


# **RECOGNIZED COMPONENT** **Constructional Data Report (CDR)**

1.0 Reference and Address			
Report Number	130100670SHA-001	Original Issued: 9-Apr-2013	Revised: 18-Sep-2016
Standard(s)	Class 2 Power Units [UL 1310:2011 Ed.6 +R:12Dec2014]		
	Power Supplies With Extra-Low Voltage Class 2 Outputs [CSA C22.2 No.223:2015 Ed.3]		
Applicant	GlobTek, Inc.	Manufacturer	GlobTek ( Suzhou) Co., Ltd
Address	186 Veterans Dr. Northvale, NJ 07647 USA	Address	Building 4, No. 76 JinLing East Road, Suzhou Industrial Park, Suzhou, JiangSu, 215021, China
Country	USA	Country	CHINA
Contact	Mr. HANS Moritz	Contact	Ms.Demon Zhou
Phone	(201)784-1000	Phone	86 512 6279 0301 Ext 178
FAX	(201)784-0111	FAX	86 512 6279 0355
Email	<a href="mailto:Moritzh@globtek.com">Moritzh@globtek.com</a>	Email	<a href="mailto:demon.zhou@globtek.cn">demon.zhou@globtek.cn</a>

2.0 Product Description	
Product	Class 2 Power Supply
Brand name	
Description	The products covered by this report are class 2 power supplies which is supplied by 100-240V 50-60Hz mains. The direct plug-in models are intended to be used by travelers and the open frame type models are intended to be installed in end product.
Models	GT*41080-**** (where * in the model name are numbers or letters or blank)
Model Similarity	<p>The 1st “*” can be “M” or “-” or “H” for market identification and not related to safety</p> <p>The 2nd “*” denote the rated output wattage designation, which can be “01” to “18”, with interval of 1.</p> <p>The 3rd “*” denote the standard rated output voltage designation, which can be “07”, “11” “17.9”, “30”, “38”.</p> <p>The 4th “*” is optional deviation, subtracted from standard output voltage, which can be “-0.1” to “-12” with interval of 0,1, or blank to indicate no voltage different.</p> <p>The 3rd and 4th “*” together denote the output voltage, with a range of 5 - 36 volts.</p> <p>The last “*” is optional, which can be “-F” or blank. The model name with “-F” means a open frame power supply.</p> <p>Transformers used in all models are with same construction. The turns of secondary winding may be added or reduced according different output voltage.</p> <p>All models have similar PCB, but PCB for models with “-F” is longer than models without “-F” due to input and output dip type terminals employed. Some non-critical components may be adjusted according different output voltage. The parameters of these components depend on output voltage.</p> <p>Models with “-F” are built-in power supply boards with open frame construction which contained dip type terminals. These models shall be installed and evaluated in end product.</p> <p>Two type transformers is optional, these two transformers are with same construction except different routing of secondary lead wires.</p>
Ratings	Input: 100-240V~, 50-60Hz, 0,6A; Output: 5-36VDC, Max 18W
Other Ratings	NA
Conditions of Acceptability	<p>The products covered in this Report are incomplete in construction features or limited in performance capabilities and are intended for use and evaluation in other products. Consideration should be given to the following when the component is used in or with another product.</p> <ol style="list-style-type: none"> <li>1. Suitability of the enclosure for open frame type models should be evaluated when installed in the end product. The products shall be enclosed in a enclosure without any openings.</li> <li>2. Temperature Testing and Abnormal testing under an over-temperature condition should be performed on open frame type models when installed in the end product.</li> <li>3. For open frame type models, the suitable wiring and terminals shall be adopted according manufacturer's specification and shall be evaluated in end product.</li> <li>4. For open frame type models, in this report, products are considered as no earthing means provided. They should be evaluated in end product if earthing conductor is connected.</li> <li>5. The open frame type models shall be installed on the load side of line filters or similar voltage-peak reduction networks and components in the end product.</li> <li>6. For direct plug-in models with a 125 V 15 A (parallel) input blade configuration (NEMA 1-15P), the corresponding national safety regulation shall be considered.</li> </ol>

### 3.0 Product Photographs

Photo 1 - External view (For direct plug-in models, With optional BS, US, SAA and EU plug)

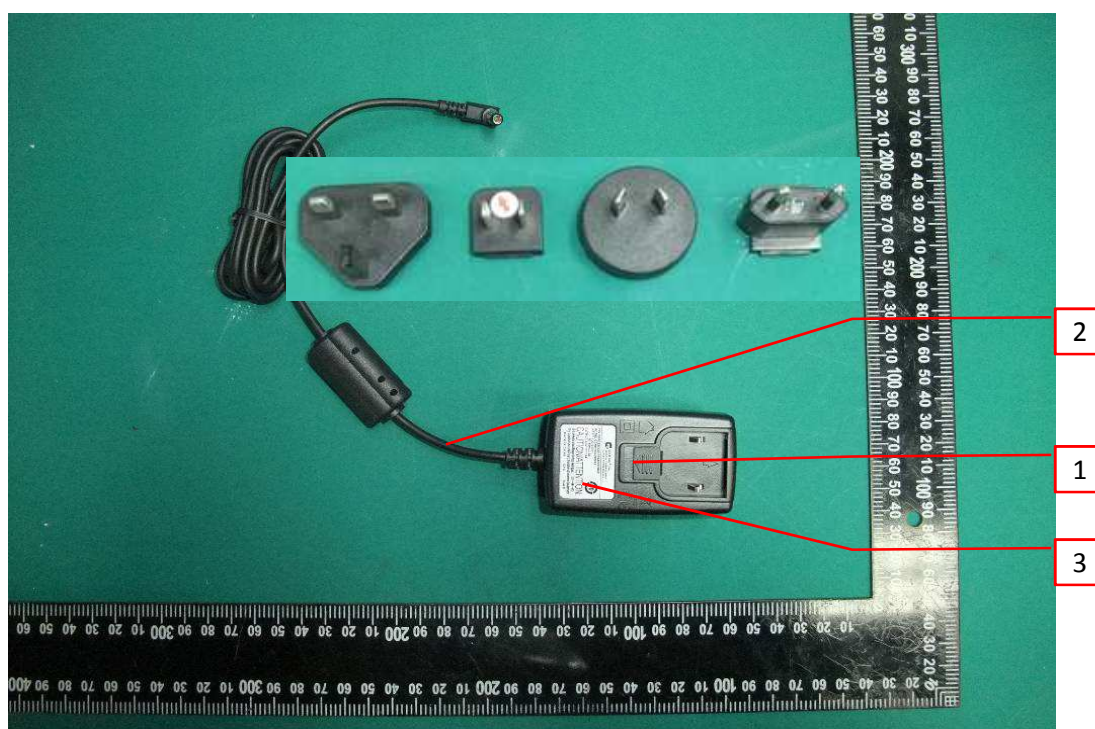
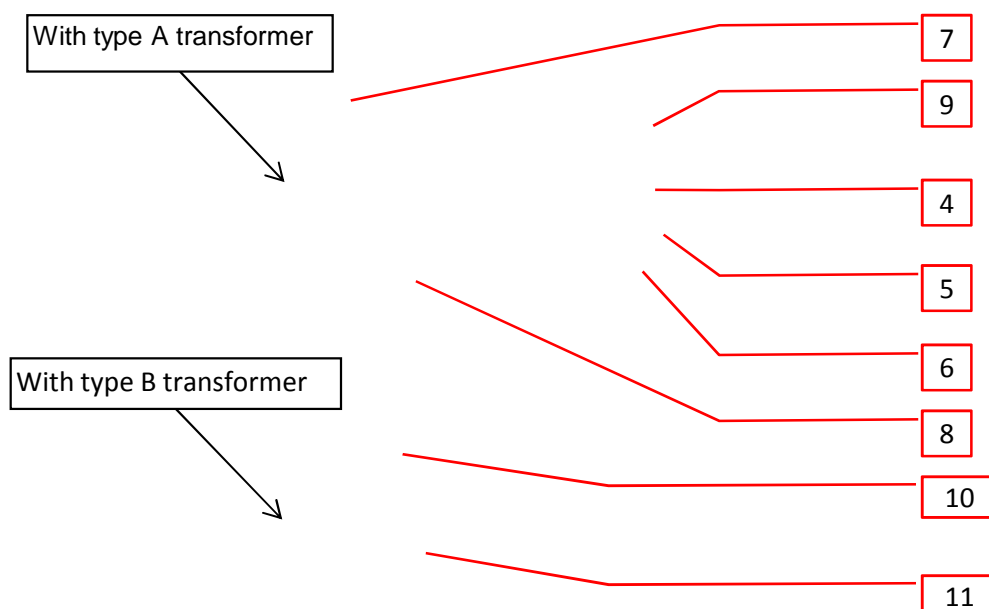
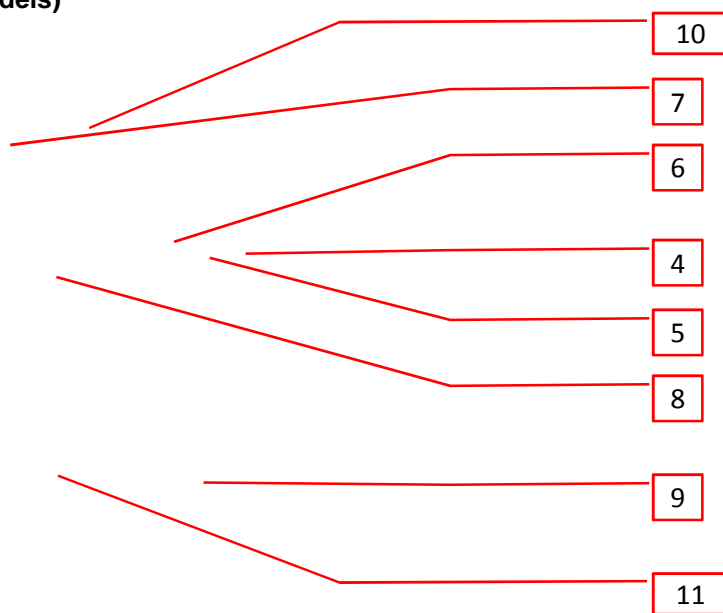


Photo 2 - Internal view (For direct plug-in models)



