, Guangzhou, P.R.China

After : MEAN WELL (Guangzhou) Electronics Co., Ltd. Huadu branch / Yin Xiao Ming

No.11 Jingu South Road, Huadong Town, Huadu District, Guangzhou, P.R. China

4th Rev.) Addition of components (17-021470-02 : 2017.04.17.)

- Addition of components

Component	Manufacturer	Model(Type)	Characteristics
Power Cord	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 57 H05RN-F 3G0.75 mm ² -1.0 mm ²	3G x 0.75 mm ² -1.0 m m ²
	Dongguan Lucky United Electric Wire & Cable Co.,Ltd	245 IEC 57 H05RN-F 2C- 3CX0.75 mm ² -1 mm ²	3C x 0.75 mm ² -1.0 m m ²
	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 66 H07RN-F 3G1.0 mm ² -4 mm ²	3G x 1.0 mm ² -4.0 m m ²

변경발급 내용
Contents of Certificate Revisions

5th Rev.) Change of PCB layout construction and Components (20-065726-02-1 : 2020.11.10.)

- PCB layout: Added copper foil around the component holes for fixing components better.
- Addition of component:

Component	Manufacturer	Model(Type)	Characteristics
Input cord	DONGGUAN TAWANG ELECTRONICS CO LTD	60245 IEC 57 (H05RN-F) 3x1.0 mm ²	AC 300/500 V, 3 x 1.0 mm ²

- Change of components:

Component	Before	After
X-capacitor (C1)	KEMET(Arcotronics)/R.46 : 300 Vac, 1.0 μ F	KEMET(Arcotronics)/R.46 : 275/300 Vac, 1.0 μ F

6th Rev.) Change name, president and address of factory (21-082212-11-1 : 2022.01.11.)

- Before : MEAN WELL (Guangzhou) Electronics Co., Ltd. Huadu branch / Yin Xiao Ming
No.11 Jingu South Road, Huadong Town, Huadu District, Guangzhou, P.R. China
- After : MEAN WELL (Guangzhou) Electronics Co.,Ltd. / Aden Wang
No.11 Jingu South Road, Huadu District, Guangzhou 510890, Guangdong, China

7th Rev.) Addition/Delete of a component, Change of a component.

Differences between the basic and derivative model of HLG-320H-54B correction.
(23-007485-01-1 : 2023.03.15.)

- Add additional component:

Component	Manufacturer	Model	Rating	Tested by
Fuse (FS1)	Conquer	MST-series	T6.3A, 300Vac	VDE
Potting Compound	U-BOND MATERIAL TECHNOLOGY CO LTD	UB- 5203A/B	Natural, rated 150 °C	UL

변경발급 내용
Contents of Certificate Revisions

- Change Critical components model or rating information

Component	Manufacturer	Model	Rating	Tested by
Varistor (ZNR1, ZNR2)	Joyin	10N561K, 10S561K 14N561K	350 Vac, 450 Vdc	UL
Y- Capacitors (C3, C4)	Murata	KX, KH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	440L	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	338 6	Min. 250 Vac, Max. 1000pF	ENEC
Y- Capacitors (C22)	Murata	KX, KH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	440L	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	338 6	Min. 250 Vac, Max. 1000pF	ENEC
Y- Capacitors (C129)	Murata	KX, KH	Min. 250 Vac, Max. 4700pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 4700pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 4700pF	VDE
Alt.	Vishay	440L	Min. 250 Vac, Max. 4700pF F	VDE

변경발급 내용
Contents of Certificate Revisions

Alt.	Vishay	338 6	Min.250 Vac, Max.4700pF	ENEC
X-capacitor (C1)	KEMET (Arcotronics)	R.46	Min.250Vac, Max.1.0 uF	ENEC
Alt.	KEMET(Arcotronics)	R.49	Min.250Vac, Max.1.0 uF	ENEC
Alt.	Epcos	B3292#-...	Min.250Vac, Max.1.0 uF	VDE
Alt.	ISKRA	KNB 1530	Min.250Vac, Max.1.0 uF	VDE
Alt.	ISKRA	KNB 1560	Min.250Vac, Max.1.0 uF	VDE
Alt.	Liow Gu	GS-L	Min.250Vac, Max.1.0 uF	VDE
Alt.	Pilkor	PCX2 335M	Min.250Vac, Max.1.0 uF	ENEC
Alt.	Pilkor	PCX2 337	Min.250Vac, Max.1.0 uF	VDE
Alt.	Ultra Tech	HQX	Min.250Vac, Max.1.0 uF	VDE
Alt.	Cheng Tung	CTX	Min.250Vac, Max.1.0 uF	VDE
Bridging Capacitor (C31)	Murata	KX	Min.250 Vac, Max.2200pF, Y1	VDE
Alt.	Walsin	AH	Min.250 Vac, Max.2200pF, Y1	VDE
Alt.	TDK	CD	Min.250 Vac, Max.2200pF, Y1	VDE

변경발급 내용
Contents of Certificate Revisions

- Change Critical components model or rating information

Component	Manufacturer	Model	Rating	Tested by
Varistor (ZNR1, ZNR2)	Joyin	10N561K, 10S561K 14N561K	350 Vac, 450 Vdc	UL
Y- Capacitors (C3, C4)	Murata	KX, KH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	440L	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	338 6	Min. 250 Vac, Max. 1000pF	ENEC
Y- Capacitors (C22)	Murata	KX, KH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	440L	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	338 6	Min. 250 Vac, Max. 1000pF	ENEC
Y- Capacitors (C129)	Murata	KX, KH	Min. 250 Vac, Max. 4700pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 4700pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 4700pF	VDE
Alt.	Vishay	440L	Min. 250 Vac, Max. 4700pF F	VDE

변경발급 내용
Contents of Certificate Revisions

- Differences between basic model and derivative model of HLG-320H-54B corrected as below;

HLG-320H-24	O/P: DC24 V, 13.34 A (Identical except for output rating , output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-30A	O/P: DC30 V, 10.7 A (Identical except for output rating , output wire with 14AWG*2C×1)
HLG-320H-30B	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1; 18AWG*2C×1 , type B top enclosure and type B dimming control board provided)
HLG-320H-30D	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure and type D dimming control board provided)
HLG-320H-30	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-36B	O/P: DC36 V, 8.9 A (Identical except for output rating, output wire with 14AWG*2C×1; 18AWG*2C×1 , type B top enclosure and type B dimming control board provided)
HLG-320H-42B	O/P: DC42 V, 7.65 A (Identical except for output rating, output wire with 14AWG*2C×1; 18AWG*2C×1 , type B top enclosure and type B dimming control board provided)
HLG-320H-48B	O/P: DC48 V, 6.7 A (Identical except for output rating, output wire with 14AWG*2C×1; 18AWG*2C×1 , type B top enclosure and type B dimming control board provided)
HLG-320H-54B	O/P: DC54 V, 5.95 A (Identical except for output wire with 14AWG*2C×1; 18AWG*2C×1 , type B top enclosure and type B dimming control board provided)

□ 첨부 1 : 전기용품의 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
Fuse (FS1)	Conquer	MST-series	T6.3 A, 250 Vac	VDE
Alt.	Conquer	MST-series	T6.3A, 300Vac	VDE
Varistor (ZNR1, ZNR2)	Joyin	10N561K, 10S561K 14N561K	350 Vac, 450 Vdc	UL
Alt.	Joyin	10N471K, 10S471K	300 Vac, 385 Vdc	UL
Alt.	Joyin	10N511K, 10S511K	320 Vac, 418 Vdc	UL
Alt.	Thinking	TVR10471-D TVR14471-D TVR10471-M TVR14471-M TVR10471 TVR14471 TVR10471-V TVR14471-V TVR10471-K TVR14471-K	300 Vac, 385 Vdc	UL
Alt.	Thinking	TVR10511 TVR14511 TVR10511-D TVR14511-D TVR10511-V TVR14511-V TVR10511-M TVR14511-M TVR10511-K TVR14511-K	320 Vac, 410 Vdc	UL
Alt.	Thinking	TVR10561 TVR10561 TVR10561-V TVR14561-V TVR10561-K TVR14561-K TVR10561-M TVR14561-M	350 Vac, 450 Vdc	UL
Alt.	Centra Science	CNR-10D511K CNR-14D511K	320 Vac, 410 Vdc	UL
Alt.	Centra Science	CNR-10D471K CNR-14D471K	300 Vac, 385 Vdc	UL
Alt.	Centra Science	CNR-10D561K CNR-14D561K	350 Vac, 450 Vdc	UL

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Y- Capacitors (C3, C4)	Murata	KX, KH	Min.250 Vac, Max.1000pF	VDE
Alt.	Walsin	AC, AH	Min.250 Vac, Max.1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min.250 Vac, Max.1000pF	VDE
Alt.	Viahay	440L	Min.250 Vac, Max.1000pF	VDE
Alt.	Viahay	338 6	Min.250 Vac, Max.1000pF	ENEC
Y- Capacitors (C22)	Murata	KX, KH	Min.250 Vac, Max.1000pF	VDE
Alt.	Walsin	AC, AH	Min.250 Vac, Max.1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min.250 Vac, Max.1000pF	VDE
Alt.	Viahay	440L	Min.250 Vac, Max.1000pF	VDE
Alt.	Viahay	338 6	Min.250 Vac, Max.1000pF	ENEC
Y- Capacitors (C129)	Murata	KX, KH	Min.250 Vac, Max.4700pF	VDE
Alt.	Walsin	AC, AH	Min.250 Vac, Max.4700pF	VDE
Alt.	TDK-EPC	CD, CS	Min.250 Vac, Max.4700pF	VDE
Alt.	Vishay	440L	Min.250 Vac, Max.4700pF	VDE
Alt.	Vishay	338 6	Min.250 Vac, Max.4700pF	ENEC
X-capacitor (C1)	KEMET (Arcotronics)	R.46	Min.250Vac, Max.1.0 uF	ENEC
Alt.	KEMET(Arcotronics)	R.49	Min.250Vac, Max.1.0 uF	ENEC
Alt.	Epcos	B3292#-...	Min.250Vac, Max.1.0 uF	VDE
Alt.	ISKRA	KNB 1530	Min.250Vac, Max.1.0 uF	VDE
Alt.	ISKRA	KNB 1560	Min.250Vac, Max.1.0 uF	VDE
Alt.	Liow Gu	GS-L	Min.250Vac, Max.1.0 uF	VDE
Alt.	Pilkor	PCX2 335M	Min.250Vac, Max.1.0 uF	ENEC
Alt.	Pilkor	PCX2 337	Min.250Vac, Max.1.0 uF	VDE
Alt.	Ultra Tech	HQX	Min.250Vac, Max.1.0 uF	VDE

