RECOGNIZED COMPONENT
Constructional Data Report (CDR)

1.0 Reference and Address			
Report Number	130700043SHA-001	Original Issued: 19-Jul-2013	Revised: 11-Jul-2014
Standard(s)	Class 2 Power Units – UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including May 30, 2014 Power Supplies with Extra-low Voltage Class 2 Outputs – CSA C22.2 No.223-M91 Dated June 1991, Reaffirmed 2013 with General Instruction No. 1 Dated June 1991 and Update No. 2 Dated September 2009		

Applicant	GlobTek, Inc.	Manufacturer	**GlobTek (Suzhou) Co., Ltd**
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2.0 Product Description	
Product	Class 2 Power Supply
Brand name	GlobTek
Description	The products covered by this report are class 2 power supplies which is supplied by 100-240V 50-60Hz mains. The products are direct plug-in type with interchangeable integral plug.
Models	GT-43007-*** (where * in the model name are numbers or blank)
Model Similarity	The 1st "*" denote the rated output wattage designation, which can be "01" to "40", with interval of 1. The 2nd "*" denote the standard rated output voltage designation, which can be "12", "24" The last "*" is optional deviation, subtracted from standard output voltage, which can be "-0.1" to "-11.9" with interval of 0.1 to indicate voltage difference, or blank to indicate no voltage difference. The last "**" together denote the output voltage, with a range of 12- 24 volts. All models have same enclosure and PCB. Some non-critical components may be adjusted according different output voltage and production purpose. The parameters of these components depend on output voltage. Transformers used in all models are with similar construction. The turns of secondary winding may be added or reduced according different output voltage.
Ratings	Input: 100-240V~, 50-60Hz, 1.0A; Output: 12-24VDC, 1-40W
Other Ratings	NA
Conditions of Acceptability	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. 1. The product shall be plugged into the socket-outlet which on the load side of line filters or similar voltage-peak reduction networks and overvoltage devices. 2.The products equipped with an interchangeable 125 V 15 A (parallel) input blade configuration (NEMA 1-15P) plug. Other interchangable plugs provided by manufacturer also can be used by traveler but the corresponding national safety regulation shall be considered. See photo 1 of section 3 for detailed interchangable plugs.

4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
1	1	Enclosure and Blade holder	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; UL E45329	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; UL E45329	cURus
			SABIC INNOVATIVE PLASTICS B V	CX7211, EXCY0098	PC/ABS, V-0, 5VB, HWI 2, HAI 0, 90°C, min thickness: 2,0mm; Fixed by ultrasonic welding and without opening; UL E45329	cURus
			TEIJIN CHEMICALS LTD	LN-1250P, LN-1250G	PC, V-0, HWI 3, HAI 0, 115°C, min thickness: 2,0mm; Fixed by ultrasonic welding and without opening; UL E50075	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; UL E56070	cURus
			CHI MEI CORPORATION	PC-540	PC/ABS, V-0, HWI 3, HAI 3, 70°C, min thickness: 2,0mm; Fixed by ultrasonic welding and without opening; UL E56070	cURus
1	2	Output cord	DONGGUAN YUE YANG WIRE & CABLE CO LTD	1185 / 2464 / 2468	Min. 24AWG, 300V, 80°C, length: 1.8m; UL E230810	cURus
			YONG HAO ELECTRICAL INDUSTRY CO LTD	1185 / 2464 / 2468	Min. 24AWG, 300V, 80°C, length: 1.8m; UL E240426	cURus
			DONGGUAN GUNEETAL WIRE & CABLE CO LTD	1185 / 2464 / 2468	Min. 24AWG, 300V, 80°C, length: 1.8m; UL E204204	cURus
			HIP TAI ELECTRIC WIRE CO	1185 / 2464 / 2468	Min. 24AWG, 300V, 80°C, length: 1.8m; UL E225804	cURus
			KUNSHAN NEW ZHICHENG ELECTRONICS TECHNOLOGIES CO LTD	1185 / 2464 / 2468	Min. 24AWG, 300V, 80°C, length: 1.8m; UL E237831	cURus
			SHENG YU ENTERPRISE CO LTD	2464 / 2468	Min. 24AWG, 300V, 80°C, length: 1.8m; UL E219726	cURus
			SUZHOU HONGMENG ELECTRONIC CO LTD	1185 / 2464 / 2468	Min. 24AWG, 300V, 80°C, length: 1.8m; UL E315421	cURus