### 3.0 Product Photographs

**Photo 3 - Overview (for open frame type models)**



4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
1	1	Enclosure and Blade holder (for direct plug-in models)	SABIC INNOVATIVE PLASTICS B V	SE1X	PPE+PS, V-1, HWI 0, HAI 0, 105°C, min thickness: 2,0mm; Fixed by ultrasonic welding and without opening;	cURus
			SABIC INNOVATIVE PLASTICS B V	C2950	PC/ABS, V-0, HWI 3, HAI 0, 75°C, min thickness: 2,0mm; Fixed by ultrasonic welding and without opening;	cURus
			SABIC INNOVATIVE PLASTICS B V	CX7211	PC/ABS, V-0, 5VB, HWI 2, HAI 0, 90°C, min thickness: 2,0mm; Fixed by ultrasonic welding and without opening;	cURus
			SABIC INNOVATIVE PLASTICS B V	EXCY0098	PC/ABS, V-0, 5VB, HWI 2, HAI 0, 90°C, min thickness: 2,0mm; Fixed by ultrasonic welding and without opening;	cURus
			TEIJIN CHEMICALS LTD	LN-1250P	PC, V-0, HWI 3, HAI 0, 115°C, min thickness: 2,0mm; Fixed by ultrasonic welding and without opening;	cURus
			TEIJIN CHEMICALS LTD	LN-1250G	PC, V-0, HWI 3, HAI 0, 115°C, min thickness: 2,0mm; Fixed by ultrasonic welding and without opening;	cURus
			CHI MEI CORPORATION	PA-765A	ABS, V-0, 5VB, HWI 3, HAI 0, 80°C, min thickness: 2,0mm; Fixed by ultrasonic welding and without opening;	cURus
			DONGGUAN YUE YANG WIRE & CABLE CO LTD	1185	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			DONGGUAN YUE YANG WIRE & CABLE CO LTD	2464	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			DONGGUAN YUE YANG WIRE & CABLE CO LTD	2468	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			YONG HAO ELECTRICAL INDUSTRY CO LTD	1185	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			YONG HAO ELECTRICAL INDUSTRY CO LTD	2464	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			YONG HAO ELECTRICAL INDUSTRY CO LTD	2468	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
1	2	Output cord (for direct plug-in models)	DONGGUAN GUNEETAL WIRE & CABLE CO LTD	1185	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			DONGGUAN GUNEETAL WIRE & CABLE CO LTD	2464	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			DONGGUAN GUNEETAL WIRE & CABLE CO LTD	2468	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			HIP TAI ELECTRIC WIRE CO	1185	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			HIP TAI ELECTRIC WIRE CO	2464	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			HIP TAI ELECTRIC WIRE CO	2468	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			KUNSHAN NEW ZHICHENG ELECTRONICS TECHNOLOGIES CO LTD	1185	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			KUNSHAN NEW ZHICHENG ELECTRONICS TECHNOLOGIES CO LTD	2464	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			KUNSHAN NEW ZHICHENG ELECTRONICS TECHNOLOGIES CO LTD	2468	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			SHENG YU ENTERPRISE CO LTD	2464	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			SHENG YU ENTERPRISE CO LTD	2468	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			SUZHOU HONGMENG ELECTRONIC CO LTD	1185	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			SUZHOU HONGMENG ELECTRONIC CO LTD	2464	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			SUZHOU HONGMENG ELECTRONIC CO LTD	2468	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
			ZHUANG SHAN CHUAN ELECTRICAL PRODUCTS (KUNSHAN) CO LTD	1185	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			ZHUANG SHAN CHUAN ELECTRICAL PRODUCTS (KUNSHAN) CO LTD	2464	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			ZHUANG SHAN CHUAN ELECTRICAL PRODUCTS (KUNSHAN) CO LTD	2468	Min. 24AWG, 300V, 80°C, length: 1.8m;	cURus
			YONG HAO ELECTRICAL INDUSTRY CO LTD	SPT-1	Min. 24AWG, 300V, 105°C, length: 1.8m;	cURus
			YONG HAO ELECTRICAL INDUSTRY CO LTD	SPT-2	Min. 24AWG, 300V, 105°C, length: 1.8m;	cURus
			JHI WEI ELECTRIC WIRE & CABLE CO LTD	SPT-1	Min. 24AWG, 300V, 105°C, length: 1.8m;	cURus
			JHI WEI ELECTRIC WIRE & CABLE CO LTD	SPT-2	Min. 24AWG, 300V, 105°C, length: 1.8m;	cURus
			ZHUANG SHAN CHUAN ELECTRICAL PRODUCTS (KUNSHAN) CO LTD	SPT-1	Min. 24AWG, 300V, 105°C, length: 1.8m;	cURus
			ZHUANG SHAN CHUAN ELECTRICAL PRODUCTS (KUNSHAN) CO LTD	SPT-2	Min. 24AWG, 300V, 105°C, length: 1.8m;	cURus
			Various	Various	Min. 24AWG, min. 300V, min. 80°C, length: min. 1.8m, performance parameter shall be equal to 1185, 2464, 2468, SPT-1 or SPT-2.	cURus

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
1	3	Adhesive-Type Label	DONGGUAN XIANGQUAN PRINTING CO LTD	XQ03	Temperature range: -40~80°C;	cURus
			FAN JA PAPER PRINTING CO LTD	FJ-03-3	Temperature range: -40~80°C;	cURus
			FAN JA PAPER PRINTING CO LTD	FJ07	Temperature range: -40~80°C;	cURus
			DONGGUAN XIANGQUAN PRINTING CO LTD	XQ004-B	Temperature range: 80°C;	cURus
			E-LIN ADHESIVE LABEL CO LTD	EL-15	Temperature range: -40~80°C;	cURus
			SHENZHEN CORWIN PRINTING CO LTD	CW-01	Temperature range: -40~80°C; UL MH47077	cURus
			YUEN CHANG SPECIAL PRINTING (SHENZHEN) CO LTD	JL-08	Temperature range: 0~80°C;	cURus
			Various	Various	Temperature range: min. 80°C; certified according UL 969.	cURus
2, 3	4	PWB	TECHNI TECHNOLOGY LTD	T2A	V-0, 130°C; Thickness: 1.6mm;	cURus
			TECHNI TECHNOLOGY LTD	T2B	V-0, 130°C; Thickness: 1.6mm;	cURus
			TECHNI TECHNOLOGY LTD	T4	V-0, 130°C; Thickness: 1.6mm;	cURus
			DONGGUAN HE TONG ELECTRONICS CO LTD	CEM1	V-0, 130°C; Thickness: 1.6mm;	cURus
			CHEERFUL ELECTRONIC (HK) LTD	03	V-0, 130°C; Thickness: 1.6mm;	cURus
			CHEERFUL ELECTRONIC (HK) LTD	03A	V-0, 130°C; Thickness: 1.6mm;	cURus
			DONGGUAN DAYSUN ELECTRONIC CO LTD	DS2	V-0, 130°C; Thickness: 1.6mm;	cURus



4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
			SUZHOU CITY YILIHUA ELECTRONICS CO LTD	YLH-1	V-0, 130°C; Thickness: 1.6mm;	cURus
			SHANGHAI AREX PRECISION ELECTRONIC CO LTD	02V0	V-0, 130°C; Thickness: 1.6mm;	cURus
			BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	DKV0-3A	V-0, 130°C; Thickness: 1.6mm;	cURus
			Various	Various	V-0, 130°C; Thickness: 1.6mm; certified according UL 796	cURus
2, 3	5	Current fuse (FS1, FS2) (FS2 is optional)	CONQUER ELECTRONICS CO LTD	MST	250Vac, 1.6A, Length: 8.35 x 4.3 x 7.7mm;	cURus
			EVER ISLAND ELECTRIC CO LTD & WALTER ELECTRIC	2010	250Vac, 1.6A;	cURus
			BEL FUSE INC	RST	250Vac, 1.6A, Length: 6.8 x 3.0 x 3.6mm;	cURus
			COOPER BUSSMANN L L C	SS-5	250Vac, 1.6A, Length: 8.6 x 4.3 x 8.4mm;	cURus
			WALTER ELECTRONIC CO LTD	ICP	250Vac, 1.6A, Length: 3.6 x 10mm;	cURus
			SHENZHEN LANSON ELECTRONICS CO LTD	SMT	250Vac, 1.6A, Length: 8.4 x 4 x 7.7mm;	cURus
			CHENG TUNG INDUSTRIAL CO LTD	CTX	X1/X2, 310Vac, -40~110°C, max 0.22μF;	cURus
			ULTRA TECH XIPHI ENTERPRISE CO LTD	HQX	X2, 275Vac, -40~100°C, max 0.22μF;	cURus
			TENTA ELECTRIC INDUSTRIAL CO LTD	MEX	X2, 250/275Vac, -40~100°C, max 0.22μF;	cURus
			OKAYA ELECTRIC INDUSTRIES CO LTD	RE	X2, 275Vac, -55~100°C, max 0.22μF;	cURus

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
2, 3	6	X capacitor (CX1) (optional)	VISHAY CAPACITORS BELGIUM N V	F1772	X2, 310Vac, -40~110°C, max 0.22μF;	cURus
			DAIN ELECTRONICS CO LTD	MEX	X2, 250/275/310Vac, -40~100°C, max 0.22μF;	cURus
			DAIN ELECTRONICS CO LTD	MPX	X2, 250/275/310Vac, -40~100°C, max 0.22μF;	cURus
			DAIN ELECTRONICS CO LTD	NPX	X2, 250/275/310Vac, -40~100°C, max 0.22μF;	cURus
			SINHUA ELECTRONICS (HUZHOU) CO LTD	MPX	X2, 310Vac, -40~110°C, max 0.22μF;	cURus
			SHUN DE DAHUA ELECTRIC CO LTD	HD	X2, 250Vac, -40~105°C, max 0.22μF;	cURus
			FOSHAN SHUNDE CHUANG GE ELECTRONIC INDUSTRIAL CO LTD	MKP-X2	X2, 275Vac, -40~105°C, max 0.22μF;	cURus
			HONGZHI ENTERPRISES LTD	MPX	X2, 310Vac, -40~110°C, max 0.22μF;	cURus
			WINDAY ELECTRONIC INDUSTRIAL CO	MPX	X2, 250/275/280/300/310Vac, -40~110°C, max 0.22μF;	cURus
			JIANGSU XINGHUA HUAYU ELECTRONICS CO LTD	MPX	X2, 250Vac, -40~100°C, max 0.22μF;	cURus
2, 3	7	Y capacitor (CY1, CY2) (optional)	TDK-EPC CORPORATION	CD##	Y1, 250VAC, max 2200pF, -40~+125°C;	cURus
			SUCCESS ELECTRONICS CO LTD	SE	Y1, 500VAC, max 2200pF, -40~+125°C;	cURus
			SUCCESS ELECTRONICS CO LTD	SB	Y1, 500VAC, max 2200pF, -40~+125°C;	cURus
			MURATA MFG CO LTD	KX	Y1, 250/300VAC, max 2200pF, -25~+125°C;	cURus
			WALSIN TECHNOLOGY CORP	AH	Y1, 250/400VAC, max 2200pF, -25~+125°C;	cURus
			JYA-NAY CO LTD	JN	Y1, 250/400VAC, max 2200pF, -25~+125°C;	cURus

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
			HAOHUA ELECTRONIC CO	CT7	Y1, 250VAC, max 2200pF, -25~+125°C;	cURus
			HONGZHI ENTERPRISES LTD	Y	Y1, 400VAC, max 2200pF, -25~+125°C;	cURus
			JERRO ELECTRONICS CORP	JX	Y1, 250VAC, max 2200pF	cURus
2, 3	8	Optocoupler (U1)	EVERLIGHT ELECTRONICS CO LTD	EL817	Double protection optical isolators, providing 5000 Vac isolation;	cURus
			COSMO ELECTRONICS CORP	K1010	Optical isolators, double protection type, rated 5000 Vac;	cURus
			COSMO ELECTRONICS CORP	KP1010	Optical isolators, double protection type, rated 5000 Vac;	cURus
			LITE-ON TECHNOLOGY CORP	LTV-817	Double protection optical isolators having an isolation voltage of 5300Vrms;	cURus
			FAIRCHILD SEMICONDUCTOR CORP	H11A817B	Double Protection Optical isolators, providing 5000 V ac isolation;	cURus
			FAIRCHILD SEMICONDUCTOR CORP	FOD817B	Double Protection Optical isolators, providing 5000 V ac isolation;	cURus
			SHARP CORP ELECTRONIC COMPONENTS AND DEVICES GROUP	PC817	Double protection optical isolated switches, providing 5000 Vac isolation;	cURus
			BRIGHT LED ELECTRONICS CORP	BPC-817	Optical isolators, double protection isolation;	cURus
			BRIGHT LED ELECTRONICS CORP	BPC-817 M	Optical isolators, double protection isolation;	cURus
			BRIGHT LED ELECTRONICS CORP	BPC-817 S	Optical isolators, double protection isolation;	cURus
			JOYIN CO LTD	7N471K	300VAC, Type 4 surge protective devices, varistors;	cURus
			JOYIN CO LTD	10N471K	300VAC, Type 4 surge protective devices, varistors;	cURus
			JOYIN CO LTD	14N471K	300VAC, Type 4 surge protective devices, varistors;	cURus
			CENTRA SCIENCE CORP	CNR-07D471K	300VAC, Surge protective devices;	cURus
			CENTRA SCIENCE CORP	CNR-10D471K	300VAC, Surge protective devices;	cURus
			CENTRA SCIENCE CORP	CNR-14D471K	300VAC, Surge protective devices;	cURus
			THINKING ELECTRONIC INDUSTRIAL CO LTD	TVR07471	300VAC, Surge protective devices;	cURus