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	Cheng Tung	CTX	Min.250Vac, Max.1.0 uF	VDE
Relay (RY1)	Tyco	OJE-SH-112L MH, OJE-SS-112LM H	8A, 250V	TUV, UL
Alt.	Tyco	OJE-SH-112H MF, OJE-SS-112H MF	10A, 250V	TUV, UL
Alt.	Song Chuan	835-1A-B-C	10A, 250V	VDE, TUV, UL
Alt.	Tyco	PCH-112D2H	5A, 277V	VDE, UL
Bridging Capacitor (C31)	Murata	KX	Min.250 Vac, Max.2200p F, Y1	VDE
Alt.	Walsin	AH	Min.250 Vac, Max.2200p F, Y1	VDE
Alt.	TDK	CD	Min.250 Vac, Max.2200p F, Y1	VDE
Photo Coupler (U3, U4)	Cosmo	K1010	dti=0.7mm, Int. dcr=5.2mm Ext. dcr=8mm, thermal cycling test, 115 ℃	VDE
Alt.	Lite-On	LTV-817, LTV-817M	dti=0.8mm, Int.dcr=5.2m m, Ent. dcr=7.8mm, 110 ℃	VDE
Alt.	Sharp	PC123	dti=0.7mm Int. dcr=5mm Ext. dcr=8mm, thermal cycling test, 110 ℃	VDE
Transformer(T1) (For HLG-320H-1 2B)	Yu Jing	TF-2355	Class B	Tested wit h applianc e
Alt.	Mean Well	TF-2355	Class B	Tested wit h applianc e
Transformer(T1) (For HLG-320H-1 2y, y=A, D or Bla nk)	Yu Jing	TF-2286	Class B	Tested wit h applianc e
Alt.	Mean Well	TF-2286	Class B	Tested wit h applianc e
Transformer(T1) (For HLG-320H-1 5B)	Yu Jing	TF-2356	Class B	Tested wit h applianc e

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	Mean Well	TF-2356	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-15y, y=A, D or Blank)	Yu Jing	TF-2287	Class B	Tested with appliance
Alt.	Mean Well	TF-2287	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-20B)	Yu Jing	TF-2357	Class B	Tested with appliance
Alt.	Mean Well	TF-2357	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-20y, y=A, D or Blank)	Yu Jing	TF-2288	Class B	Tested with appliance
Alt.	Mean Well	TF-2288	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-24B)	Yu Jing	TF-2358	Class B	Tested with appliance
Alt.	Mean Well	TF-2358	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-24y, y=A, D or Blank)	Yu Jing	TF-2289	Class B	Tested with appliance
Alt.	Mean Well	TF-2289	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-30B)	Yu Jing	TF-2359	Class B	Tested with appliance
Alt.	Mean Well	TF-2359	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-30y, y=A, D or Blank)	Yu Jing	TF-2290	Class B	Tested with appliance
Alt.	Mean Well	TF-2290	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 HLG-320H-36B)	Yu Jing	TF-2360	Class B	Tested with appliance
Alt.	Mean Well	TF-2360	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-36y, y=A, D or Blank)	Yu Jing	TF-2291	Class B	Tested with appliance
Alt.	Mean Well	TF-2291	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-42B)	Yu Jing	TF-2361	Class B	Tested with appliance
Alt.	Mean Well	TF-2361	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-42y, y=A, D or Blank)	Yu Jing	TF-2292	Class B	Tested with appliance
Alt.	Mean Well	TF-2292	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-48B)	Yu Jing	TF-2362	Class B	Tested with appliance
Alt.	Mean Well	TF-2362	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-48y, y=A, D or Blank)	Yu Jing	TF-2293	Class B	Tested with appliance
Alt.	Mean Well	TF-2293	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-54B)	Yu Jing	TF-2363	Class B	Tested with appliance
Alt.	Mean Well	TF-2363	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-54y, y=A, D or Blank)	Yu Jing	TF-2294	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
Alt.	Mean Well	TF-2294	Class B	Tested with appliance
Line Filter (LF1)	Mean Well	TR-1010	130 ℃	Tested with appliance
Line Filter (LF2, LF3)	Mean Well	TR-890	125 ℃	Tested with appliance
Choke(L2)	Mean Well	TR-993	130 ℃	Tested with appliance
PFC Choke (L1)	Mean Well	TF-2295	130 ℃	Tested with appliance
PCB	SHUNDE JUNDA ELECTRONIC CO LTD	JD-D, JD-E	Min.V-1, 130 ℃	UL
Alt.	BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	DGV0-3A		
Alt.	HONG SHIEN ENTERPRISE CO LTD	03V-0, -D, -M		
Alt.	HONG WEI ENTERPRISES CO LTD	79		
Alt.	HSU TZU ELECTRONIC CO LTD	4V0, DV2, MV1		
Alt.	Kunshan Wanyuantong Electronic Technology Co Ltd	SWZ-1		
Alt.	HSIANG KUO INDUSTRIAL CO LTD	76V0A		
Alt.	Guangzhou Taihe Printed Circuit Board Ltd.	THS, THD		
Alt.	Jiin-Yu Enterprise Co Ltd	JY-001, JY-003		
Power Cord	Dongguan Lucky United	245 IEC 57 H05RN-F	3C x 0.75 mm ² 3C x 1.0 mm ²	KC
Alt.	Dongguan Lucky United	245 IEC 51 H03RT-H	3C x 0.75 mm ² 3C x 1.0 mm ²	KC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	Guangdong Rifeng	60245 IEC 57 H05RN-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ²	KC
Alt.	I-sheng	60227 IEC 53	3G x 0.75 mm ² 3G x 1.0 mm ² 3G x 1.5 mm ² 3G x 2.5 mm ²	KC
Alt.	Foxconn	K60227 IEC 52 (H03VV-F)	3G x 0.75 mm ²	KC
Alt.	Foxconn	K60227 IEC 53 (H05VV-F)	3G x 0.75 mm ² 3G x 1.0 mm ²	KC
Alt.	Fuyu	K60227 IEC 52 (H03VV-F)	3G x 0.75 mm ²	KC
Alt.	Fuyu	K60227 IEC 53 (H05VV-F)	3G x 0.75 mm ² 3G x 1.0 mm ²	KC
Alt.	Dong Guan Well Shin	K60227 IEC 52 H03VV-F	3C x 0.75 mm ²	KC
Alt.	Dong Guan Well Shin	K60227 IEC 53 H05VVH-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ² 3C x 2.0 mm ² 3C x 2.5 mm ²	KC
Alt.	Ta Hsing Electric Wire & Cable	H05VV-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ² 3C x 2.0 mm ² 3C x 2.5 mm ²	KC
Alt.	Awin Wire & Cable Co., Ltd	60227IEC52 (H03VV-F) 3G 0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3G 0.75 mm ² , 3 x 0.75/1.0 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3G 1.0 mm ²	3G×1.0mm ² 3C×1.0mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipmen t Co., Ltd.	60227 IEC 53 (H05VV-F) 3×0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipmen t Co., Ltd.	60227 IEC 53 (H05VV-F) 3×1.0 mm ²	3G×1.0mm ² 3C×1.0mm ²	KC
Alt.	Zhenjiang Huayin Instrument And	60227 IEC 53 (H05VV-F)	3G×1.5mm ² 3C×1.5mm ²	KC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
	Electrical Equipmen t Co., Ltd.	3×1.5 mm ²		
Alt.	Zhenjiang Huayin Instrument And Electrical Equipmen t Co., Ltd.	60227 IEC 53 (H05VV-F) 3×2.5 mm ²	3G×2.5mm ² 3C×2.5mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipmen t Co., Ltd.	60227 IEC 52 (H03VV-F) 3X 0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H 05RN-F) 3G 0. 75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H 05RN-F) 3G 1. 0 mm ²	3G×1.0mm ² 3C×1.0mm ²	KC
Alt.	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 57 H05RN-F 3G 0.75 mm ² –1.0 mm ²	3G x 0.75 mm ² –1.0 mm ²	KC
Alt.	Dongguan Lucky United Electric Wire & Cable Co.,Ltd	245 IEC 57 H0 5RN-F 2C–3CX 0.75 mm ² –1 mm ²	3C x 0.75 mm ² –1.0 mm ²	KC
Alt.	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 66 H07RN-F 3G 1.0 mm ² –4 mm ²	3G x 1.0 mm ² –4.0 mm ²	KC
Alt.	DONGGUAN TAWA NG ELECTRONICS CO LTD	60245 IEC 57 (H05RN-F) 3x 1.0 mm ²	AC 300/500 V, 3 x 1.0 mm ²	KC
Potting Compoun d	DOW Corning Cor p.	SYLGARD 160	Gray, rated 150 °C	UL
Alt.	Shin Etsu Silicone	KET-132A/B	Natural, rated 150 °C	UL
Alt.	GUANGZHOU Huitian	5299	Gray, rated 150 °C	UL
Alt.	Shin-Etsu Silicone	KET-132 A/B H	Natural, rated 150 °C	UL
Alt.	U-BOND MATERIAL TECHNOLOGY CO LTD	UB-5203A/B	Natural, rated 150 °C	UL

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
☐ 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. <i>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 multiple listing or changing the items above, the certification revision shall be applied.</i> 2. 인증변경신청 없이 임의로 변경하는 경우는, 전기용품 및 생활용품 안전관리법 시행규칙 제 21 조제 1 항 또는 제 38 조제 1 항 규정에 의한 안전인증 취소 혹은 안전확인신고 효력상실 사유가 됨을 유의하시기 바랍니다. <i>The Safety Certification will be cancelled under the Article 21(1), 38(1) of the Enforcement Rule of the Electrical appliances and Consumer Products Safety Control Act if the contents of the Certification is altered without our authorization.</i>				