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
2, 3	9	Varistor (MOV1) (optional)	THINKING ELECTRONIC INDUSTRIAL CO LTD	TVR10471	300VAC, Surge protective devices;	cURus
			THINKING ELECTRONIC INDUSTRIAL CO LTD	TVR14471	300VAC, Surge protective devices;	cURus
			SUCCESS ELECTRONICS CO LTD	SVR07D471K	300VAC, Surge protective devices;	cURus
			SUCCESS ELECTRONICS CO LTD	SVR10D471K	300VAC, Surge protective devices;	cURus
			SUCCESS ELECTRONICS CO LTD	SVR14D471K	300VAC, Surge protective devices;	cURus
			CERAMATE TECHNICAL CO LTD	GNR07D471K	300VAC, Surge protective devices;	cURus
			CERAMATE TECHNICAL CO LTD	GNR10D471K	300VAC, Surge protective devices;	cURus
			CERAMATE TECHNICAL CO LTD	GND14D471K	300VAC, Surge protective devices;	cURus
			BRIGHTKING (SHENZHEN) CO LTD	07D471K	300VAC, Surge protective devices;	cURus
			BRIGHTKING (SHENZHEN) CO LTD	10D471K	300VAC, Surge protective devices;	cURus
			BRIGHTKING (SHENZHEN) CO LTD	14D471K	300VAC, Surge protective devices;	cURus
			LIEN SHUN ELECTRONICS CO LTD	07D471K	300VAC, Surge protective devices;	cURus
			LIEN SHUN ELECTRONICS CO LTD	10D471K	300VAC, Surge protective devices;	cURus
			LIEN SHUN ELECTRONICS CO LTD	14D471K	300VAC, Surge protective devices;	cURus
			HONGZHI ENTERPRISES LTD	HEL-7D471K	300VAC, Surge protective devices;	cURus
			HONGZHI ENTERPRISES LTD	HEL-10D471K	300VAC, Surge protective devices;	cURus
			HONGZHI ENTERPRISES LTD	HEL-14D471K	300VAC, Surge protective devices;	cURus

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
			GUANGXI NEW FUTURE INFORMATION INDUSTRY CO LTD	07D471K	300VAC, Surge protective devices, Varistors, Type 4 Surge Protective Devices;	cURus
			GUANGXI NEW FUTURE INFORMATION INDUSTRY CO LTD	10D471K	300VAC, Surge protective devices, Varistors, Type 4 Surge Protective Devices;	cURus
			GUANGXI NEW FUTURE INFORMATION INDUSTRY CO LTD	14D471K	300VAC, Surge protective devices, Varistors, Type 4 Surge Protective Devices;	cURus
2, 3	10	Tape	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1	130°C;	cURus
			3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350T-1	130°C;	cURus
			BONDTEC PACIFIC CO LTD	370S	130°C;	cURus
			JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ	130°C;	cURus
			JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT	130°C;	cURus
			JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A	130°C;	cURus
			CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX	130°C;	cURus
					PC40 core with dimension: EE22×18,8×5,7mm; for model with 5-7V output, Class 130 (B) electrical insulation systems, designated -01 / Class 130 (B) electrical insulation systems, designated GTX-130-TM / Class 130 (B) electrical insulation systems, designated ZT-130.	See 5.0

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
2, 3	11	Transformer	GLOBTEK INC / HAOPUWEI ELECTRONICS	XF00550	PC40 core with dimension: EE22×18,8×5,7mm; for model with 7.1-11V output, Class 130 (B) electrical insulation systems, designated -01 / Class 130 (B) electrical insulation systems, designated GTX-130-TM / Class 130 (B) electrical insulation systems, designated ZT-130.	See 5.0
				XF00579	PC40 core with dimension: EE22×18,8×5,7mm; for model with 11.1-17.9V output, Class 130 (B) electrical insulation systems, designated -01 / Class 130 (B) electrical insulation systems, designated GTX-130-TM / Class 130 (B) electrical insulation systems, designated ZT-130.	See 5.0
				XF00590	PC40 core with dimension: EE22×18,8×5,7mm; for model with 18-30V output, Class 130 (B) electrical insulation systems, designated -01 / Class 130 (B) electrical insulation systems, designated GTX-130-TM / Class 130 (B) electrical insulation systems, designated ZT-130.	
				XF00682A	PC40 core with dimension: EE22×18,8×5,7mm; for model with 30.1-36V output, Class 130 (B) electrical insulation systems, designated -01 / Class 130 (B) electrical insulation systems, designated GTX-130-TM / Class 130 (B) electrical insulation systems, designated ZT-130.	See 5.0

NOTES:

1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.

2) "Various" means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.

3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.

## 5.0 Critical Unlisted CEC Components

### INSULATED COIL

Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
2, 3	11	Transformer	GLOBTEK INC / HAOPUWEI ELECTRONICS	XF00514
Electrical Rating: N/A				Insulation class 130

Class 2 Power Units [UL 1310:2011 Ed.6 +R:12Dec2014]

Component Standard used: Power Supplies With Extra-Low Voltage Class 2 Outputs [CSA C22.2 No.223:2015 Ed.3]

### MATERIALS LIST (refer to illustration 3a for assembly drawing)

Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Bobbin	CHANG CHUN PLASTICS CO LTD	T375J	PMC; V-0, RTI 150; Minimum thickness: 0.6mm;
	CHANG CHUN PLASTICS CO LTD	T375HF	PMC; V-0, RTI 150; Minimum thickness: 0.6mm;
	SUMITOMO BAKELITE CO LTD	PM-9820	PF; V-0, RTI 150; Minimum thickness: 0.6mm;
	HITACHI CHEMICAL CO LTD	CP-J-8800	PF; V-0, RTI 150; Minimum thickness: 0.6mm;
Insulating tape	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1	130°C;
	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350T-1	130°C;
	BONDTEC PACIFIC CO LTD	370S	130°C;
	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ	130°C;
	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT	130°C;
	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A	130°C;

## 5.0 Critical Unlisted CEC Components

	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX	130°C;
Magnet wire	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWN/U	MW28-C, 130°C;
	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWS/U	MW75-C, 130°C;
	JUNG SHING WIRE CO LTD	UEW-4	MW75C, 130°C;
	JUNG SHING WIRE CO LTD	UEY-2	MW28-C, 130°C;
	JIANGSU HONGLIU MAGNET WIRE TECHNOLOGY CO LTD	2UEW/130	MW75-C, 130°C;
	CHANGZHOU DAYANG WIRE & CABLE CO LTD	2UEW/130	MW75-C, 130°C;
	WUXI JUFENG COMPOUND LINE CO LTD	2UEWB	MW75#, 130°C;
	JIANGSU DARTONG M & E CO LTD	UEW	MW 75-C, 130°C;
	SHANDONG SAINT ELECTRIC CO LTD	UEW/130	MW75#, 130°C;
	ZHEJIANG LANGLI ELECTRIC EQUIPMENTS CO LTD	UEW	MW 79#, 130°C;
	Various	Various	MW 28, MW75, MW79, 130°C;
Triple insulated winding wire	GREAT LEOFLO INDUSTRIAL CO LTD	TRW (B)	Reinforced Insulation, rated 130°C (Class B), 600 Volts peak for Information Technology;
	COSMOLINK CO LTD	TIW-M (B)	Reinforced insulation rated 130°C (Class B), 1.41 kV peak for Information Technology Equipment;
	FURUKAWA ELECTRIC CO LTD	TEX-E	Reinforced insulation rated 130°C (Class B), 1.41 kV peak for Information Technology Equipment;



5.0 Critical Unlisted CEC Components						
PTFE tubing	GREAT HOLDING INDUSTRIAL CO LTD	TFS	600V, 200°C;			
	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	WF	600V, 200°C;			
	CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	CB-TT-S	600V, 200°C;			
Varnish	NOROO PAINT & COATINGS CO LTD	DVB-2085(1)	MW28, TP 130, HC 130;			
	NOROO PAINT & COATINGS CO LTD	DVB-2085(C)	MW28, TP 130, HC 130;			
	WU JIANG TAIHU INSULATING MATERIAL CO LTD	T-4260(a)	MW28, TP 130;			
	WU JIANG TAIHU INSULATING MATERIAL CO LTD	ET-90(a)	MW28, TP 130;			
WINDING(S) RESISTANCE						
Winding Designation	Wire Size (mm)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
N1 (pin 4 to 3)	Φ 0.3	MW75	49	-	-	-
N2 (pin B-A)	Φ 0.7	TIW	8	-	-	-
N3 (pin 1 to 2)	Φ 0.2	MW75	20	-	-	-
N4 (pin 3 to 5)	Φ 0.3	MW75	43	-	-	-
VERIFICATION PROCESS						
Frequency: <b>Annual</b>		Test Site: <b>CEC</b>		Number of samples to test: <b>1</b>		
Test Name		Test Parameters				
Winding resistance		See resistance per winding above.				
Dielectric Strength		Apply voltage Between		Test Voltage		Test Time
		Primary to secondary		1480 V		60 s
		Secondary to core		1480 V		60 s
INSULATED COIL						
Photo #	Item no.	Name	Manufacturer/Trademark		Type / model	
2, 3	11	Transformer	GLOBTEK INC / HAOPUWEI ELECTRONICS		XF00550	
Electrical Rating:		N/A			Insulation class 130	
Class 2 Power Units [UL 1310:2011 Ed.6 +R:12Dec2014]						
Component Standard used: Power Supplies With Extra-Low Voltage Class 2 Outputs [CSA C22.2 No.223:2015 Ed.3]						
MATERIALS LIST (refer to illustration 3b for assembly drawing)						
Component	Manufacturer	Type/model	Dimensions/thickness/assembly information			

## 5.0 Critical Unlisted CEC Components

Bobbin	CHANG CHUN PLASTICS CO LTD	T375J	PMC; V-0, RTI 150; Minimum thickness: 0.6mm;
	CHANG CHUN PLASTICS CO LTD	T375HF	PMC; V-0, RTI 150; Minimum thickness: 0.6mm;
	SUMITOMO BAKELITE CO LTD	PM-9820	PF; V-0, RTI 150; Minimum thickness: 0.6mm;
	HITACHI CHEMICAL CO LTD	CP-J-8800	PF; V-0, RTI 150; Minimum thickness: 0.6mm;
Insulating tape	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1	130°C;
	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350T-1	130°C;
	BONDTEC PACIFIC CO LTD	370S	130°C;
	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ	130°C;
	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT	130°C;
	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A	130°C;
	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX	130°C;
	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWN/U	MW28-C, 130°C;
	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWS/U	MW75-C, 130°C;
	JUNG SHING WIRE CO LTD	UEW-4	MW75C, 130°C;

## 5.0 Critical Unlisted CEC Components

Magnet wire	JUNG SHING WIRE CO LTD	UEY-2	MW28-C, 130°C;
	JIANGSU HONGLIU MAGNET WIRE TECHNOLOGY CO LTD	2UEW/130	MW75-C, 130°C;
	CHANGZHOU DAYANG WIRE & CABLE CO LTD	2UEW/130	MW75-C, 130°C;
	WUXI JUFENG COMPOUND LINE CO LTD	2UEWB	MW75#, 130°C;
	JIANGSU DARTONG M & E CO LTD	UEW	MW 75-C, 130°C;
	SHANDONG SAINT ELECTRIC CO LTD	UEW/130	MW75#, 130°C;
	ZHEJIANG LANGLI ELECTRIC EQUIPMENTS CO LTD	UEW	MW 79#, 130°C;
	Various	Various	MW 28, MW75, MW79, 130°C;
Triple insulated winding wire	GREAT LEOFLON INDUSTRIAL CO LTD	TRW (B)	Reinforced Insulation, rated 130°C (Class B), 600 Volts peak for Information Technology;
	COSMOLINK CO LTD	TIW-M (B)	Reinforced insulation rated 130°C (Class B), 1.41 kV peak for Information Technology Equipment;
	FURUKAWA ELECTRIC CO LTD	TEX-E	Reinforced insulation rated 130°C (Class B), 1.41 kV peak for Information Technology Equipment;
PTFE tubing	GREAT HOLDING INDUSTRIAL CO LTD	TFS	600V, 200°C;
	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	WF	600V, 200°C;
	CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	CB-TT-S	600V, 200°C;
	NOROO PAINT & COATINGS CO LTD	DVB-2085(1)	MW28, TP 130, HC 130;

## 5.0 Critical Unlisted CEC Components

Varnish	NOROO PAINT & COATINGS CO LTD	DVB-2085(C)	MW28, TP 130, HC 130;
	WU JIANG TAIHU INSULATING MATERIAL CO LTD	T-4260(a)	MW28, TP 130;
	WU JIANG TAIHU INSULATING MATERIAL CO LTD	ET-90(a)	MW28, TP 130;

## WINDING(S) RESISTANCE

Winding Designation	Wire Size (mm)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
N1 (pin 4 to 3)	Φ 0.3	MW75	49	-	-	-
N2 (pin B-A)	Φ 0.7	TIW	8	-	-	-
N3 (pin 1 to 2)	Φ 0.2	MW75	12	-	-	-
N4 (pin 3 to 5)	Φ 0.3	MW75	43	-	-	-

## VERIFICATION PROCESS

Frequency: <b>Annual</b>	Test Site: <b>CEC</b>	Number of samples to test: <b>1</b>
Test Name	Test Parameters	
Winding resistance	See resistance per winding above.	
Dielectric Strength	Apply voltage Between	Test Voltage
	Primary to secondary	1480 V
	Secondary to core	1480 V
		Test Time
		60 s

## INSULATED COIL

Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
2, 3	11	Transformer	GLOBTEK INC / HAOPUWEI ELECTRONICS	XF00579
Electrical Rating: N/A				Insulation class 130

Class 2 Power Units [UL 1310:2011 Ed.6 +R:12Dec2014]

Component Standard used: Power Supplies With Extra-Low Voltage Class 2 Outputs [CSA C22.2 No.223:2015 Ed.3]

## MATERIALS LIST (refer to illustration 3c for assembly drawing)

Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Bobbin	CHANG CHUN PLASTICS CO LTD	T375J	PMC; V-0, RTI 150; Minimum thickness: 0.6mm;
	CHANG CHUN PLASTICS CO LTD	T375HF	PMC; V-0, RTI 150; Minimum thickness: 0.6mm;
	SUMITOMO BAKELITE CO LTD	PM-9820	PF; V-0, RTI 150; Minimum thickness: 0.6mm;
	HITACHI CHEMICAL CO LTD	CP-J-8800	PF; V-0, RTI 150; Minimum thickness: 0.6mm;

## 5.0 Critical Unlisted CEC Components

Insulating tape	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1	130°C;
	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350T-1	130°C;
	BONDTEC PACIFIC CO LTD	370S	130°C;
	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ	130°C;
	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT	130°C;
	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A	130°C;
	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX	130°C;
Magnet wire	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWN/U	MW28-C, 130°C;
	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWS/U	MW75-C, 130°C;
	JUNG SHING WIRE CO LTD	UEW-4	MW75C, 130°C;
	JUNG SHING WIRE CO LTD	UEY-2	MW28-C, 130°C;
	JIANGSU HONGLIU MAGNET WIRE TECHNOLOGY CO LTD	2UEW/130	MW75-C, 130°C;
	CHANGZHOU DAYANG WIRE & CABLE CO LTD	2UEW/130	MW75-C, 130°C;
	WUXI JUFENG COMPOUND LINE CO LTD	2UEWB	MW75#, 130°C;

## 5.0 Critical Unlisted CEC Components

	JIANGSU DARTONG M & E CO LTD	UEW	MW 75-C, 130°C;
	SHANDONG SAINT ELECTRIC CO LTD	UEW/130	MW75#, 130°C;
	ZHEJIANG LANGLI ELECTRIC EQUIPMENTS CO LTD	UEW	MW 79#, 130°C;
	Various	Various	MW 28, MW75, MW79, 130°C;
Triple insulated winding wire	GREAT LEOFLON INDUSTRIAL CO LTD	TRW (B)	Reinforced Insulation, rated 130°C (Class B), 600 Volts peak for Information Technology;
	COSMOLINK CO LTD	TIW-M (B)	Reinforced insulation rated 130°C (Class B), 1.41 kV peak for Information Technology Equipment;
	FURUKAWA ELECTRIC CO LTD	TEX-E	Reinforced insulation rated 130°C (Class B), 1.41 kV peak for Information Technology Equipment;
PTFE tubing	GREAT HOLDING INDUSTRIAL CO LTD	TFS	600V, 200°C;
	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	WF	600V, 200°C;
	CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	CB-TT-S	600V, 200°C;
Varnish	NOROO PAINT & COATINGS CO LTD	DVB-2085(1)	MW28, TP 130, HC 130;
	NOROO PAINT & COATINGS CO LTD	DVB-2085(C)	MW28, TP 130, HC 130;
	WU JIANG TAIHU INSULATING MATERIAL CO LTD	T-4260(a)	MW28, TP 130;
	WU JIANG TAIHU INSULATING MATERIAL CO LTD	ET-90(a)	MW28, TP 130;

## WINDING(S) RESISTANCE

Winding Designation	Wire Size (mm)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
N1 (pin 4)	Φ 0.20	MW75	36	-	-	-
N2 (pin 4-5)	Φ 0.20	MW75	87	-	-	-
N3 (pin B-A)	Φ 0.5	TIW	10	-	-	-

5.0 Critical Unlisted CEC Components						
N4 (pin 1 to 2)	Φ 0.2*2	MW75	15	-	-	-
VERIFICATION PROCESS						
Frequency: <b>Annual</b>	Test Site: <b>CEC</b>			Number of samples to test: <b>1</b>		
Test Name		Test Parameters				
Winding resistance		See resistance per winding above.				
Dielectric Strength	Apply voltage Between			Test Voltage		Test Time
	Primary to secondary			1480 V		60 s
	Secondary to core			1480 V		60 s

INSULATED COIL				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
2, 3	11	Transformer	GLOBTEK INC / HAOPUWEI ELECTRONICS	XF00590
Electrical Rating: N/A				Insulation class 130
Class 2 Power Units [UL 1310:2011 Ed.6 +R:12Dec2014]				
Component Standard used: Power Supplies With Extra-Low Voltage Class 2 Outputs [CSA C22.2 No.223:2015 Ed.3]				

MATERIALS LIST (refer to illustration 3d for assembly drawing)			
Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Bobbin	CHANG CHUN PLASTICS CO LTD	T375J	PMC; V-0, RTI 150; Minimum thickness: 0.6mm;
	CHANG CHUN PLASTICS CO LTD	T375HF	PMC; V-0, RTI 150; Minimum thickness: 0.6mm;
	SUMITOMO BAKELITE CO LTD	PM-9820	PF; V-0, RTI 150; Minimum thickness: 0.6mm;
	HITACHI CHEMICAL CO LTD	CP-J-8800	PF; V-0, RTI 150; Minimum thickness: 0.6mm;
Insulating tape	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1	130°C;
	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350T-1	130°C;
	BONDTEC PACIFIC CO LTD	370S	130°C;
	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ	130°C;
	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT	130°C;

## 5.0 Critical Unlisted CEC Components

	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A	130°C;
	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX	130°C;
Magnet wire	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWN/U	MW28-C, 130°C;
	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWS/U	MW75-C, 130°C;
	JUNG SHING WIRE CO LTD	UEW-4	MW75C, 130°C;
	JUNG SHING WIRE CO LTD	UEY-2	MW28-C, 130°C;
	JIANGSU HONGLIU MAGNET WIRE TECHNOLOGY CO LTD	2UEW/130	MW75-C, 130°C;
	CHANGZHOU DAYANG WIRE & CABLE CO LTD	2UEW/130	MW75-C, 130°C;
	WUXI JUFENG COMPOUND LINE CO LTD	2UEWB	MW75#, 130°C;
	JIANGSU DARTONG M & E CO LTD	UEW	MW 75-C, 130°C;
	SHANDONG SAINT ELECTRIC CO LTD	UEW/130	MW75#, 130°C;
	ZHEJIANG LANGLI ELECTRIC EQUIPMENTS CO LTD	UEW	MW 79#, 130°C;
	Various	Various	MW 28, MW75, MW79, 130°C;
Triple insulated winding wire	GREAT LEOFLON INDUSTRIAL CO LTD	TRW (B)	Reinforced Insulation, rated 130°C (Class B), 600 Volts peak for Information Technology;
	COSMOLINK CO LTD	TIW-M (B)	Reinforced insulation rated 130°C (Class B), 1.41 kV peak for Information Technology Equipment;



5.0 Critical Unlisted CEC Components			
	FURUKAWA ELECTRIC CO LTD	TEX-E	Reinforced insulation rated 130°C (Class B), 1.41 kV peak for Information Technology Equipment;
PTFE tubing	GREAT HOLDING INDUSTRIAL CO LTD	TFS	600V, 200°C;
	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	WF	600V, 200°C;
	CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	CB-TT-S	600V, 200°C;
Varnish	NOROO PAINT & COATINGS CO LTD	DVB-2085(1)	MW28, TP 130, HC 130;
	NOROO PAINT & COATINGS CO LTD	DVB-2085(C)	MW28, TP 130, HC 130;
	WU JIANG TAIHU INSULATING MATERIAL CO LTD	T-4260(a)	MW28, TP 130;
	WU JIANG TAIHU INSULATING MATERIAL CO LTD	ET-90(a)	MW28, TP 130;

#### WINDING(S) RESISTANCE

Winding Designation	Wire Size (mm)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
N1 (pin 4)	Φ 0.25	MW75	30	-	-	-
N2 (pin 4-5)	Φ 0.25	MW75	88	-	-	-
N3 (pin B-A)	Φ 0.5	TIW	16	-	-	-
N4 (pin 1 to 2)	Φ 0.18*3	MW75	13	-	-	-

#### VERIFICATION PROCESS

Frequency: <b>Annual</b>	Test Site: <b>CEC</b>		Number of samples to test: <b>1</b>
Test Name	Test Parameters		
Winding resistance	See resistance per winding above.		
Dielectric Strength	Apply voltage Between	Test Voltage	Test Time
	Primary to secondary	1480 V	60 s
	Secondary to core	1480 V	60 s

#### INSULATED COIL

Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
2, 3	11	Transformer	GLOBTEK INC / HAOPUWEI ELECTRONICS	XF00682A
Electrical Rating: N/A			Insulation class	130

## 5.0 Critical Unlisted CEC Components

Class 2 Power Units [UL 1310:2011 Ed.6 +R:12Dec2014]

Component Standard used:

Power Supplies With Extra-Low Voltage Class 2 Outputs [CSA C22.2 No.223:2015 Ed.3]

### MATERIALS LIST (refer to illustration 3e for assembly drawing)

Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Bobbin	CHANG CHUN PLASTICS CO LTD	T375J	PMC; V-0, RTI 150; Minimum thickness: 0.6mm;
	CHANG CHUN PLASTICS CO LTD	T375HF	PMC; V-0, RTI 150; Minimum thickness: 0.6mm;
	SUMITOMO BAKELITE CO LTD	PM-9820	PF; V-0, RTI 150; Minimum thickness: 0.6mm;
	HITACHI CHEMICAL CO LTD	CP-J-8800	PF; V-0, RTI 150; Minimum thickness: 0.6mm;
Insulating tape	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1	130°C;
	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350T-1	130°C;
	BONDTEC PACIFIC CO LTD	370S	130°C;
	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ	130°C;
	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT	130°C;
	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A	130°C;
	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX	130°C;
	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWN/U	MW28-C, 130°C;
	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWS/U	MW75-C, 130°C;