FP511-04

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

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-12A	O/P: DC12 V, 22 A (Identical except for output rating, output wire with 14AWG*2C×1)
HLG-320H-12B	O/P: DC12 V, 22 A (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)
HLG-320H-12D	O/P: DC12 V, 22 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure and type D dimming control board provided)
HLG-320H-12	O/P: DC12 V, 22 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-15A	O/P: DC15 V, 19 A (Identical except for output rating , output wire with 14AWG*2C×1)
HLG-320H-15B	O/P: DC15 V, 19 A (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)
HLG-320H-15D	O/P: DC15 V, 19 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure and type D dimming control board provided)
HLG-320H-15	O/P: DC15 V, 19 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-20A	O/P: DC20 V, 15 A (Identical except for output rating, output wire with 14AWG*2C×1)
HLG-320H-20B	O/P: DC20 V, 15 A (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)
HLG-320H-20D	O/P: DC20 V, 15 A (Identical except for output rating, output wire with 14AWG*2C×1 type B top enclosure and type D dimming control board provided)
HLG-320H-20	O/P: DC20 V, 15 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-24A	O/P: DC24 V, 13.34 A (Identical except for output rating, output wire with 14AWG*2C×1)
HLG-320H-24B	O/P: DC24 V, 13.34 A (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-24D	O/P: DC24 V, 13.34 A (Identical except for output rating , output wire with 14AWG*2C×1 , type B top enclosure and type D dimming control board provided)
HLG-320H-24	O/P: DC24 V, 13.34 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-30A	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1)
HLG-320H-30B	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1; type B top enclosure and type B dimming control board provided)
HLG-320H-30D	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure and type D dimming control board provided)
HLG-320H-30	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-36A	O/P: DC36 V, 8.9 A (Identical except for output rating)
HLG-320H-36B	O/P: DC36 V, 8.9 A (Identical except for output rating, type B top enclosure and type B dimming control board provided)
HLG-320H-36D	O/P: DC36 V, 8.9 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-36	O/P: DC36 V, 8.9 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-42A	O/P: DC42 V, 7.65 A (Identical except for output rating)
HLG-320H-42B	O/P: DC42 V, 7.65 A (Identical except for output rating, type B top enclosure and type B dimming control board provided)
HLG-320H-42D	O/P: DC42 V, 7.65 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-42	O/P: DC42 V, 7.65 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-48A	O/P: DC48 V, 6.7 A (Identical except for output rating)
HLG-320H-48B	O/P: DC48 V, 6.7 A (Identical except for output rating, type B top enclosure and type B dimming control board provided)

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-48D	O/P: DC48 V, 6.7 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-48	O/P: DC48 V, 6.7 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-54B	O/P: DC54 V, 5.95 A (Identical except for type B top enclosure and type B dimming control board provided)
HLG-320H-54D	O/P: DC54 V, 5.95 A (Identical except for type B top enclosure and type D dimming control board provided)
HLG-320H-54	O/P: DC54 V, 5.95 A (Identical except for type B top enclosure provided)

제품특기사항 및 시험조건
Remarks & Test conditions

1. Test Report Ref. No. : 11-1920-5550 (2011.11.01.)

2. Products Description

- DC or AC supplied electronic controlgear for LEDs
- Rating - PRI : AC100-240 V 50/60 Hz 385 W
SEC : 54 Vd.c. 5.95 A
- PF : > 0.9
- Type of protection : IP 65
- tc : 90 °C, ta : 50 °C
- Protection class : Class I
- Thermally protected : 110 °C
- This product is totally enclosed electronic controlgear.
- Constant voltage type, Independent SELV equivalent

* factory information

- MEAN WELL (Guangzhou) Electronics Co.,Ltd.
No.11 Jingu South Road, Huadu District, Guangzhou 510890, Guangdong, China

□ 본 제품의 검토내용에 관하여 의문사항이 있으시면 아래 연락처로 문의하시기 바랍니다.

검토 담당자 : 고객지원본부 인증융합평가센터 신 종욱 / 02-8601-1473

□ *If you have any question on product review, please contact the person below :*

Job holder: Customer Support Division, Certification Convergence Evaluation Center, J.U.Shin / +82 2 860-1473

FP511-05

□ 첨부 3 : 안전인증의 변경 현황
Revisions Status

변경발급 내용 Contents of Certificate Revisions		
1 st Rev.) Addition/Delete of a component, Change of a component and PCB's pattern (15-041361-01)		
- Addition of a component		
Part no.	Manufacturer	Model
Fuse (FS1)	Conquer	MST-series
Varistor(ZNR1, ZNR2)	Joyin	10N561K, 10S561K
	Joyin	10N471K, 10S471K
	Joyin	10N511K, 10S511K
	Thinking	TVR10471-D TVR14471-D TVR10471-M TVR14471-M TVR10471 TVR14471 TVR10471-V TVR14471-V TVR10471-K TVR14471-K
	Thinking	TVR10511 TVR14511 TVR10511-D TVR14511-D TVR10511-V TVR14511-V TVR10511-M TVR14511-M TVR10511-K TVR14511-K
	Thinking	TVR10561 TVR10561 TVR10561-V TVR14561-V TVR10561-K TVR14561-K TVR10561-M TVR14561-M
	Centra Science	CNR-10D511K CNR-14D511K
	Centra Science	CNR-10D471K CNR-14D471K
	Centra Science	CNR-10D561K CNR-14D561K

변경발급 내용 Contents of Certificate Revisions			
	Relay(RY1)	Tyco	PCH-112D2H
	Photo Coupler(U3, U4)	Lite-On	LTV-817M
PCB	SHUNDE JUNDA ELECTRONIC CO LTD	HONG SHIEN ENTERPRISE CO LTD	-D, -M
		HSU TZU ELECTRONIC CO LTD	DV2, MV1
		Guangzhou Taihe Printed Circuit Board Ltd.	THS, THD
		Jiin-Yu Enterprise Co Ltd	JY-001, JY-003
Power Cord	Awin Wire & Cable Co., Ltd		60227IEC52 (H03VV-F) 3G 0.75 mm ²
			60227IEC53 (H05VV-F) 3G 0.75 mm ² , 3 x 0.75/1.0 mm ²
			60227IEC53 (H05VV-F) 3G 1.0 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x0.75 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x1.0 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x1.5 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x2.5 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 52 (H03VV-F) 3X0.75 mm ²
		Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3G 0.75 mm ²
		Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3G 1.0 mm ²
	Potting Compound	GUANGZHOU Huitian	5299

변경발급 내용
Contents of Certificate Revisions

- Shin-Etsu Silicone KET-132 A/B H
- Delete of a component

Part no.	Manufacturer	Model
Fuse (FS1)	Conquer	MET-series
Varistor(ZNR1)	Centra Science	CNR14D361K
	Joyin	14N361K, 10S361K, 14S361K
	Thinking	TVR10361-D, TVR14361-D
Varistor(ZNR2)	Thinking	TVR14511-D, TVR10511-D
	Centra Science	CNR14D511K
	Joyin	10S511K, 14S511K, 14N511K

- Change of a component

Part no.	Model	Before	After
Y-Capacitors(C3, C4)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
Y-Capacitors(C22)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
Y-Capacitors(C129)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
X-Capacitors(C1)	R 46	Rating: 300 Vac	Rating: 250 Vac
	R 49	Rating: 310 Vac	Rating: 250 Vac
	B3292#-...	Rating: 305 Vac	Rating: 250 Vac
	KNB 1530	Rating: 300 Vac	Rating: 250 Vac
	KNB 1560	Rating: 300 Vac	Rating: 250 Vac
	GS-L	Rating: 275 Vac	Rating: 250 Vac
	PCX2 335M	Rating: 275 Vac	Rating: 250 Vac
	PCX2 337	Rating: 275 Vac	Rating: 250 Vac
	HQX	Rating: 275 Vac	Rating: 250 Vac
	CTX	Rating: 300 Vac	Rating: 250 Vac
Bridging Capacitor (C31)	CD	Manufacturer : TDK	Manufacturer : TDK-EPC
Photo Coupler (U3, U4)	K1010	Rating : Int. dcr=5.2mm	Rating : Int. dcr=5.3mm
	LTV-817	Rating: 100 °C	Rating: 110 °C
PCB	SWZ-1	Manufacturer : SHANGHAI WANZHENG CIRCUIT BOARD CO LTD	Manufacturer : Kunshan Wanyuantong Electronic Technology Co Ltd
Potting compound	SYLGARD 160	Rating: 105 °C	Rating: 150 °C
	KET-132A/B	Rating: 105 °C	Rating: 150 °C

변경발급 내용

Contents of Certificate Revisions

2nd Rev.) Addition of factory (16-015152-13 : 2016.03.24.)

- Factory name : Mean Well (Guangzhou) Electronics Co., Ltd.

Address : 2nd Floor No.A Building, Yuean Ind. Park, Dongpu Town, TianHe, Guangzhou, P.R.China

3rd Rev.) Change Addition factory name, address and president (16-067872-18 : 2016.12.08.)

- Before: Mean Well (Guangzhou) Electronics Co., Ltd. / Wang Fei Long

2nd Floor No.A Building, Yuean Ind. Park, Dongpu Town, TianHe, Guangzhou, P.R.China

After : MEAN WELL (Guangzhou) Electronics Co., Ltd. Huadu branch / Yin Xiao Ming

No.11 Jingu South Road, Huadong Town, Huadu District, Guangzhou, P.R. China

4th Rev.) Addition of components (17-021470-02 : 2017.04.17.)

- Addition of components

Component	Manufacturer	Model(Type)	Characteristics
Power Cord	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 57 H05RN-F 3G 0.75 mm ² -1.0 mm ²	3G x 0.75 mm ² -1.0 m m ²
	Dongguan Lucky United Electric Wire & Cable Co.,Ltd	245 IEC 57 H0 5RN-F 2C-3C X0.75 mm ² -1 mm ²	3C x 0.75 mm ² -1.0 m m ²
	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 66 H07RN-F 3G 1.0 mm ² -4 mm ²	3G x 1.0 mm ² -4.0 m m ²

변경발급 내용
Contents of Certificate Revisions

5th Rev.) Change of PCB layout construction and Components (20-065726-02-1 : 2020.11.10.)

- PCB layout: Added copper foil around the component holes for fixing components better.

- Addition of component:

Component	Manufacturer	Model(Type)	Characteristics
Input cord	DONGGUAN TAWANG ELECTRONICS CO LTD	60245 IEC 57 (H05 RN-F) 3x1.0 mm ²	AC 300/500 V, 3 x 1.0 mm ²

- Change of components:

Component	Before	After
X-capacitor (C1)	KEMET(Arcotronics)/R.46 : 300 Vac, 1.0 μF	KEMET(Arcotronics)/R.46 : 275/300 Vac, 1.0 μF

6th Rev.) Change name, president and address of factory (21-082212-11-1 : 2022.01.11.)

- Before : MEAN WELL (Guangzhou) Electronics Co., Ltd. Huadu branch / Yin Xiao Ming

No.11 Jingu South Road, Huadong Town, Huadu District, Guangzhou, P.R. China

After : MEAN WELL (Guangzhou) Electronics Co.,Ltd. / Aden Wang

No.11 Jingu South Road, Huadu District, Guangzhou 510890, Guangdong, China

7th Rev.) Addition/Delete of a component, Change of a component.

Differences between the basic and derivative model of HLG-320H-54B correction.

(23-007485-01-1 : 2023.03.15.)