## 5.0 Critical Unlisted CEC Components

Magnet wire	JUNG SHING WIRE CO LTD	UEW-4	MW75C, 130°C;
	JUNG SHING WIRE CO LTD	UEY-2	MW28-C, 130°C;
	JIANGSU HONGLIU MAGNET WIRE TECHNOLOGY CO LTD	2UEW/130	MW75-C, 130°C;
	CHANGZHOU DAYANG WIRE & CABLE CO LTD	2UEW/130	MW75-C, 130°C;
	WUXI JUFENG COMPOUND LINE CO LTD	2UEWB	MW75#, 130°C;
	JIANGSU DARTONG M & E CO LTD	UEW	MW 75-C, 130°C;
	SHANDONG SAINT ELECTRIC CO LTD	UEW/130	MW75#, 130°C;
	ZHEJIANG LANGLI ELECTRIC EQUIPMENTS CO LTD	UEW	MW 79#, 130°C;
	Various	Various	MW 28, MW75, MW79, 130°C;
Triple insulated winding wire	GREAT LEOFLON INDUSTRIAL CO LTD	TRW (B)	Reinforced Insulation, rated 130°C (Class B), 600 Volts peak for Information Technology;
	COSMOLINK CO LTD	TIW-M (B)	Reinforced insulation rated 130°C (Class B), 1.41 kV peak for Information Technology Equipment;
	FURUKAWA ELECTRIC CO LTD	TEX-E	Reinforced insulation rated 130°C (Class B), 1.41 kV peak for Information Technology Equipment;
PTFE tubing	GREAT HOLDING INDUSTRIAL CO LTD	TFS	600V, 200°C;
	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	WF	600V, 200°C;
	CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	CB-TT-S	600V, 200°C;
	NOROO PAINT & COATINGS CO LTD	DVB-2085(1)	MW28, TP 130, HC 130;

### 5.0 Critical Unlisted CEC Components

Varnish	NOROO PAINT & COATINGS CO LTD	DVB-2085(C)	MW28, TP 130, HC 130;
	WU JIANG TAIHU INSULATING MATERIAL CO LTD	T-4260(a)	MW28, TP 130;
	WU JIANG TAIHU INSULATING MATERIAL CO LTD	ET-90(a)	MW28, TP 130;

### WINDING(S) RESISTANCE

Winding Designation	Wire Size (mm)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
N1 (pin 4)	Φ 0.25*2	MW75	15	-	-	-
N2 (pin 4-5)	Φ 0.25	MW75	88	-	-	-
N3 (pin B-A)	Φ 0.5	TIW	24	-	-	-
N4 (pin 1 to 2)	Φ 0.20*3	MW75	10	-	-	-

### VERIFICATION PROCESS

Frequency: <b>Annual</b>	Test Site: <b>CEC</b>	Number of samples to test: <b>1</b>	
Test Name	Test Parameters		
Winding resistance	See resistance per winding above.		
Dielectric Strength	Apply voltage Between	Test Voltage	Test Time
	Primary to secondary	1480 V	60 s
	Secondary to core	1480 V	60 s

## 6.0 Critical Features

Recognized Component - A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

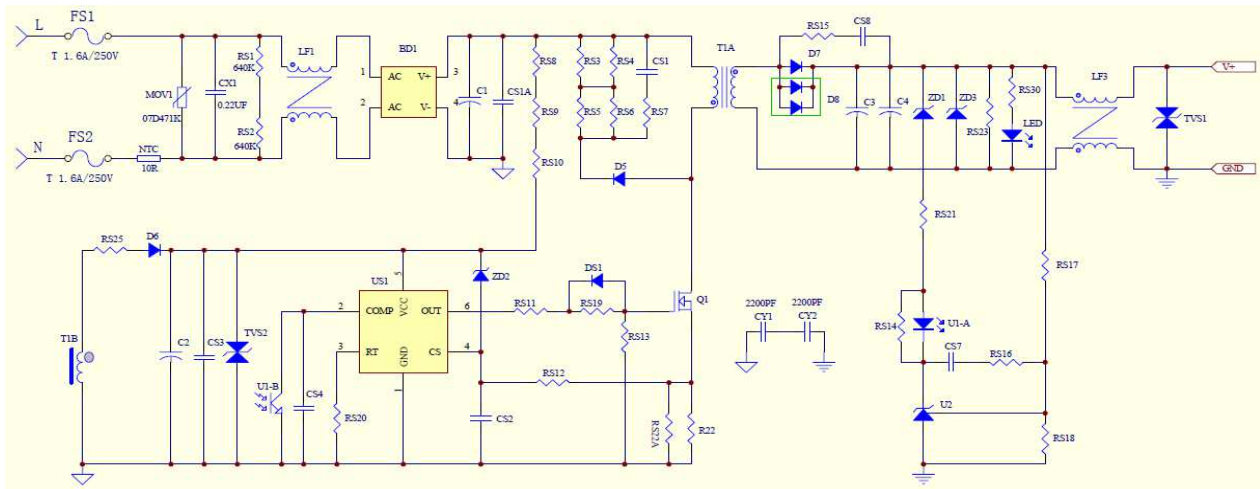
Unlisted Component - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

Construction Details - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

1. Spacing - In primary circuits, 4.8 mm minimum spacing are maintained through air and over surfaces of insulating material between current-carrying parts of opposite polarity, 4.8 mm minimum between such current-carrying parts and low voltage isolated circuits, and 6.4 mm between such current-carrying parts and dead-metal parts. For frame type models, spacings between live parts of opposite polarity is evaluated by UL840, minimum 3.2 mm spacings are maintained.
2. Mechanical Assembly - Components such as switches, fuseholders, connectors, wiring terminals and display lamps are mounted and prevented from shifting or rotating by the use of lockwashers, starwashers, or other mounting format that prevents turning of the component.
3. Corrosion Protection - All ferrous metal parts are protected against corrosion by painting, plating or the equivalent.
4. Accessibility of Live Parts - All uninsulated live parts in secondary circuitry are housed within a non-metallic enclosure constructed with no openings other than those specifically described in Sections 4 and 5.
5. Grounding - This product is not provided with a means of grounding.
6. Polarized Connection - This product is not provided with a polarized power supply connection.
7. Internal Wiring - Internal wiring is routed away from sharp or moving parts. Internal wiring leads terminating in soldered connections are made mechanically secure prior to soldering. Recognized Component separable (quick disconnect) connectors of the positive detent type, closed loop connectors, or other types specifically described in the text of this report are also acceptable as internal wiring terminals. At points where internal wiring passes through metal walls or partitions, the wiring insulation is protected against abrasion or damage by plastic bushings or grommets. All wiring is minimum 24 AWG, with a minimum rating of 300V, 80°C.
8. Schematics - Refer to Illustration No. 1 for schematics requiring verification during Field Representative Inspection Audits.
9. Markings - The product is marked on a labeling system as described in Section 4.0. Refer to Illustration No.4 for markings.
10. Cautionary Markings - The following are required: refer to illustration No.4 for detail.
11. Installation, Operating and Safety Instructions - Specification for installation and use of this product are provided by the manufacturer. Refer to Illustration No. 5a to 5c for details.
12. PWB Layout - Refer to Illustration No.2a and 2b for PWB layout requiring verification during Field Representative Inspection Audits.

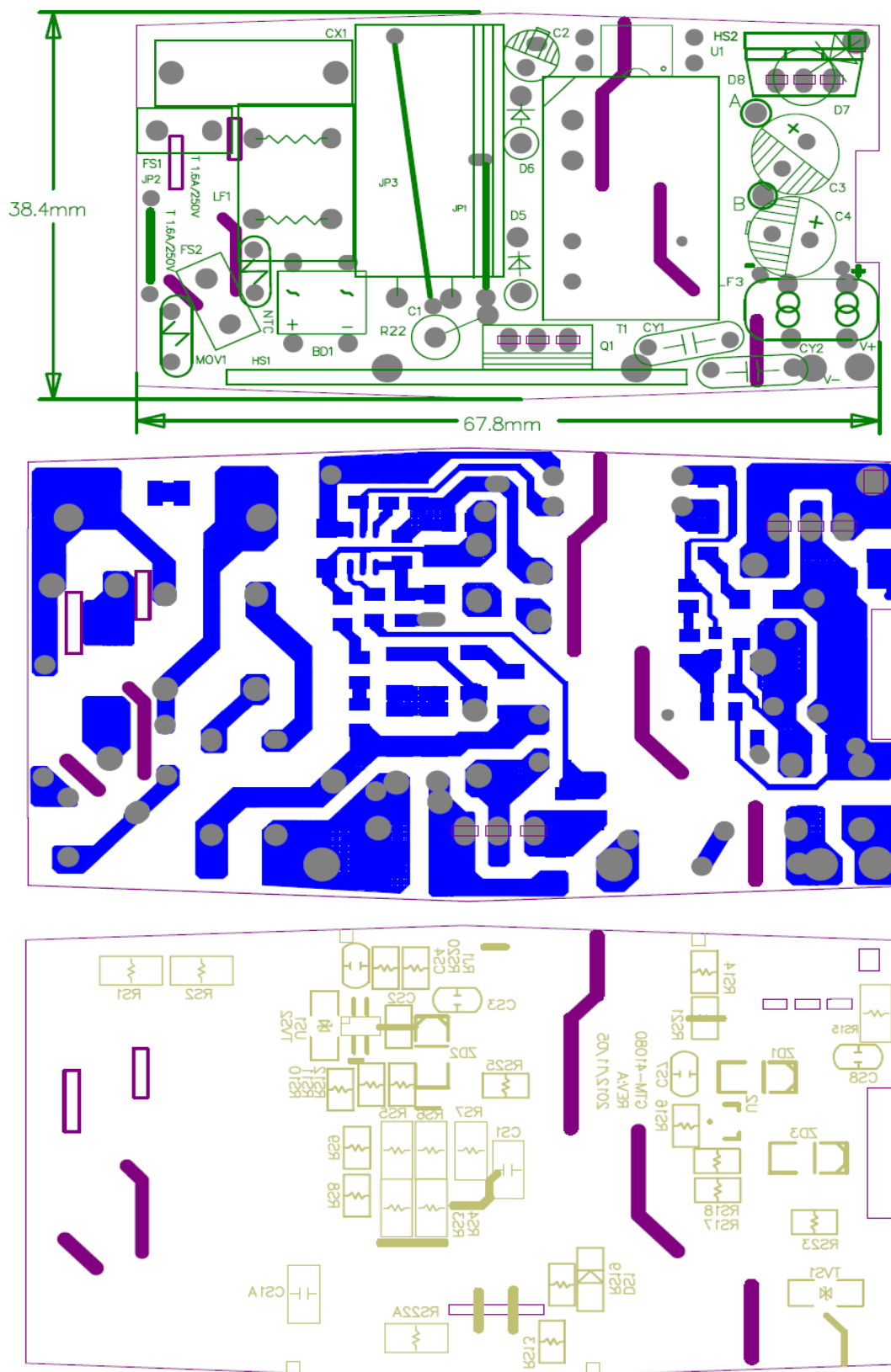
### Illustration 1 - Circuit diagram



## 7.0 Illustrations

### Illustration 2a - PWB layout

For direct plug-in models



### Illustration 2b - PWB layout

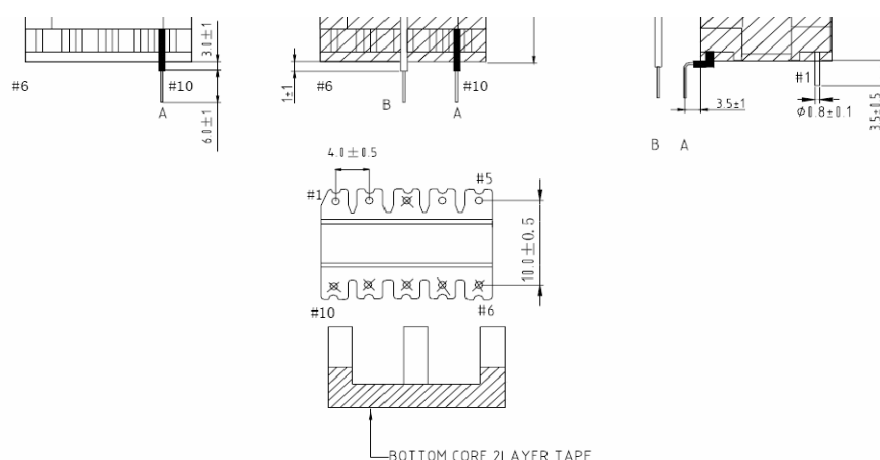
[illegible]



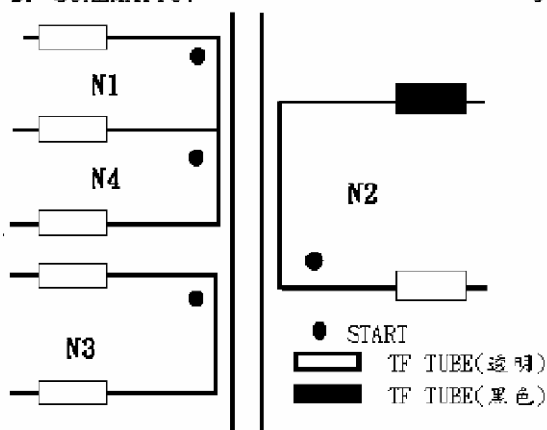
## 7.0 Illustrations

### Illustration 3a - Structure of Transformer

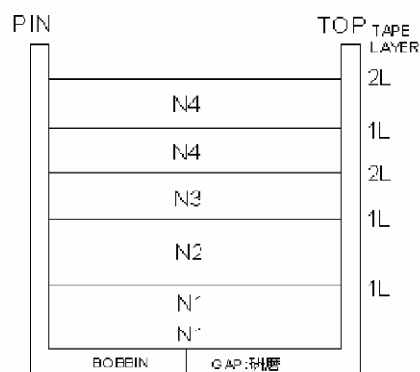
XF00514



#### 2. SCHEMATIC:



#### 3. WINDING SEQUENCE:



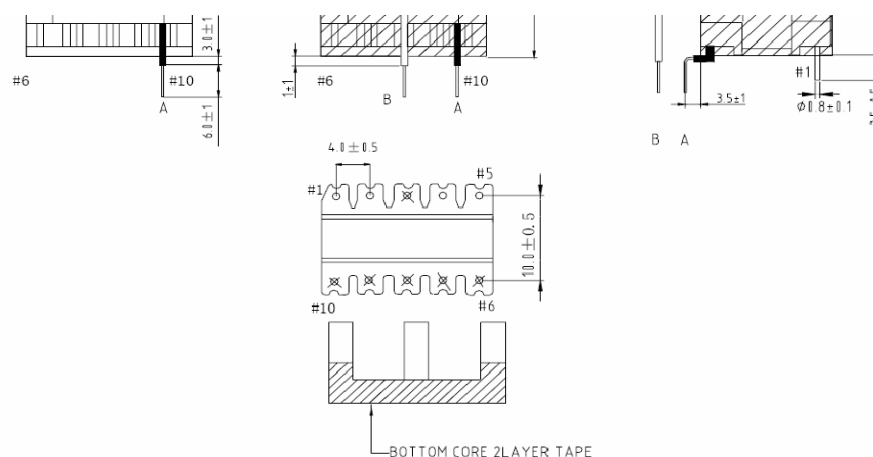
#### 4. WINDING TABLE

Winding No (組別)	Margin Tape (檔精膠帶)	PIN (腳位)	Wire&Wire Copper (線徑X股數)	Turns (圈數)	Winding Tape (繞線方式)	Tape Layer (膠帶層次)	Tube (套管)
N1	0		0.30 ΦX1P	49Ts	密繞	1L	28*8/28*8
N2	0		0.70 ΦX1P (三層絕緣)	8Ts	密繞	2L	18*15(透明)/ 18*15(黑色)
N3	0		0.20 ΦX1P	20Ts	密中繞	2L	28*8 /28*8
N4	0		0.30 ΦX1P	43Ts	密繞	2L	28/8*28*8

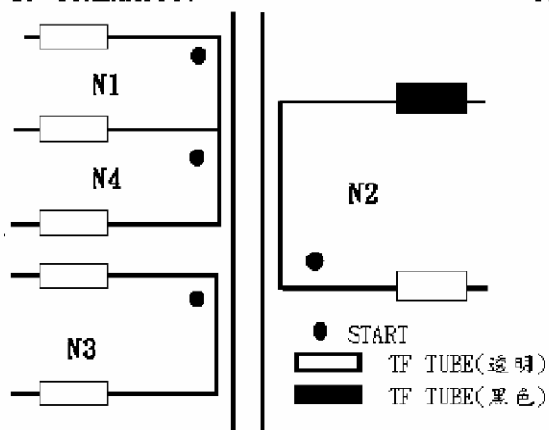
## 7.0 Illustrations

### Illustration 3b - Structure of Transformer

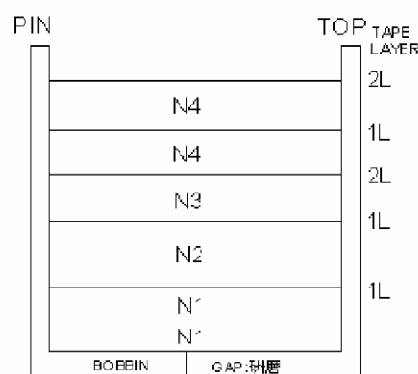
XF00550



#### 2. SCHEMATIC:



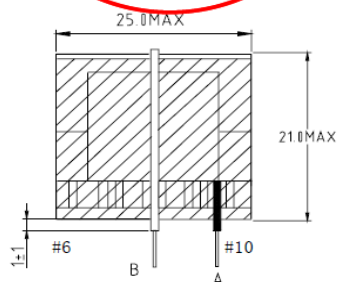
#### 3. WINDING SEQUENCE:



#### 4. WINDING TABLE

Winding No (組別)	Margin Tape (檔牆膠帶)	PIN (腳位)	Wire&Wire Copper (線徑X股數)	Turns (圈數)	Winding Tape (繞線方式)	Tape Layer (膠帶層次)	Tube (套管)
N1	0		0.30ΦX1P	49Ts	密繞	1L	28*8/28*8
N2	0		0.70ΦX1P (三層絕緣)	8Ts	密繞	2L	18*15(透明)/ 18*15(黑色)
N3	0		0.20ΦX1P	20Ts	密中繞	2L	28*8 /28*8
N4	0		0.30ΦX1P	43Ts	密繞	2L	28*8*28*8

### Illustration 3c - Structure of Transformer

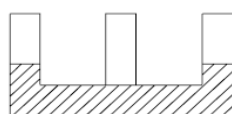
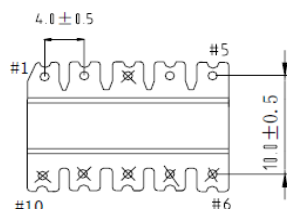
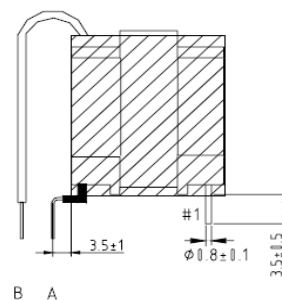


MARKING

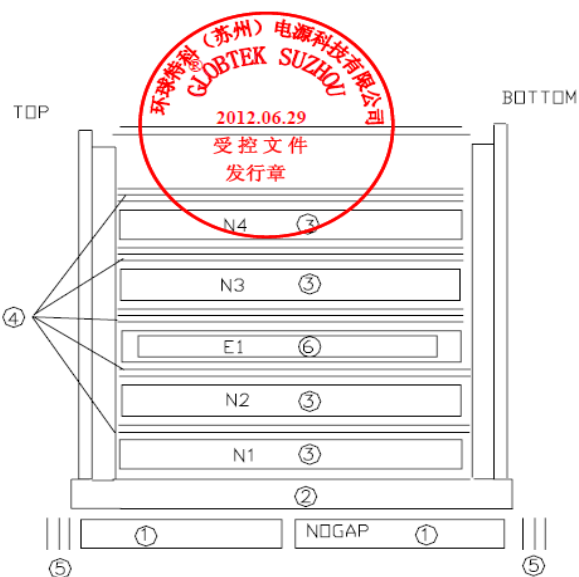
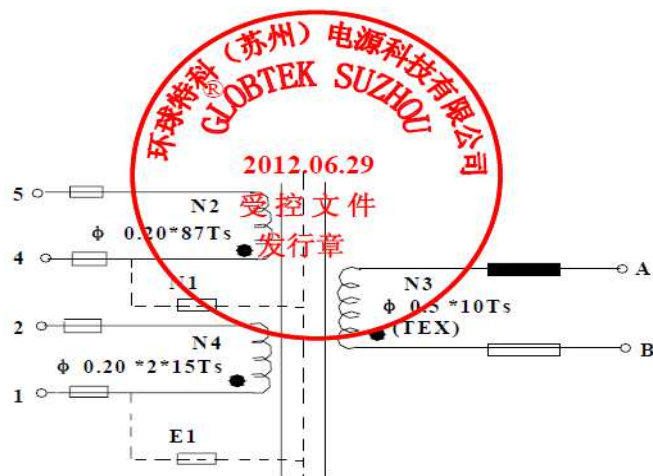
BA YYMM