- Add additional component:

Component	Manufacturer	Model	Rating	Tested by
Fuse (FS1)	Conquer	MST-series	T6.3A, 300Vac	VDE
Potting Compound	U-BOND MATERIAL TECHNOLOGY CO LTD	UB-5203A/B	Natural, rated 150 °C	UL

변경발급 내용
Contents of Certificate Revisions

- Change Critical components model or rating information

Component	Manufacturer	Model	Rating	Tested by
Varistor (ZNR1, ZNR2)	Joyin	10N561K, 10S561K 14N561K	350 Vac, 450 Vdc	UL
Y- Capacitors (C3, C4)	Murata	KX, KH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	440L	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	338 6	Min. 250 Vac, Max. 1000pF	ENEC
Y- Capacitors (C22)	Murata	KX, KH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	440L	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	338 6	Min. 250 Vac, Max. 1000pF	ENEC
Y- Capacitors (C129)	Murata	KX, KH	Min. 250 Vac, Max. 4700pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, M ax. 4700pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, M ax. 4700pF	VDE
Alt.	Vishay	440L	Min. 250 Vac, M ax. 4700pF F	VDE

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Alt.	Vishay	338 6	Min.250 Vac, M ax.4700pF	ENEC
X-capacitor (C 1)	KEMET (Arcotronics)	R.46	Min.250Vac, M ax.1.0 uF	ENEC
Alt.	KEMET(Arcotronics)	R.49	Min.250Vac, M ax.1.0 uF	ENEC
Alt.	Epcos	B3292#-...	Min.250Vac, M ax.1.0 uF	VDE
Alt.	ISKRA	KNB 1530	Min.250Vac, M ax.1.0 uF	VDE
Alt.	ISKRA	KNB 1560	Min.250Vac, M ax.1.0 uF	VDE
Alt.	Liow Gu	GS-L	Min.250Vac, M ax.1.0 uF	VDE
Alt.	Pilkor	PCX2 335 M	Min.250Vac, M ax.1.0 uF	ENEC
Alt.	Pilkor	PCX2 337	Min.250Vac, M ax.1.0 uF	VDE
Alt.	Ultra Tech	HQX	Min.250Vac, M ax.1.0 uF	VDE
Alt.	Cheng Tung	CTX	Min.250Vac, M ax.1.0 uF	VDE
Bridging Capacitor (C31)	Murata	KX	Min.250 Vac, Max.2200pF, Y1	VDE
Alt.	Walsin	AH	Min.250 Vac, Max.2200pF, Y1	VDE
Alt.	TDK	CD	Min.250 Vac, Max.2200pF, Y1	VDE

변경발급 내용
Contents of Certificate Revisions

- Change Critical components model or rating information

Component	Manufacturer	Model	Rating	Tested by
Varistor (ZNR1, ZNR2)	Joyin	10N561K, 10S561K 14N561K	350 Vac, 450 Vdc	UL
Y- Capacitors (C3, C4)	Murata	KX, KH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	440L	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	338 6	Min. 250 Vac, Max. 1000pF	ENEC
Y- Capacitors (C22)	Murata	KX, KH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, Max. 1000pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	440L	Min. 250 Vac, Max. 1000pF	VDE
Alt.	Viahay	338 6	Min. 250 Vac, Max. 1000pF	ENEC
Y- Capacitors (C129)	Murata	KX, KH	Min. 250 Vac, Max. 4700pF	VDE
Alt.	Walsin	AC, AH	Min. 250 Vac, M ax. 4700pF	VDE
Alt.	TDK-EPC	CD, CS	Min. 250 Vac, M ax. 4700pF	VDE
Alt.	Vishay	440L	Min. 250 Vac, M ax. 4700pF F	VDE

변경발급 내용
Contents of Certificate Revisions

- Differences between basic model and derivative model of HLG-320H-54B corrected as below;

HLG-320H-24	O/P: DC24 V, 13.34 A (Identical except for output rating , output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-30A	O/P: DC30 V, 10.7 A (Identical except for output rating , output wire with 14AWG*2C×1)
HLG-320H-30B	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1; 18A WG*2C×1 , type B top enclosure and type B dimming control board provided)
HLG-320H-30D	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure and type D dimming control board provided)
HLG-320H-30	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1 , type B top enclosure provided)
HLG-320H-36B	O/P: DC36 V, 8.9 A (Identical except for output rating, output wire with 14AWG*2C×1;18A WG*2C×1 , type B top enclosure and type B dimming control board provided)
HLG-320H-42B	O/P: DC42 V, 7.65 A (Identical except for output rating, output wire with 14AWG*2C×1;18A WG*2C×1 , type B top enclosure and type B dimming control board provided)
HLG-320H-48B	O/P: DC48 V, 6.7 A (Identical except for output rating, output wire with 14AWG*2C×1;18A WG*2C×1 , type B top enclosure and type B dimming control board provided)
HLG-320H-54B	O/P: DC54 V, 5.95 A (Identical except for output wire with 14AWG*2C×1;18AWG*2C×1 , type B top enclosure and type B dimming control board provided)

접 수 번 호 : 21-082212-11-1
(Receipt No.)



안 전 인 증 서

Safety Certificate

안 전 인 증 번 호 : SZ11007-11008F
(Certificate No.)

제 조 업 자/수 입 업 자 명 : MEAN WELL Enterprises Co., Ltd.
(Manufacturer/importer)

주 소 : No.28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 248, Taiwan
(Address) (R.O.C.)

제 품 명 : 조명기구용컨버터(LED용)
(Product) (Electronic controlgear)

기 본 모 델 명 : HLG-320H-54A
(Basic Model)

파 생 모 델 명 : See the attachment 2
(Series Model)

정격/안전기준상의 모델구분 : AC 100-240 V, 50/60 Hz, 3.85-1.6 A, 385 W
(Rating) (Output : DC 54 V, 5.95 A)

시 형 기 준 : KC61347-1(2015-09), KC61347-2-13(2015-09)
(Standard)

본 인증서는 제 조 국 명 : 대만
제 조 업 자 명 : MEAN WELL Enterprises Co., Ltd.
제조공장의 주소 : No.28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 248, Taiwan (R.O.C.)
다수 공장의 명 : “이면기재” 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 11 일
Year month day

한국산업기술시험원
KOREA TESTING LABORATORY



※ 이 인증서는 「전기용품 및 생활용품 안전관리법 시행규칙」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)

다수 공장의 현황
(The status of Multiple Factories)

No	현황	
1	다수 공장의 명 (Name)	MEAN WELL (Guangzhou) Electronics Co.,Ltd.
	주소 (Address)	No.11 Jingu South Road, Huadu District, Guangzhou 510890, Guangdong, China
	제조국명 (Origin)	중국

□ 첨부 1 : 전기용품의 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
Fuse (FS1)	Conquer	MST-series	T6.3 A, 250 Vac	VDE
Varistor (ZNR1, ZNR2)	Joyin	10N561K, 10S561K	350 Vac, 450 Vdc	UL
Alt.	Joyin	10N471K, 10S471K	300 Vac, 385 Vdc	UL
Alt.	Joyin	10N511K, 10S511K	320 Vac, 418 Vdc	UL
Alt.	Thinking	TVR10471-D TVR14471-D TVR10471-M TVR14471-M TVR10471 TVR14471 TVR10471-V TVR14471-V TVR10471-K TVR14471-K	300 Vac, 385 Vdc	UL
Alt.	Thinking	TVR10511 TVR14511 TVR10511-D TVR14511-D TVR10511-V TVR14511-V TVR10511-M TVR14511-M TVR10511-K TVR14511-K	320 Vac, 410 Vdc	UL
Alt.	Thinking	TVR10561 TVR10561 TVR10561-V TVR14561-V TVR10561-K TVR14561-K TVR10561-M TVR14561-M	350 Vac, 450 Vdc	UL
Alt.	Centra Science	CNR- 10D511K CNR- 14D511K	320 Vac, 410 Vdc	UL
Alt.	Centra Science	CNR- 10D471K CNR- 14D471K	300 Vac, 385 Vdc	UL
Alt.	Centra Science	CNR- 10D561K CNR- 14D561K	350 Vac, 450 Vdc	UL

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Y- Capacitors (C3, C4)	Murata	KX, KH	250 Vac, 1000pF	VDE
Alt.	Walsin	AC, AH	250 Vac, 1000pF	VDE
Alt.	TDK-EPC	CD, CS	250 Vac, 1000pF	VDE
Alt.	Viahay	440L	250 Vac, 1000pF	VDE
Alt.	Viahay	338 6	250 Vac, 1000pF	ENEC
Y- Capacitors (C22)	Murata	KX, KH	250 Vac, 100pF	VDE
Alt.	Walsin	AC, AH	250 Vac, 100pF	VDE
Alt.	TDK-EPC	CD, CS	250 Vac, 100pF	VDE
Alt.	Viahay	440L	250 Vac, 100pF	VDE
Alt.	Viahay	338 6	250 Vac, 100pF	ENEC
Y- Capacitors (C129)	Murata	KX, KH	250 Vac, 4700pF	VDE
Alt.	Walsin	AC, AH	250 Vac, 4700pF	VDE
Alt.	TDK-EPC	CD, CS	250 Vac, 4700pF	VDE
Alt.	Vishay	440L	250 Vac, 4700pF	VDE
Alt.	Vishay	338 6	250 Vac, 4700pF	ENEC
X-capacitor (C1)	KEMET (Arcotronics)	R.46	275/300 Vac, 1.0 uF	ENEC
Alt.	KEMET(Arcotronics)	R.49	310 Vac, 1.0 uF	ENEC
Alt.	Epcos	B3292#-...	305 Vac, 1.0 uF	VDE
Alt.	ISKRA	KNB 1530	300 Vac, 1.0 uF	VDE
Alt.	ISKRA	KNB 1560	300 Vac, 1.0 uF	VDE
Alt.	Liow Gu	GS-L	275 Vac, 1.0 uF	VDE
Alt.	Pilkor	PCX2 335M	275 Vac, 1.0 uF	ENEC
Alt.	Pilkor	PCX2 337	275 Vac, 1.0 uF	VDE
Alt.	Ultra Tech	HQX	275 Vac, 1.0 uF	VDE
Alt.	Cheng Tung	CTX	300 Vac, 1.0 uF	VDE