MONTH

YEAR



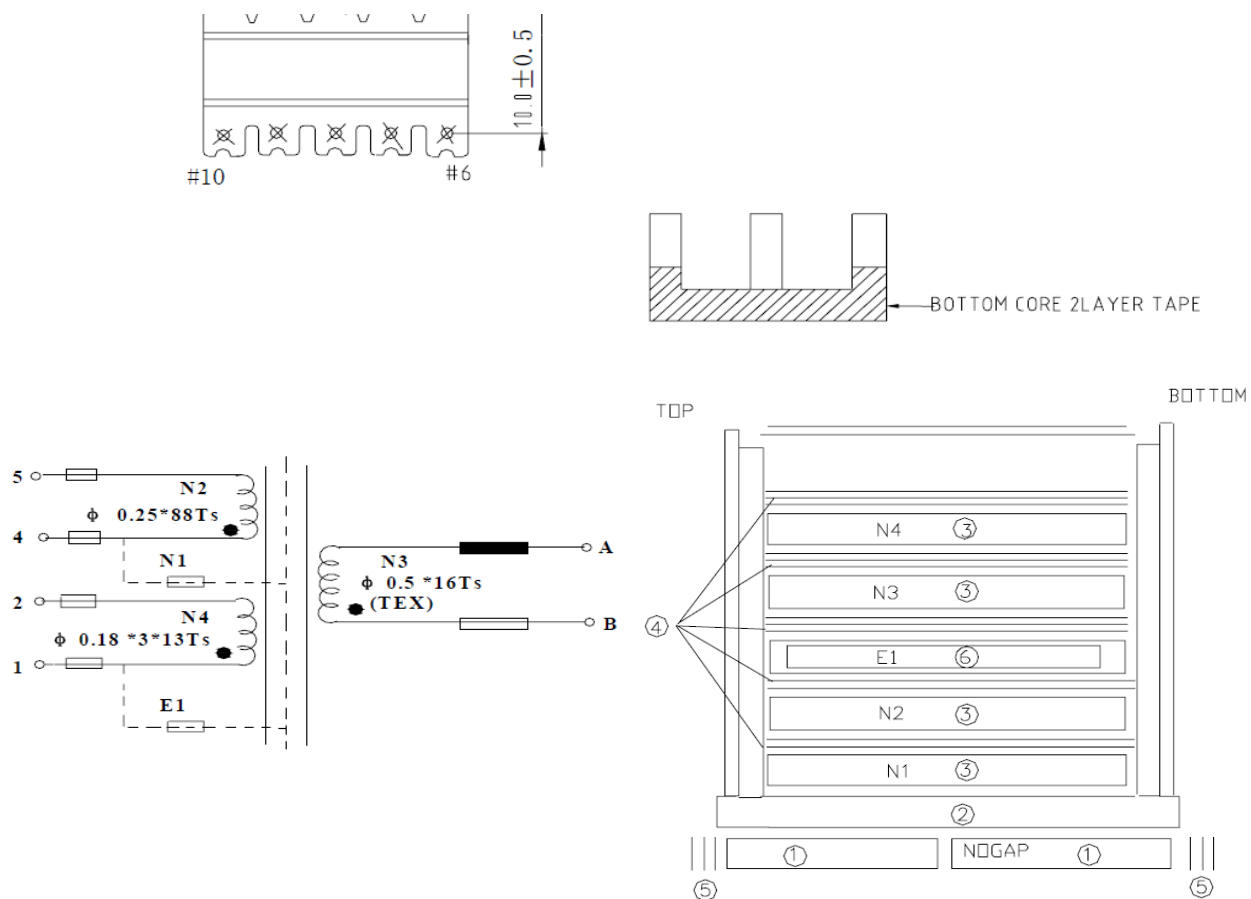
—BOTTOM CORE 2 LAYER TAPE



## 7.0 Illustrations

### Illustration 3d - Structure of Transformer

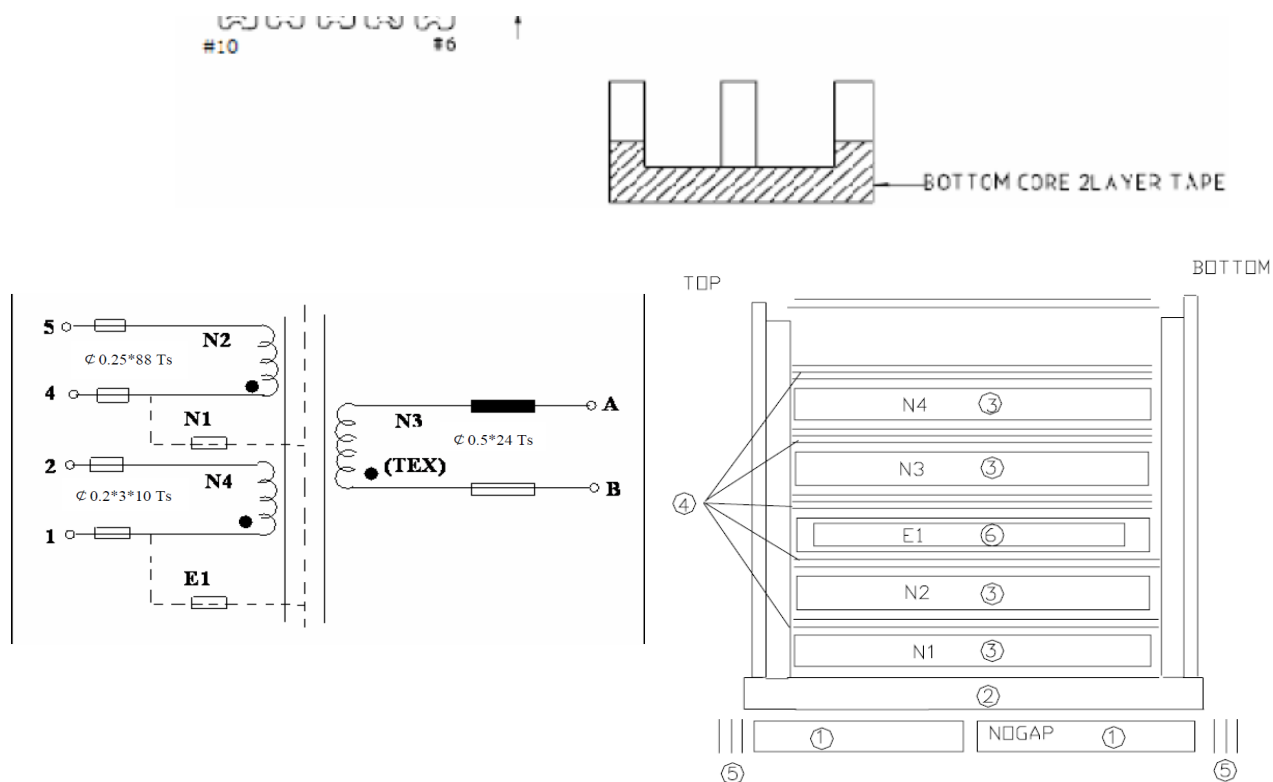
XF00590



## 7.0 Illustrations

### Illustration 3e - Structure of Transformer

XF00682A



## 7.0 Illustrations

Illustration 4 - Marking



**Note:**

1. The height of the word "WARNING" and "Avertissement" in cautionary statements are not less than 3.2mm. The height of the remaining letters in cautionary statement are not less than 1.6mm.
2. The manufacturing date of the product is presented as WWYY, YY = manufacturing year, WW = the week of the year, e.g. 0213 = The second week of 2013.
3. Other models are with similar label except model name and ratings.

## 7.0 Illustrations

### Illustration 5a - Instruction

The power supply cord shall terminate in a 125 volt, 15 amp plug configuration



#### Warning

- This is Class 2 Power Supply, it is suitable for indoor use only.
- Before use, the input and output voltage must be checked to secure correct use.
- Do not use the transformer in the circumstances that the output polarity does not match the load polarity.
- The output cord cannot be replaced. If the cord is damaged the appliance should be scrapped.
- The adaptor shall be installed and used according to national wiring rules.
- Please refer to page 8 how to assemble the changeable blades

**IMPORTANT  
SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS  
DANGER – TO REDUCE THE RISK  
OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS**

If the shape of the plug does not fit the power outlet, use an attachment plug adaptor of the proper configuration for the power outlet

This power unit is intended to be correctly orientated in a vertical or floor mount position

! In Addition to GlobTek Inc.'s renewed ISO9001:2008 - Quality Management System Certification, GlobTek Inc. is now certified to:  
ISO13485:2003 - Medical Devices Quality Management System Certification  
ISO14001:2004 - Environmental Management System Certification  
[ISO Certificates are available On-Line by clicking this link](#)

#### Customer Approval of Specification:

Please approve, sign and send back to GlobTek so we can complete order processing.

A delay in receipt of this form will delay delivery schedule.

Company Name:

Customer P/N:

Quote Number:

Date:

Authorized Representative Name:

Authorized Representative Signature:

#### Foot Note:

Globtek Inc. will not be liable for the safety and performance of these power supplies if unauthorized access and repair occurs. End user should consult applicable UL, CSA or EN standards for proper installation instruction.

#### Limitation of Use:

Globtek product are not authorized for use as mission critical components in life support hazardous environment, nuclear or aircraft applications without prior written approval from the CEO of Globtek Inc.  
Contents of this document are subject to change without prior notice

## 7.0 Illustrations

### Illustration 5b - Instruction

#### 1. NOTES:

DIMENSIONS ARE IN MM UNLESS SPECIFIED OTHERWISE.

#### 2. ELECTRICAL SPECIFICATIONS:

INPUT VOLTAGE:	100-240	VAC
INPUT CURRENT:	0.6	Amp RMS MAX
INPUT FREQUENCY:	47-63	Hz

OUTPUT VOLTAGE:	36	VDC
OUTPUT CURRENT:	0.5	A, NO MINIMUM LOAD REQUIRED TO MAINTAIN OUTPUT VOLTAGE REGULATION
OUTPUT POWER (RATED):	18	WATTS MAX
OUTPUT LOAD REGULATION:	+/- 5% MEASURED AT O/P CONNECTOR	
LINE VOLTAGE REGULATION:	+/- 1% TYPICAL MEASURED AT THE OUTPUT CONNECTOR	
OUTPUT RIPPLE (PEAK TO PEAK):	1% OR 150 mV WHICHEVER IS GREATER. MEASURED AT 20 MHz BANDWIDTH WITH 0.1 µf CERAMIC CAPACITOR IN PARALLEL WITH 10 µf ELECTROLYTIC CAPACITOR CONNECTED AT THE END OF OUTPUT CONNECTOR AT NOMINAL LINE	
TURN-ON/TURN-OFF OVERSHOOT:	5% MAXIMUM, 1ms TYPICAL RECOVERY TIME FOR 25% STEP LOAD	
TURN-ON DELAY:	1 SECOND, TYPICAL	
HOLD-UP TIME:	8ms TYPICAL AT NOMINAL INPUT VOLTAGE AND FULL LOAD	
INRUSH CURRENT:	30A TYPICAL AT 115VAC INPUT AND 60A TYPICAL AT 230 VAC INPUT	
SWITCHING FREQUENCY:	65 KHz TYPICAL	

#### PROTECTION

OVER-VOLTAGE:	PROTECTED WITH ZENER CLAMP ACROSS OUTPUT
SHORT CIRCUIT:	PROTECTED, UNIT WILL RECOVER UPON REMOVAL OF FAULT
INPUT:	INPUT LINE FUSING

#### SAFETY:

DIELECTRIC WITHSTAND VOLTAGE:	4242	VDC FROM PRIMARY TO SECONDARY
EARTH LEAKAGE:	<0.25 mA AT 240 VAC INPUT VOLTAGE	

#### APPROVALS

SAFETY APPROVAL:

[SAFETY DOCUMENTS ARE AVAILABLE ONLINE BY CLICKING THIS LINK.](#)  
GOST-R, CE CLASS II, PSE TO J60950

EMI:

COMPLIES WITH EN55022 CLASS B AND FCC PART 15 CLASS B, VCCI WHEN TESTED WITH RESISTIVE LOAD, BOTH CONDUCTED AND RADIATED EMI TESTED TO COMPLY WITH EN55022:1998\_A1:2000, EN610003-2, E610003-3 INCLUDING EN61204-3:2000, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6N EN61000-4-11

C-TICK:

TESTED TO COMPLY WITH AUSTRALIA SECTION 182 OF THE RADIO COMMUNICATION ACT OF 1992.