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Relay (RY1)	Tyco	OJE-SH-112LMH, OJE-SS-112LMH	8A, 250V	TUV, UL
Alt.	Tyco	OJE-SH-112HMF, OJE-SS-112HMF	10A, 250V	TUV, UL
Alt.	Song Chuan	835-1A-B-C	10A, 250V	VDE, TUV, UL
Alt.	Tyco	PCH-112D2H	5A, 277V	VDE, UL
Bridging Capacitor (C31)	Murata	KX	250 Vac, 1000pF, Y1	VDE
Alt.	Walsin	AH	250 Vac, 1000pF, Y1	VDE
Alt.	TDK	CD	250 Vac, 1000pF, Y1	VDE
Photo Coupler (U3, U4)	Cosmo	K1010	dti=0.7mm, Int. dcr=5.2mm Ext. dcr=8mm, thermal cycling test, 115 °C	VDE
Alt.	Lite-On	LTV-817, LTV-817M	dti=0.8mm, Int.dcr=5.2mm, Ent. dcr=7.8mm, 110 °C	VDE
Alt.	Sharp	PC123	dti=0.7mm Int. dcr=5mm Ext. dcr=8mm, thermal cycling test, 110 °C	VDE
Transformer(T1) (For HLG-320H-12B)	Yu Jing	TF-2355	Class B	Tested with appliance
Alt.	Mean Well	TF-2355	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-12y, y=A, D or Blank)	Yu Jing	TF-2286	Class B	Tested with appliance
Alt.	Mean Well	TF-2286	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-15B)	Yu Jing	TF-2356	Class B	Tested with appliance
Alt.	Mean Well	TF-2356	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-15y, y=A, D or Blank)	Yu Jing	TF-2287	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
Alt.	Mean Well	TF-2287	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-2 0B)	Yu Jing	TF-2357	Class B	Tested with appliance
Alt.	Mean Well	TF-2357	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-2 0y, y=A, D or Blank)	Yu Jing	TF-2288	Class B	Tested with appliance
Alt.	Mean Well	TF-2288	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-2 4B)	Yu Jing	TF-2358	Class B	Tested with appliance
Alt.	Mean Well	TF-2358	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-2 4y, y=A, D or Blank)	Yu Jing	TF-2289	Class B	Tested with appliance
Alt.	Mean Well	TF-2289	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 0B)	Yu Jing	TF-2359	Class B	Tested with appliance
Alt.	Mean Well	TF-2359	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 0y, y=A, D or Blank)	Yu Jing	TF-2290	Class B	Tested with appliance
Alt.	Mean Well	TF-2290	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 6B)	Yu Jing	TF-2360	Class B	Tested with appliance
Alt.	Mean Well	TF-2360	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 6y, y=A, D or Blank)	Yu Jing	TF-2291	Class B	Tested with appliance
Alt.	Mean Well	TF-2291	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 2B)	Yu Jing	TF-2361	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
Alt.	Mean Well	TF-2361	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 2y, y=A, D or Blank)	Yu Jing	TF-2292	Class B	Tested with appliance
Alt.	Mean Well	TF-2292	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 8B)	Yu Jing	TF-2362	Class B	Tested with appliance
Alt.	Mean Well	TF-2362	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 8y, y=A, D or Blank)	Yu Jing	TF-2293	Class B	Tested with appliance
Alt.	Mean Well	TF-2293	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-5 4B)	Yu Jing	TF-2363	Class B	Tested with appliance
Alt.	Mean Well	TF-2363	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-5 4y, y=A, D or Blank)	Yu Jing	TF-2294	Class B	Tested with appliance
Alt.	Mean Well	TF-2294	Class B	Tested with appliance
Line Filter (LF1)	Mean Well	TR-1010	130 ℃	Tested with appliance
Line Filter (LF2, L F3)	Mean Well	TR-890	125 ℃	Tested with appliance
Choke(L2)	Mean Well	TR-993	130 ℃	Tested with appliance
PFC Choke (L1)	Mean Well	TF-2295	130 ℃	Tested with appliance
PCB	SHUNDE JUNDA ELECTRONIC CO LTD	JD-D, JD-E	Min.V-1, 130 ℃	UL
Alt.	BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	DGV0-3A		
Alt.	HONG SHIEN ENTERPRISE CO LTD	03V-0, -D, -M		

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	HONG WEI ENTERPRISES CO LTD	79		
Alt.	HSU TZU ELECTRONIC CO LTD	4V0, DV2, MV1		
Alt.	Kunshan Wanyuantong Electronic Technology Co Ltd	SWZ-1		
Alt.	HSIANG KUO INDUSTRIAL CO LTD	76V0A		
Alt.	Guangzhou Taihe Printed Circuit Board Ltd.	THS, THD		
Alt.	Jiin-Yu Enterprise Co Ltd	JY-001, JY-003		
Power Cord	Dongguan Lucky United	245 IEC 57 H05RN-F	3C x 0.75 mm ² 3C x 1.0 mm ²	KC
Alt.	Dongguan Lucky United	245 IEC 51 H03RT-H	3C x 0.75 mm ² 3C x 1.0 mm ²	KC
Alt.	Guangdong Rifeng	60245 IEC 57 H05RN-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ²	KC
Alt.	I-sheng	60227 IEC 53	3G x 0.75 mm ² 3G x 1.0 mm ² 3G x 1.5 mm ² 3G x 2.5 mm ²	KC
Alt.	Foxconn	K60227 IEC 52 (H03VV-F)	3G x 0.75 mm ²	KC
Alt.	Foxconn	K60227 IEC 53 (H05VV-F)	3G x 0.75 mm ² 3G x 1.0 mm ²	KC
Alt.	Fuyu	K60227 IEC 52 (H03VV-F)	3G x 0.75 mm ²	KC
Alt.	Fuyu	K60227 IEC 53 (H05VV-F)	3G x 0.75 mm ² 3G x 1.0 mm ²	KC
Alt.	Dong Guan Well Shin	K60227 IEC 52 H03VV-F	3C x 0.75 mm ²	KC
Alt.	Dong Guan Well Shin	K60227 IEC 53 H05VVH-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ² 3C x 2.0 mm ² 3C x 2.5 mm ²	KC
Alt.	Ta Hsing Electric Wire & Cable	H05VV-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ² 3C x 2.0 mm ² 3C x 2.5 mm ²	KC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	Awin Wire & Cable Co., Ltd	60227IEC52 (H03VV-F) 3 G 0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3 G 0.75 mm ² , 3 × 0.75/1.0 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3 G 1.0 mm ²	3G×1.0mm ² 3C×1.0mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×1.0 mm ²	3G×1.0mm ² 3C×1.0mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×1.5 mm ²	3G×1.5mm ² 3C×1.5mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×2.5 mm ²	3G×2.5mm ² 3C×2.5mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 52 (H03VV-F) 3X0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3 G 0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3 G 1.0 mm ²	3G×1.0mm ² 3C×1.0mm ²	KC
Alt.	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 57 H05RN-F 3G0.75 mm ² -1.0 mm ²	3G x 0.75 mm ² -1.0 mm ²	KC
Alt.	Dongguan Lucky United Electric Wire & Cable Co.,Ltd	245 IEC 57 H05RN-F 2C-3CX0.75 mm ² -1 mm ²	3C x 0.75 mm ² -1.0 mm ²	KC
Alt.	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 66 H07RN-F 3G1.0 mm ² -4 mm ²	3G x 1.0 mm ² -4.0 mm ²	KC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	DONGGUAN TAWANG ELECTRONICS CO LTD	60245 IEC 57 (H05RN-F) 3x1.0 mm ²	AC 300/500 V, 3 x 1.0 mm ²	KC
Potting Compound	DOW Corning Corp.	SYLGARD 160	Gray, rated 150 ℃	UL
Alt.	Shin Etsu Silicone	KET-132A/B	Natural, rated 150 ℃	UL
Alt.	GUANGZHOU Huitian	5299	Gray, rated 150 ℃	UL
Alt.	Shin-Etsu Silicone	KET-132 A/B H	Natural, rated 150 ℃	UL

☐ 유의사항 (Attention) :

1. 안전관리부품은 전기적인 안전에 직접적인 영향을 주는 부품으로서 안전인증기관이 정기공장검사 시 확인 관리 하는 사항입니다. 따라서 상기목록에 기재된 사항을 변경하거나 또는 복수등록을 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 multiple listing or changing the items above, the certification revision shall be applied.

2. 인증변경신청 없이 임의로 변경하는 경우는, 전기용품 및 생활용품 안전관리법 시행규칙 제 21 조제 1 항 또는 제 38 조제 1 항 규정에 의한 안전인증 취소 혹은 안전확인신고 효력상실 사유가 됨을 유의하시기 바랍니다.

The Safety Certification will be cancelled under the Article 21(1), 38(1) of the Enforcement Rule of the Electrical appliances and Consumer Products Safety Control Act if the contents of the Certification is altered without our authorization.

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

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-12A	O/P: DC12 V, 22 A (Identical except for output rating)
HLG-320H-12B	O/P: DC12 V, 22 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1,type B top enclosure and type B dimming control board provided)
HLG-320H-12D	O/P: DC12 V, 22 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-12	O/P: DC12 V, 22 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-15A	O/P: DC15 V, 19 A (Identical except for output rating)
HLG-320H-15B	O/P: DC15 V, 19 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-15D	O/P: DC15 V, 19 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-15	O/P: DC15 V, 19 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-20A	O/P: DC20 V, 15 A (Identical except for output rating)
HLG-320H-20B	O/P: DC20 V, 15 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-20D	O/P: DC20 V, 15 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-20	O/P: DC20 V, 15 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-24A	O/P: DC24 V, 13.34 A (Identical except for output rating)
HLG-320H-24B	O/P: DC24 V, 13.34 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-24D	O/P: DC24 V, 13.34 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-24	O/P: DC24 V, 13.34 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-30A	O/P: DC30 V, 10.7 A (Identical except for output rating)
HLG-320H-30B	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-30D	O/P: DC30 V, 10.7 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-30	O/P: DC30 V, 10.7 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-36A	O/P: DC36 V, 8.9 A (Identical except for output rating)
HLG-320H-36B	O/P: DC36 V, 8.9 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-36D	O/P: DC36 V, 8.9 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-36	O/P: DC36 V, 8.9 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-42A	O/P: DC42 V, 7.65 A (Identical except for output rating)
HLG-320H-42B	O/P: DC42 V, 7.65 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-42D	O/P: DC42 V, 7.65 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-42	O/P: DC42 V, 7.65 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-48A	O/P: DC48 V, 6.7 A (Identical except for output rating)

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-48B	O/P: DC48 V, 6.7 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-48D	O/P: DC48 V, 6.7 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-48	O/P: DC48 V, 6.7 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-54B	O/P: DC54 V, 5.95 A (Identical except for output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-54D	O/P: DC54 V, 5.95 A (Identical except for type B top enclosure and type D dimming control board provided)
HLG-320H-54	O/P: DC54 V, 5.95 A (Identical except for type B top enclosure provided)

제품특기사항 및 시험조건
Remarks & Test conditions

1. Test Report Ref. No. : 11-1920-5550 (2011.11.01.)

2. Products Description

- DC or AC supplied electronic controlgear for LEDs
- Rating - PRI : AC100-240 V 50/60 Hz 385 W
SEC : 54 Vd.c. 5.95 A
- PF : > 0.9
- Type of protection : IP 65
- tc : 90 °C, ta : 50 °C
- Protection class : Class I
- Thermally protected : 110 °C
- This product is totally enclosed electronic controlgear.
- Constant voltage type, Independent SELV equivalent

* factory information

- MEAN WELL (Guangzhou) Electronics Co.,Ltd.
No.11 Jingu South Road, Huadu District, Guangzhou 510890, Guangdong, China

□ 본 제품의 검토내용에 관하여 의문사항이 있으시면 아래 연락처로 문의하시기 바랍니다.