EFFICIENCY:

ENERGY STAR VERSION 2.0, LEVEL V  
COMPLIES TO SECTION 301 OF THE ENERGY INDEPENDENCE AND SECURITY ACT (EISA)  
CECP TIER 2 (CHINA), MEPS TIER 2 (AUSTRALIA), CODE OF CONDUCT (EUROPE)

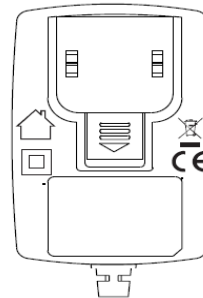
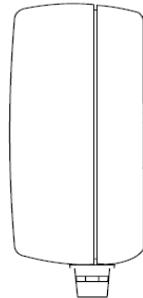
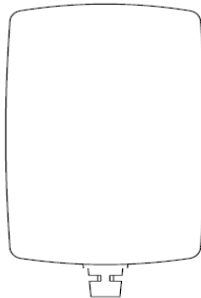
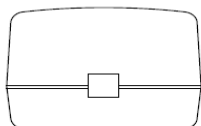
#### OTHERS

MTBF:	200,000 HOURS AT 25°C AMBIENT TEMPERATURE
OPERATING TEMPERATURE:	0°C TO 40° C AMBIENT TEMPERATURE
HUMIDITY:	0% TO 90% RELATIVE HUMIDITY
STORAGE TEMPERATURE:	-10°C TO +80° C
RoHS:	COMPLIES WITH EU 2002/95/EC AND CHINA SO/T 11363-2006

#### 3. ENCLOSURE:

MATERIAL:	94V-0 POLYCARBONATE
COLOR:	BLACK
DIMENSIONS:	43.5 x 74.0 x 35.3mm +/- 1.0

SYMBOLS CAN BE EITHER PAD PRINTED OR MOLDED IN THE CASE







8.0 Test Summary					
Evaluation Period	9-Jan-2013 to 28-Feb-2013		Project No.	130100670SHA	
Sample Rec. Date	9-Jan-2013	Condition	Prototype	Sample ID.	0130109-60-001~033
Test Location	Intertek Testing Services Shanghai Limited				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
The following tests were performed:					
Test Description		UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including July 25, 2012 Clause	CSA C22.2 No.223-M91 Dated June 1991, Reaffirmed 2008 with General Instruction No. 1 Dated June 1991 and Update No. 2 Dated September 2009 Clause	UL 746C Sixth Edition Dated September 10, 2004 including Revisions through March 7, 2012 Clause	
Integral plug dimension check		14.1.1	4.5.1.1	-	
Maximum moment measurement		7.11	4.1.4	-	
Leakage Current Test		26	6.5	-	
Leakage Current Test and Dielectric Voltage Withstand Test After Humidity Exposure		27	-	-	
Maximum Output Voltage Test		28	6.2.1	-	
Maximum Input Test		29	6.2.2	-	
Output Current and Power Test		30	6.2.4	-	
Full-Load Output Current Test		32	6.2.3	-	
Normal Temperature Test		33	6.3	-	
Dielectric Voltage-Withstand Test		34	6.4	-	
Abnormal Tests		39	6.7	-	
Tests on Insulating Materials		40	-	-	
Direct Plug-In Blade Secureness Test		43	-	-	
Direct Plug-In Security of Input Contacts Test		44.1	-	-	
Abuse Tests		46	-	-	
Secondary Circuit Protection		-	6.6	-	
Drop and Impact		-	6.9	-	
Blade retention		-	6.10	-	
Securement of components		-	6.12	-	
Insulating Material		-	6.13	-	
Mold-Stress Relief Distortion		-	-	29	

Evaluation Period	11-Jul-2014			Project No.	140700797SHA
Sample Rec. Date	-	Condition	Prototype	Sample ID.	-
Test Location	Intertek Testing Services Shanghai Limited				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
All tests have been evaluated in 130100670SHA-001. No test required in below updated standard:					

8.0 Test Summary				
Test Description		UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including May 30, 2014	CSA C22.2 No.223-M91 Dated June 1991, Reaffirmed 2013 with General Instruction No. 1 Dated June 1991 and No. 2 Dated September 2009	UL 746C Sixth Edition Dated September 10, 2004 including Revisions through August 29, 2013
Evaluation Period	28-Jul-2016 to 8-Sep-2016		Project No.	151000549SHA
Sample Rec. Date	25-Jul-2016	Condition	Prototype	Sample ID. 0160725-112-001~012
Test Location	Intertek Testing Services Shanghai Limited			
Test Procedure	Testing Lab			
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.				
All tests have been evaluated in 130100670SHA-001. No test required in below updated standard:				
Test Description		Class 2 Power Units [UL 1310:2011 Ed.6 +R:12Dec2014]	Power Supplies With Extra-Low Voltage Class 2 Outputs [CSA C22.2 No.223:2015 Ed.3]	Polymeric Materials - Use In Electrical Equipment Evaluations [UL 746C:2004 Ed.6 +R:18Jul2016]
Integral plug dimension check		14.1.1	4.6.1.1	-
Maximum moment measurement		7.11	4.2.5	-
Plug Discharge and Plug Energy Stored Test			4.6.2.7	-
Leakage Current Test		26	6.6	-
Leakage Current Test and Dielectric Voltage Withstand Test After Humidity Exposure		27	-	-
Maximum Output Voltage Test		28	6.3.1	-
Maximum Input Test		29	6.3.2	-
Output Current and Power Test		30	6.3.4	-
Full-Load Output Current Test		32	6.3.3	-
Normal Temperature Test		33	6.4	-
Dielectric Voltage-Withstand Test		34	6.5	-
Abnormal Tests		39	6.8	-
Tests on Insulating Materials		40	-	-
Strain Relief		41	-	-
Push-Back Relief		42	-	-
Direct Plug-In Blade Secureness Test		43	-	-
Direct Plug-In Security of Input Contacts Test		44.1	-	-
Abuse Tests		46	-	-
Secondary Circuit Protection		-	6.7	-
Drop and Impact		-	6.9	-
Strain Relief and Blade Retention		-	6.10	-
Securement of components		-	6.12	-
Insulating Material		-	6.14	-
Compression (rod)		-	6.15	-
Deformation (non-metallic enclosures)		-	6.16	-
Mold-Stress Relief Distortion		-	-	29

**8.0 Test Summary**

Strain Relief Test after Mold-Stress Relief Distortion	-	-	31
--	---	---	----

**8.1 Signatures**

A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0.

Completed by:	Albert Zhou	Reviewed by:	Will Wang
Title:	Engineer	Title:	Supervisor
Signature:	Albert Zhou	Signature:	Will Wang

## 9.0 Correlation Page For Multiple Listings

The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program.

BASIC LISTEE	GlobTek, Inc.
Address	186 Veterans Dr. Northvale, NJ 07647 USA
Country	USA
Product	Class 2 Power Supply

MULTIPLE LISTEE 1	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 2	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 2 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 3	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 3 MODELS	BASIC LISTEE MODELS

## 10.0 General Information

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

### COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments and/or revisions.

### LISTING MARK

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

The mark must include the following four items:

- 1) applicable country identifiers "US" and/or "C" or "US", "C" and "EU"
- 2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)
- 3) a control number issue by Intertek
- 4) a product descriptor that identifies the standards used for certification. Example:

**For US standards**, the words, "Conforms to" shall appear with the standard number along with the word, "Standard" or "Std." Example: "Conforms to ANSI/UL Std. XX."

**For Canadian standards**, the words "Certified to CAN/CSA Standard CXX No. XX." shall be used, or abbreviated, "Cert. to CAN/CSA Std. CXX No. XX."

Can be used together when both standards are used.

**Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use.**

The facsimile need not have a control number. A control number will be issued **after signed Certification Agreements** have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory assessment in your facility.

### MANUFACTURING AND PRODUCTION TESTS

Manufacturing and Production Tests shall be performed as required in this Report.

### FOLLOW-UP SERVICE

Periodic unannounced audits of the manufacturing facility (and any locations authorized to apply the mark) shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the following:

1. Conformance of the manufactured product to the descriptions in this Report.
2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.
3. Manufacturing changes.
4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

1. Correct the non-conformance.
2. Remove the ETL Mark from non-conforming product.
3. Contact the issuing product safety evaluation center for instructions.

### 10.1 Evaluation of Unlisted Components

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.0 require testing and/or evaluation as indicated.

**Note to Intertek Follow Up Inspector: The Component Evaluation Center, CEC, will notify you in writing when these components must be selected and sent to the CEC for re-evaluation**

Ship the samples to:  
Intertek Testing Services Shanghai Limited  
ETL Component Evaluation Center  
Building No. 86, 1198 Qinzhou Road (North)  
Shanghai 200233, China  
Attn: Ms. Dansy Xu

Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.

## 11.0 Manufacturing and Production Tests

The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

### Required Tests

Dielectric Voltage Withstand Test

## 11.1 Dielectric Voltage Withstand Test

### Method

One hundred percent of production of the products covered by this Report shall be subjected to a routine production line dielectric withstand test.

The test shall be conducted on products, which are fully assembled. Prior to applying the test potential, all switches, contactors, relays, etc., should be closed so that all primary circuits are energized by the test potential. If all primary circuits cannot be tested at one time, then separate applications of the test potential shall be made.

The test voltage specified below shall be applied between input and output circuits. The test voltage may be gradually increased to the specified value but must be maintained at the specified value for one second or one minute as required.

### Test Equipment

The test equipment shall incorporate a transformer with an essentially sinusoidal output, a means to indicate the applied test potential, and an audible and/or visual indicator of dielectric breakdown.

The test equipment shall incorporate a voltmeter in the output circuit to indicate directly the applied test potential if the rated output of the test equipment is less than 500VA.

If the rated output of the test equipment is 500VA or more, the applied test potential may be indicated by either:


- 1 - a voltmeter in the primary circuit;
- 2 - a selector switch marked to indicate the test potential; or
- 3 - a marking in a readily visible location to indicate the test potential for test equipment having a single test potential output.

In cases 2 and 3, the test equipment shall include a lamp or other visual means to indicate that the test potential is present at the test equipment output. All test equipment shall be maintained in current calibration.

## Products Requiring Dielectric Voltage Withstand Test:

<u>Product</u>	<u>Test Voltage</u>	<u>Test Time</u>
All products covered by this Report.	1000V	60 s
	or	
	1200V	1 s



12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
11-Jul-2014	Will Wang	1,5	-	Updated standard version of UL 1310 from "UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including July 25, 2012" to "UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including May 30, 2014." Updated standard version of CSA C22.2 No.223 from "CSA C22.2 No.223-M91 Dated June 1991, Reaffirmed 2008 with General Instruction No. 1 Dated June 1991 and Update No. 2 Dated September 2009" to "CSA C22.2 No.223-M91 Dated June 1991, Reaffirmed 2013 with General Instruction No. 1 Dated June 1991 and No. 2 Dated September 2009"
140700797SHA	Carl Bao	2	-	Modified description of model name.
		8	-	Updated standard version of UL 1310 from "UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including July 25, 2012" to "UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including May 30, 2014." Updated standard version of CSA C22.2 No.223 from "CSA C22.2 No.223-M91 Dated June 1991, Reaffirmed 2008 with General Instruction No. 1 Dated June 1991 and Update No. 2 Dated September 2009" to "CSA C22.2 No.223-M91 Dated June 1991, Reaffirmed 2013 with General Instruction No. 1 Dated June 1991 and No. 2 Dated September 2009" Updated standard version of UL 746C from "UL 746C Sixth Edition Dated September 10, 2004 including Revisions through March 7, 2012" to "UL 746C Sixth Edition Dated September 10, 2004 including Revisions through August 29, 2013" New signatures signed.
18-Sep-2016	Albert Zhou <i>Albert Zhou</i>	1, 5	-	Updated standard version of UL 1310 from "UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including May 30, 2014" to "Class 2 Power Units [UL 1310:2011 Ed.6 +R:12Dec2014]" Updated standard version of CSA C22.2 No.223 from "CSA C22.2 No.223-M91 Dated June 1991, Reaffirmed 2013 with General Instruction No. 1 Dated June 1991 and No. 2 Dated September 2009" to "Power Supplies With Extra-Low Voltage Class 2 Outputs [CSA C22.2 No.223:2015 Ed.3]"
151000549SHA	Will Wang <i>Will Wang</i>	2	-	Replaced the old brand name "GlobTek" with " 
		4	11	Changed the manufacturer name of transformer from "ZHONGTONG ELECTRONICS CO LTD" to "HAOPUWEI ELECTRONICS".
		5	11	Changed the manufacturer name of transformer from "ZHONGTONG ELECTRONICS CO LTD" to "HAOPUWEI ELECTRONICS".

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
		8	-	Updated standard version of UL 1310 from "UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including May 30, 2014" to "Class 2 Power Units [UL 1310:2011 Ed.6 +R:12Dec2014]" Updated standard version of CSA C22.2 No.223 from "CSA C22.2 No.223-M91 Dated June 1991, Reaffirmed 2013 with General Instruction No. 1 Dated June 1991 and No. 2 Dated September 2009" to "Power Supplies With Extra-Low Voltage Class 2 Outputs [CSA C22.2 No.223:2015 Ed.3]" Updated standard version of UL 746C from "UL 746C Sixth Edition Dated September 10, 2004 including Revisions through August 29, 2013" to "[UL 746C:2004 Ed.6 +R:18Jul2016]"
		8	-	Added new test block in section 8
		8.1	-	Revised with new signatures