검토 담당자 / 연락처 : 고객지원본부 인증융합평가팀 신 종욱 / 02-8601-1437

□ If you have any question on product review, please contact the person below :

Job holder: Customer Support Division, Certification Convergence Evaluation Team, J.U.Shin / +82 2 860-1437

FP511-05

☐ 첨부 3 : 안전인증의 변경 현황
Revisions Status

변경발급 내용 Contents of Certificate Revisions		
1 st Rev.) Addition/Delete of a component, Change of a component and PCB' s pattern (15-041361-01)		
- Addition of a component		
Part no.	Manufacturer	Model
Fuse (FS1)	Conquer	MST-series
Varistor(ZNR1, ZNR2)	Joyin	10N561K, 10S561K
	Joyin	10N471K, 10S471K
	Joyin	10N511K, 10S511K
	Thinking	TVR10471-D TVR14471-D TVR10471-M TVR14471-M TVR10471 TVR14471 TVR10471-V TVR14471-V TVR10471-K TVR14471-K
	Thinking	TVR10511 TVR14511 TVR10511-D TVR14511-D TVR10511-V TVR14511-V TVR10511-M TVR14511-M TVR10511-K TVR14511-K
	Thinking	TVR10561 TVR10561 TVR10561-V TVR14561-V TVR10561-K TVR14561-K TVR10561-M TVR14561-M
	Centra Science	CNR-10D511K CNR-14D511K
	Centra Science	CNR-10D471K CNR-14D471K
	Centra Science	CNR-10D561K CNR-14D561K

변경발급 내용
Contents of Certificate Revisions

Relay(RY1)	Tyco	PCH-112D2H
Photo Coupler(U3, U4)	Lite-On	LTV-817M
PCB	SHUNDE JUNDA ELECTRONIC CO LTD	JD-E
	HONG SHIEN ENTERPRISE CO LTD	-D, -M
	HSU TZU ELECTRONIC CO LTD	DV2, MV1
	Guangzhou Taihe Printed Circuit Board Ltd.	THS, THD
	Jiin-Yu Enterprise Co Ltd	JY-001, JY-003
Power Cord	Awin Wire & Cable Co., Ltd	60227IEC52 (H03VV-F) 3G 0.75 mm ²
	Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3G 0.75 mm ² , 3 x 0.75/1.0 mm ²
	Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3G 1.0 mm ²
	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x0.75 mm ²
	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x1.0 mm ²
	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x1.5 mm ²
	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x2.5 mm ²
	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 52 (H03VV-F) 3X0.75 mm ²
	Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3G 0.75 mm ²
	Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3G 1.0 mm ²
Potting Compound	GUANGZHOU Huitian	5299

변경발급 내용
Contents of Certificate Revisions

	Shin-Etsu Silicone	KET-132 A/B H	
Delete of a component			
Part no.	Manufacturer	Model	
Fuse (FS1)	Conquer	MET-series	
Varistor(ZNR1)	Centra Science	CNR14D361K	
	Joyin	14N361K, 10S361K, 14S361K	
	Thinking	TVR10361-D, TVR14361-D	
Varistor(ZNR2)	Thinking	TVR14511-D, TVR10511-D	
	Centra Science	CNR14D511K	
	Joyin	10S511K, 14S511K, 14N511K	
Change of a component			
Part no.	Model	Before	After
Y-Capacitors(C3, C4)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
Y-Capacitors(C22)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
Y-Capacitors(C129)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
X-Capacitors(C1)	R 46	Rating: 300 Vac	Rating: 250 Vac
	R 49	Rating: 310 Vac	Rating: 250 Vac
	B3292#-...	Rating: 305 Vac	Rating: 250 Vac
	KNB 1530	Rating: 300 Vac	Rating: 250 Vac
	KNB 1560	Rating: 300 Vac	Rating: 250 Vac
	GS-L	Rating: 275 Vac	Rating: 250 Vac
	PCX2 335M	Rating: 275 Vac	Rating: 250 Vac
	PCX2 337	Rating: 275 Vac	Rating: 250 Vac
	HQX	Rating: 275 Vac	Rating: 250 Vac
	CTX	Rating: 300 Vac	Rating: 250 Vac
Bridging Capacitor (C31)	CD	Manufacturer : TDK	Manufacturer : TDK-EPC
Photo Coupler (U3, U4)	K1010	Rating : Int. dcr=5.2mm	Rating : Int. dcr=5.3mm
	LTV-817	Rating: 100 ℃	Rating: 110 ℃
PCB	SWZ-1	Manufacturer : SHANGHAI WANZHENG CIRCUIT BOARD CO LTD	Manufacturer : Kunshan Wanyuantong Electronic Technology Co Ltd
Potting compound	SYLGARD 160	Rating: 105 ℃	Rating: 150 ℃
	KET-132A/B	Rating: 105 ℃	Rating: 150 ℃

변경발급 내용
Contents of Certificate Revisions

2nd Rev.) Addition of factory (16-015152-13 : 2016.03.24.)

- Factory name : Mean Well (Guangzhou) Electronics Co., Ltd.

Address : 2nd Floor No.A Building, Yuean Ind. Park, Dongpu Town, TianHe, Guangzhou,
P.R.China

3rd Rev.) Change Addition factory name, address and president (16-067872-18 : 2016.12.08.)

- Before: Mean Well (Guangzhou) Electronics Co., Ltd. / Wang Fei Long

2nd Floor No.A Building, Yuean Ind. Park, Dongpu Town, TianHe, Guangzhou, P.R.China

After : MEAN WELL (Guangzhou) Electronics Co., Ltd. Huadu branch / Yin Xiao Ming

No.11 Jingu South Road, Huadong Town, Huadu District, Guangzhou, P.R. China

4th Rev.) Addition of components (17-021470-02 : 2017.04.17.)

- Addition of components

Component	Manufacturer	Model(Type)	Characteristics
Power Cord	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 57 H05RN-F 3G0.75 mm ² -1.0 mm ²	3G x 0.75 mm ² -1.0 m m ²
	Dongguan Lucky United Electric Wire & Cable Co.,Ltd	245 IEC 57 H05RN-F 2C- 3CX0.75 mm ² -1 mm ²	3C x 0.75 mm ² -1.0 m m ²
	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 66 H07RN-F 3G1.0 mm ² -4 mm ²	3G x 1.0 mm ² -4.0 m m ²

변경발급 내용
Contents of Certificate Revisions

5th Rev.) Change of PCB layout construction and Components (20-065726-02-1 : 2020.11.10.)

- PCB layout: Added copper foil around the component holes for fixing components better.
- Addition of component:

Component	Manufacturer	Model(Type)	Characteristics
Input cord	DONGGUAN TAWANG ELECTRONICS CO LTD	60245 IEC 57 (H05RN-F) 3x1.0 mm ²	AC 300/500 V, 3 x 1.0 mm ²

- Change of components:

Component	Before	After
X-capacitor (C1)	KEMET(Arcotronics)/R.46 : 300 Vac, 1.0 μ F	KEMET(Arcotronics)/R.46 : 275/300 Vac, 1.0 μ F

6th Rev.) Change name, president and address of factory (21-082212-11-1 : 2022.01.11.)

- Before : MEAN WELL (Guangzhou) Electronics Co., Ltd. Huadu branch / Yin Xiao Ming
No.11 Jingu South Road, Huadong Town, Huadu District, Guangzhou, P.R. China
- After : MEAN WELL (Guangzhou) Electronics Co.,Ltd. / Aden Wang
No.11 Jingu South Road, Huadu District, Guangzhou 510890, Guangdong, China

접 수 번 호 : 20-065726-02-1
(Receipt No.)



안 전 인 증 서

Safety Certificate

안 전 인 증 번 호 : SZ11007-11008E
(Certificate No.)

제 조 업 자/수 입 업 자 명 : MEAN WELL Enterprises Co., Ltd.
(Manufacturer/importer)

주 소 : No.28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 248, Taiwan
(Address) (R.O.C.)

제 품 명 : 조명기구용컨버터(LED용)
(Product) (Electronic controlgear)

기 본 모 델 명 : HLG-320H-54A
(Basic Model)

파 생 모 델 명 : See the attachment 2
(Series Model)

정격/안전기준상의 모델구분 : AC 100-240 V, 50/60 Hz, 3.85-1.6 A, 385 W
(Rating) (Output : DC 54 V, 5.95 A)

시 험 기 준 : KC61347-1(2015-09), KC61347-2-13(2015-09)
(Standard)

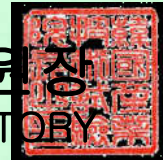
본 인증서는 제 조 국 명 : 대만
제 조 업 자 명 : MEAN WELL Enterprises Co., Ltd.
제조공장의 주소 : No.28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 248, Taiwan (R.O.C.)
다수 공장의 명 : “이면기재” 의 제품에만 해당함

「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.

2020 년 11 월 10 일
Year month day

한국산업기술시험원
KOREA TESTING LABORATORY



※ 이 인증서는 「전기용품 및 생활용품 안전관리법 시행규칙」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)

다수 공장의 현황
(The status of Multiple Factories)

No	현 황	
1	다수 공장의 명 (Name)	MEAN WELL (Guangzhou) Electronics Co., Ltd. Huadu branch
	주소 (Address)	No.11 Jingu South Road, Huadong Town, Huadu District, Guangzhou , P.R. China
	제조국명 (Origin)	중국

□ 첨부 1 : 전기용품의 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
Fuse (FS1)	Conquer	MST-series	T6.3 A, 250 Vac	VDE
Varistor (ZNR1, ZNR2)	Joyin	10N561K, 10S561K	350 Vac, 450 Vdc	UL
Alt.	Joyin	10N471K, 10S471K	300 Vac, 385 Vdc	UL
Alt.	Joyin	10N511K, 10S511K	320 Vac, 418 Vdc	UL
Alt.	Thinking	TVR10471-D TVR14471-D TVR10471-M TVR14471-M TVR10471 TVR14471 TVR10471-V TVR14471-V TVR10471-K TVR14471-K	300 Vac, 385 Vdc	UL
Alt.	Thinking	TVR10511 TVR14511 TVR10511-D TVR14511-D TVR10511-V TVR14511-V TVR10511-M TVR14511-M TVR10511-K TVR14511-K	320 Vac, 410 Vdc	UL
Alt.	Thinking	TVR10561 TVR10561 TVR10561-V TVR14561-V TVR10561-K TVR14561-K TVR10561-M TVR14561-M	350 Vac, 450 Vdc	UL
Alt.	Centra Science	CNR- 10D511K CNR- 14D511K	320 Vac, 410 Vdc	UL
Alt.	Centra Science	CNR- 10D471K CNR- 14D471K	300 Vac, 385 Vdc	UL
Alt.	Centra Science	CNR- 10D561K CNR- 14D561K	350 Vac, 450 Vdc	UL

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Y- Capacitors (C3, C4)	Murata	KX, KH	250 Vac, 1000pF	VDE
Alt.	Walsin	AC, AH	250 Vac, 1000pF	VDE
Alt.	TDK-EPC	CD, CS	250 Vac, 1000pF	VDE
Alt.	Viahay	440L	250 Vac, 1000pF	VDE
Alt.	Viahay	338 6	250 Vac, 1000pF	ENEC
Y- Capacitors (C22)	Murata	KX, KH	250 Vac, 100pF	VDE
Alt.	Walsin	AC, AH	250 Vac, 100pF	VDE
Alt.	TDK-EPC	CD, CS	250 Vac, 100pF	VDE
Alt.	Viahay	440L	250 Vac, 100pF	VDE
Alt.	Viahay	338 6	250 Vac, 100pF	ENEC
Y- Capacitors (C129)	Murata	KX, KH	250 Vac, 4700pF	VDE
Alt.	Walsin	AC, AH	250 Vac, 4700pF	VDE
Alt.	TDK-EPC	CD, CS	250 Vac, 4700pF	VDE
Alt.	Vishay	440L	250 Vac, 4700pF	VDE
Alt.	Vishay	338 6	250 Vac, 4700pF	ENEC
X-capacitor (C1)	KEMET (Arcotronics)	R.46	275/300 Vac, 1.0 uF	ENEC
Alt.	KEMET(Arcotronics)	R.49	310 Vac, 1.0 uF	ENEC
Alt.	Epcos	B3292#-...	305 Vac, 1.0 uF	VDE
Alt.	ISKRA	KNB 1530	300 Vac, 1.0 uF	VDE
Alt.	ISKRA	KNB 1560	300 Vac, 1.0 uF	VDE
Alt.	Liow Gu	GS-L	275 Vac, 1.0 uF	VDE
Alt.	Pilkor	PCX2 335M	275 Vac, 1.0 uF	ENEC
Alt.	Pilkor	PCX2 337	275 Vac, 1.0 uF	VDE
Alt.	Ultra Tech	HQX	275 Vac, 1.0 uF	VDE
Alt.	Cheng Tung	CTX	300 Vac, 1.0 uF	VDE

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Relay (RY1)	Tyco	OJE-SH-112LMH, OJE-SS-112LMH	8A, 250V	TUV, UL
Alt.	Tyco	OJE-SH-112HMF, OJE-SS-112HMF	10A, 250V	TUV, UL
Alt.	Song Chuan	835-1A-B-C	10A, 250V	VDE, TUV, UL
Alt.	Tyco	PCH-112D2H	5A, 277V	VDE, UL
Bridging Capacitor (C31)	Murata	KX	250 Vac, 1000pF, Y1	VDE
Alt.	Walsin	AH	250 Vac, 1000pF, Y1	VDE
Alt.	TDK	CD	250 Vac, 1000pF, Y1	VDE
Photo Coupler (U3, U4)	Cosmo	K1010	dti=0.7mm, Int. dcr=5.2mm Ext. dcr=8mm, thermal cycling test, 115 °C	VDE
Alt.	Lite-On	LTV-817, LTV-817M	dti=0.8mm, Int.dcr=5.2mm, Ent. dcr=7.8mm, 110 °C	VDE
Alt.	Sharp	PC123	dti=0.7mm Int. dcr=5mm Ext. dcr=8mm, thermal cycling test, 110 °C	VDE
Transformer(T1) (For HLG-320H-12B)	Yu Jing	TF-2355	Class B	Tested with appliance
Alt.	Mean Well	TF-2355	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-12y, y=A, D or Blank)	Yu Jing	TF-2286	Class B	Tested with appliance
Alt.	Mean Well	TF-2286	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-15B)	Yu Jing	TF-2356	Class B	Tested with appliance
Alt.	Mean Well	TF-2356	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-15y, y=A, D or Blank)	Yu Jing	TF-2287	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
Alt.	Mean Well	TF-2287	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-2 0B)	Yu Jing	TF-2357	Class B	Tested with appliance
Alt.	Mean Well	TF-2357	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-2 0y, y=A, D or Blank)	Yu Jing	TF-2288	Class B	Tested with appliance
Alt.	Mean Well	TF-2288	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-2 4B)	Yu Jing	TF-2358	Class B	Tested with appliance
Alt.	Mean Well	TF-2358	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-2 4y, y=A, D or Blank)	Yu Jing	TF-2289	Class B	Tested with appliance
Alt.	Mean Well	TF-2289	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 0B)	Yu Jing	TF-2359	Class B	Tested with appliance
Alt.	Mean Well	TF-2359	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 0y, y=A, D or Blank)	Yu Jing	TF-2290	Class B	Tested with appliance
Alt.	Mean Well	TF-2290	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 6B)	Yu Jing	TF-2360	Class B	Tested with appliance
Alt.	Mean Well	TF-2360	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-3 6y, y=A, D or Blank)	Yu Jing	TF-2291	Class B	Tested with appliance
Alt.	Mean Well	TF-2291	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 2B)	Yu Jing	TF-2361	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
Alt.	Mean Well	TF-2361	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 2y, y=A, D or Blank)	Yu Jing	TF-2292	Class B	Tested with appliance
Alt.	Mean Well	TF-2292	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 8B)	Yu Jing	TF-2362	Class B	Tested with appliance
Alt.	Mean Well	TF-2362	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-4 8y, y=A, D or Blank)	Yu Jing	TF-2293	Class B	Tested with appliance
Alt.	Mean Well	TF-2293	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-5 4B)	Yu Jing	TF-2363	Class B	Tested with appliance
Alt.	Mean Well	TF-2363	Class B	Tested with appliance
Transformer(T1) (For HLG-320H-5 4y, y=A, D or Blank)	Yu Jing	TF-2294	Class B	Tested with appliance
Alt.	Mean Well	TF-2294	Class B	Tested with appliance
Line Filter (LF1)	Mean Well	TR-1010	130 ℃	Tested with appliance
Line Filter (LF2, L F3)	Mean Well	TR-890	125 ℃	Tested with appliance
Choke(L2)	Mean Well	TR-993	130 ℃	Tested with appliance
PFC Choke (L1)	Mean Well	TF-2295	130 ℃	Tested with appliance
PCB	SHUNDE JUNDA ELECTRONIC CO LTD	JD-D, JD-E	Min.V-1, 130 ℃	UL
Alt.	BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	DGV0-3A		
Alt.	HONG SHIEN ENTERPRISE CO LTD	03V-0, -D, -M		

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	HONG WEI ENTERPRISES CO LTD	79		
Alt.	HSU TZU ELECTRONIC CO LTD	4V0, DV2, MV1		
Alt.	Kunshan Wanyuantong Electronic Technology Co Ltd	SWZ-1		
Alt.	HSIANG KUO INDUSTRIAL CO LTD	76V0A		
Alt.	Guangzhou Taihe Printed Circuit Board Ltd.	THS, THD		
Alt.	Jiin-Yu Enterprise Co Ltd	JY-001, JY-003		
Power Cord	Dongguan Lucky United	245 IEC 57 H05RN-F	3C x 0.75 mm ² 3C x 1.0 mm ²	KC
Alt.	Dongguan Lucky United	245 IEC 51 H03RT-H	3C x 0.75 mm ² 3C x 1.0 mm ²	KC
Alt.	Guangdong Rifeng	60245 IEC 57 H05RN-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ²	KC
Alt.	I-sheng	60227 IEC 53	3G x 0.75 mm ² 3G x 1.0 mm ² 3G x 1.5 mm ² 3G x 2.5 mm ²	KC
Alt.	Foxconn	K60227 IEC 52 (H03VV-F)	3G x 0.75 mm ²	KC
Alt.	Foxconn	K60227 IEC 53 (H05VV-F)	3G x 0.75 mm ² 3G x 1.0 mm ²	KC
Alt.	Fuyu	K60227 IEC 52 (H03VV-F)	3G x 0.75 mm ²	KC
Alt.	Fuyu	K60227 IEC 53 (H05VV-F)	3G x 0.75 mm ² 3G x 1.0 mm ²	KC
Alt.	Dong Guan Well Shin	K60227 IEC 52 H03VV-F	3C x 0.75 mm ²	KC
Alt.	Dong Guan Well Shin	K60227 IEC 53 H05VVH-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ² 3C x 2.0 mm ² 3C x 2.5 mm ²	KC
Alt.	Ta Hsing Electric Wire & Cable	H05VV-F	3C x 0.75 mm ² 3C x 1.0 mm ² 3C x 1.5 mm ² 3C x 2.0 mm ² 3C x 2.5 mm ²	KC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	Awin Wire & Cable Co., Ltd	60227IEC52 (H03VV-F) 3 G 0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3 G 0.75 mm ² , 3 × 0.75/1.0 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3 G 1.0 mm ²	3G×1.0mm ² 3C×1.0mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×1.0 mm ²	3G×1.0mm ² 3C×1.0mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×1.5 mm ²	3G×1.5mm ² 3C×1.5mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3×2.5 mm ²	3G×2.5mm ² 3C×2.5mm ²	KC
Alt.	Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 52 (H03VV-F) 3X0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3 G 0.75 mm ²	3G×0.75mm ² 3C×0.75mm ²	KC
Alt.	Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3 G 1.0 mm ²	3G×1.0mm ² 3C×1.0mm ²	KC
Alt.	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 57 H05RN-F 3G0.75 mm ² -1.0 mm ²	3G x 0.75 mm ² -1.0 mm ²	KC
Alt.	Dongguan Lucky United Electric Wire & Cable Co.,Ltd	245 IEC 57 H05RN-F 2C-3CX0.75 mm ² -1 mm ²	3C x 0.75 mm ² -1.0 mm ²	KC
Alt.	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 66 H07RN-F 3G1.0 mm ² -4 mm ²	3G x 1.0 mm ² -4.0 mm ²	KC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Alt.	DONGGUAN TAWANG ELECTRONICS CO LTD	60245 IEC 57 (H05RN-F) 3x1.0 mm ²	AC 300/500 V, 3 x 1.0 mm ²	KC
Potting Compound	DOW Corning Corp.	SYLGARD 160	Gray, rated 150 °C	UL
Alt.	Shin Etsu Silicone	KET-132A/B	Natural, rated 150 °C	UL
Alt.	GUANGZHOU Huitian	5299	Gray, rated 150 °C	UL
Alt.	Shin-Etsu Silicone	KET-132 A/B H	Natural, rated 150 °C	UL

☐ 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 multiple listing or changing the items above, the certification revision shall be applied.

2. 인증변경신청 없이 임의로 변경하는 경우는, 전기용품 및 생활용품 안전관리법 시행규칙 제 21 조제 1 항 또는 제 38 조제 1 항 규정에 의한 안전인증 취소 혹은 안전확인신고 효력상실 사유가 됨을 유의하시기 바랍니다.

The Safety Certification will be cancelled under the Article 21(1), 38(1) of the Enforcement Rule of the Electrical appliances and Consumer Products Safety Control Act if the contents of the Certification is altered without our authorization.

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

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-12A	O/P: DC12 V, 22 A (Identical except for output rating)
HLG-320H-12B	O/P: DC12 V, 22 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1,type B top enclosure and type B dimming control board provided)
HLG-320H-12D	O/P: DC12 V, 22 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-12	O/P: DC12 V, 22 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-15A	O/P: DC15 V, 19 A (Identical except for output rating)
HLG-320H-15B	O/P: DC15 V, 19 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-15D	O/P: DC15 V, 19 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-15	O/P: DC15 V, 19 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-20A	O/P: DC20 V, 15 A (Identical except for output rating)
HLG-320H-20B	O/P: DC20 V, 15 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-20D	O/P: DC20 V, 15 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-20	O/P: DC20 V, 15 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-24A	O/P: DC24 V, 13.34 A (Identical except for output rating)
HLG-320H-24B	O/P: DC24 V, 13.34 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-24D	O/P: DC24 V, 13.34 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-24	O/P: DC24 V, 13.34 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-30A	O/P: DC30 V, 10.7 A (Identical except for output rating)
HLG-320H-30B	O/P: DC30 V, 10.7 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-30D	O/P: DC30 V, 10.7 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-30	O/P: DC30 V, 10.7 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-36A	O/P: DC36 V, 8.9 A (Identical except for output rating)
HLG-320H-36B	O/P: DC36 V, 8.9 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-36D	O/P: DC36 V, 8.9 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-36	O/P: DC36 V, 8.9 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-42A	O/P: DC42 V, 7.65 A (Identical except for output rating)
HLG-320H-42B	O/P: DC42 V, 7.65 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-42D	O/P: DC42 V, 7.65 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-42	O/P: DC42 V, 7.65 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-48A	O/P: DC48 V, 6.7 A (Identical except for output rating)

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
HLG-320H-48B	O/P: DC48 V, 6.7 A (Identical except for output rating, output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-48D	O/P: DC48 V, 6.7 A (Identical except for output rating, type B top enclosure and type D dimming control board provided)
HLG-320H-48	O/P: DC48 V, 6.7 A (Identical except for output rating, type B top enclosure provided)
HLG-320H-54B	O/P: DC54 V, 5.95 A (Identical except for output wire with 14AWG*2C×1;18AWG*2C×1, type B top enclosure and type B dimming control board provided)
HLG-320H-54D	O/P: DC54 V, 5.95 A (Identical except for type B top enclosure and type D dimming control board provided)
HLG-320H-54	O/P: DC54 V, 5.95 A (Identical except for type B top enclosure provided)

제품특기사항 및 시험조건
Remarks & Test conditions

1. Test Report Ref. No. : 11-1920-5550 (2011.11.01.)

2. Products Description

- DC or AC supplied electronic controlgear for LEDs
- Rating - PRI : AC100-240 V 50/60 Hz 385 W
SEC : 54 Vd.c. 5.95 A
- PF : > 0.9
- Type of protection : IP 65
- tc : 90 °C, ta : 50 °C
- Protection class : Class I
- Thermally protected : 110 °C
- This product is totally enclosed electronic controlgear.
- Constant voltage type, Independent SELV equivalent

□ 본 제품의 검토내용에 관하여 의문사항이 있으시면 아래 연락처로 문의하시기 바랍니다.
검토 담당자 / 연락처 : BK 전략본부 인증관리센터 이 용노 / (02)860-1423
□ If you have any question on product review, please contact the person below :
Job holder: BK Strategy Division Certification Management Center, Y.R.LEE/+82 2 8601-423

FP511-05

□ 첨부 3 : 안전인증의 변경 현황
Revisions Status

변경발급 내용 Contents of Certificate Revisions		
1 st Rev.) Addition/Delete of a component, Change of a component and PCB's pattern (15-041361-01)		
- Addition of a component		
Part no.	Manufacturer	Model
Fuse (FS1)	Conquer	MST-series
Varistor(ZNR1, ZNR2)	Joyin	10N561K, 10S561K
	Joyin	10N471K, 10S471K
	Joyin	10N511K, 10S511K
	Thinking	TVR10471-D TVR14471-D TVR10471-M TVR14471-M TVR10471 TVR14471 TVR10471-V TVR14471-V TVR10471-K TVR14471-K
	Thinking	TVR10511 TVR14511 TVR10511-D TVR14511-D TVR10511-V TVR14511-V TVR10511-M TVR14511-M TVR10511-K TVR14511-K
	Thinking	TVR10561 TVR10561 TVR10561-V TVR14561-V TVR10561-K TVR14561-K TVR10561-M TVR14561-M
	Centra Science	CNR-10D511K CNR-14D511K
	Centra Science	CNR-10D471K CNR-14D471K
	Centra Science	CNR-10D561K CNR-14D561K

변경발급 내용 Contents of Certificate Revisions			
	Relay(RY1)	Tyco	PCH-112D2H
	Photo Coupler(U3, U4)	Lite-On	LTV-817M
	PCB	SHUNDE JUNDA ELECTRONIC CO LTD	JD-E
		HONG SHIEN ENTERPRISE CO LTD	-D, -M
		HSU TZU ELECTRONIC CO LTD	DV2, MV1
		Guangzhou Taihe Printed Circuit Board Ltd.	THS, THD
		Jiin-Yu Enterprise Co Ltd	JY-001, JY-003
	Power Cord	Awin Wire & Cable Co., Ltd	60227IEC52 (H03VV-F) 3G 0.75 mm ²
		Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3G 0.75 mm ² , 3 x 0.75/1.0 mm ²
		Awin Wire & Cable Co., Ltd	60227IEC53 (H05VV-F) 3G 1.0 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x0.75 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x1.0 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x1.5 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 53 (H05VV-F) 3x2.5 mm ²
		Zhenjiang Huayin Instrument And Electrical Equipment Co., Ltd.	60227 IEC 52 (H03VV-F) 3X0.75 mm ²
		Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3G 0.75 mm ²
		Zheng Yu Electric Appliance Fittings (Kunshan) Co., Ltd.	60245IEC57 (H05RN-F) 3G 1.0 mm ²
	Potting Compound	GUANGZHOU Huitian	5299

변경발급 내용
Contents of Certificate Revisions

- Delete of a component

Part no.	Manufacturer	Model
Fuse (FS1)	Conquer	MET-series
Varistor(ZNR1)	Centra Science	CNR14D361K
	Joyin	14N361K, 10S361K, 14S361K
	Thinking	TVR10361-D, TVR14361-D
Varistor(ZNR2)	Thinking	TVR14511-D, TVR10511-D
	Centra Science	CNR14D511K
	Joyin	10S511K, 14S511K, 14N511K

- Change of a component

Part no.	Model	Before	After
Y-Capacitors(C3, C4)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
Y-Capacitors(C22)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
Y-Capacitors(C129)	CD, CS	Manufacturer : TDK	Manufacturer : TDK-EPC
X-Capacitors(C1)	R 46	Rating: 300 Vac	Rating: 250 Vac
	R 49	Rating: 310 Vac	Rating: 250 Vac
	B3292#-...	Rating: 305 Vac	Rating: 250 Vac
	KNB 1530	Rating: 300 Vac	Rating: 250 Vac
	KNB 1560	Rating: 300 Vac	Rating: 250 Vac
	GS-L	Rating: 275 Vac	Rating: 250 Vac
	PCX2 335M	Rating: 275 Vac	Rating: 250 Vac
	PCX2 337	Rating: 275 Vac	Rating: 250 Vac
	HQX	Rating: 275 Vac	Rating: 250 Vac
Bridging Capacitor (C31)	CD	Manufacturer : TDK	Manufacturer : TDK-EPC
	K1010	Rating : Int. dcr=5.2mm	Rating : Int. dcr=5.3mm
Photo Coupler (U3, U4)	LTV-817	Rating: 100 °C	Rating: 110 °C
	SWZ-1	Manufacturer : SHANGHAI WANZHENG CIRCUIT BOARD CO LTD	Manufacturer : Kunshan Wanyuantong Electronic Technology Co Ltd
Potting compound	SYLGARD 160	Rating: 105 °C	Rating: 150 °C
	KET-132A/B	Rating: 105 °C	Rating: 150 °C

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2nd Rev.) Addition of factory (16-015152-13 : 2016.03.24.)

- Factory name : Mean Well (Guangzhou) Electronics Co., Ltd.

Address : 2nd Floor No.A Building, Yuean Ind. Park, Dongpu Town, TianHe, Guangzhou,
P.R.China

3rd Rev.) Change Addition factory name, address and president (16-067872-18 : 2016.12.08.)

- Before: Mean Well (Guangzhou) Electronics Co., Ltd. / Wang Fei Long

2nd Floor No.A Building, Yuean Ind. Park, Dongpu Town, TianHe, Guangzhou, P.R.China

After : MEAN WELL (Guangzhou) Electronics Co., Ltd. Huadu branch / Yin Xiao Ming

No.11 Jingu South Road, Huadong Town, Huadu District, Guangzhou, P.R. China

4th Rev.) Addition of components (17-021470-02 : 2017.04.17.)

- Addition of components

Component	Manufacturer	Model(Type)	Characteristics
Power Cord	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 57 H05RN-F 3G0.75 mm ² -1.0 mm ²	3G x 0.75 mm ² -1.0 m m ²
	Dongguan Lucky United Electric Wire & Cable Co.,Ltd	245 IEC 57 H05RN-F 2C- 3CX0.75 mm ² -1 mm ²	3C x 0.75 mm ² -1.0 m m ²
	Dongguan Ever United Electric Wire & Cable Co., Ltd.	K60245 IEC 66 H07RN-F 3G1.0 mm ² -4 mm ²	3G x 1.0 mm ² -4.0 m m ²

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5th Rev.) Change of PCB layout construction and Components (20-065726-02-1 : 2020.11.10.)

- PCB layout: Added copper foil around the component holes for fixing components better.
- Addition of component:

Component	Manufacturer	Model(Type)	Characteristics
Input cord	DONGGUAN TAWANG ELECTRONICS CO LTD	60245 IEC 57 (H05RN-F) 3x1.0 mm ²	AC 300/500 V, 3 x 1.0 mm ²

- Change of components:

Component	Before	After
X-capacitor (C1)	KEMET(Arcotronics)/R.46 : 300 Vac, 1.0 μ F	KEMET(Arcotronics)/R.46 : 275/300 Vac, 1.0 μ F

FP511-06