4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
			ZHUANG SHAN CHUAN ELECTRICAL PRODUCTS (KUNSHAN) CO LTD	1185 / 2464 / 2468	Min. 24AWG, 300V, 80°C, length: 1.8m; UL E333601	cURus
			YONG HAO ELECTRICAL INDUSTRY CO LTD	SPT-1 / SPT-2	Min. 24AWG, 300V, 105°C, length: 1.8m; UL E310072	cURus
			JHI WEI ELECTRIC WIRE & CABLE CO LTD	SPT-1 / SPT-2	Min. 24AWG, 300V, 105°C, length: 1.8m; UL E157718	cURus
			ZHUANG SHAN CHUAN ELECTRICAL PRODUCTS (KUNSHAN) CO LTD	SPT-1 / SPT-2	Min. 24AWG, 300V, 105°C, length: 1.8m; UL E310072	cURus
			Various	1185 / 2464 / 2468 / SPT-1 / SPT-2	Min. 24AWG, min. 300V, min. 80°C, length: min. 1.8m	ETL, UL or other US and Canada mark approved
1	3	Adhesive-Type Label	DONGGUAN XIANGQUAN PRINTING CO LTD	XQ03	Temperature range: -40~80°C; UL MH27594	cURus
			FAN JA PAPER PRINTING CO LTD	FJ-03-3	Temperature range: -40~80°C; UL MH19546	cURus
			FAN JA PAPER PRINTING CO LTD	FJ07	Temperature range: -40~80°C; UL MH19546	cURus
			DONGGUAN XIANGQUAN PRINTING CO LTD	XQ004-B	Temperature range: 80°C; UL MH47303	cURus
			E-LIN ADHESIVE LABEL CO LTD	EL-15	Temperature range: -40~80°C; UL MH45549	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; UL MH29752	cURus

4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
			GlobTek	Various	Permanently secured Engraving or Silkscreen	NR
			Various	Various	Temperature range: min. 80°C; certified according UL 969.	ETL, UL or other US and Canada mark approved
2	4	PWB	TECHNI TECHNOLOGY LTD	T2A / T2B / T4	V-0, 130°C; Thickness: 1.6mm; UL E154355	cURus
			DONGGUAN HE TONG ELECTRONICS CO LTD	CEM1 / 2V0	V-0, 130°C; Thickness: 1.6mm; UL E243157	cURus
			CHEERFUL ELECTRONIC (HK) LTD	02 / 03 / 03A	V-0, 130°C; Thickness: 1.6mm; UL E199724	cURus
			DONGGUAN DAYSUN ELECTRONIC CO LTD	DS2	V-0, 130°C; Thickness: 1.6mm; UL E251754	cURus
			SUZHOU CITY YILIHUA ELECTRONICS CO LTD	YLH-1 / YLH-2	V-0, 130°C; Thickness: 1.6mm; UL E251781	cURus
			SHANGHAI AREX PRECISION ELECTRONIC CO LTD	02V0	V-0, 130°C; Thickness: 1.6mm; UL E186016	cURus
			BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	DKV0-3A	V-0, 130°C; Thickness: 1.6mm; UL E177671	cURus
			SHENZHEN TONGCHUANGXIN ELECTRONICS CO LTD	TCX	V-0, 130°C; Thickness: 1.6mm; UL E250336	cURus
			Various	Various	V-0, 130°C; Thickness: 1.6mm; certified according UL 796	ETL, UL or other US and Canada mark approved

4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
3	5	Current fuse (FS1)	CONQUER ELECTRONICS CO LTD	MST	250Vac, 2A, Length: 8.35 x 4.3 x 7.7mm; UL E82636	cURus
			EVER ISLAND ELECTRIC CO LTD & WALTER ELECTRIC	2010	250Vac, 2A; The whole fuse including pigtail leads shall be wrapped with UL approved heat shrinkable tubing; UL E220181	cURus
			BEL FUSE INC	RST	250Vac, 2A, Length: 6.8 x 3.0 x 3.6mm; UL E20624	cURus
			COOPER BUSSMANN L L C	SS-5	250Vac, 2A, Length: 8.6 x 4.3 x 8.4mm; UL E19180	cURus
			SHENZHEN LANSON ELECTRONICS CO LTD	SMT	250Vac, 2A, Length: 8.4 x 4 x 7.7mm; UL E221465	cURus
			WALTER ELECTRONIC CO LTD	ICP	250Vac, 2A, Length: 3.6 x 10mm; The whole fuse including pigtail leads shall be wrapped with UL approved heat shrinkable tubing; UL E56092	cURus
			DAS & SONS INTERNATIONAL LTD	385T1200	250Vac, 2A, Length: 3.6 x 10 mm; The whole fuse including pigtail leads shall be wrapped with UL approved heat shrinkable tubing; UL E205718	cURus
			CHENG TUNG INDUSTRIAL CO LTD	CTX	X1/X2, 310Vac, -40~110°C, max 0.22µF; UL E193049	cURus
			ULTRA TECH XIPHI ENTERPRISE CO LTD	HQX	X2, 275Vac, -40~100°C, max 0.22µF; UL E183780	cURus
			TENTA ELECTRIC INDUSTRIAL CO LTD	MEX	X2, 250/275Vac, -40~100°C, max 0.22µF; UL E222911	cURus
			OKAYA ELECTRIC INDUSTRIES CO LTD	RE	250Vac, max 0.22µF; UL E47474	cURus
			VISHAY CAPACITORS BELGIUM N V	F1772	X2, 310Vac, -40~110°C, max 0.22µF; UL E354331	cURus
			DAIN ELECTRONICS CO LTD	MEX, MPX, NPX	X2, 250/275/310Vac, -40~100°C, max 0.22µF; UL E147776	cURus

4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
3	6	X capacitor (CX1) (optional)	SINHUA ELECTRONICS (HUZHOU) CO LTD	MPX	X2, 310Vac, -40~110°C, max 0.22µF; UL E237560	cURus
			SHUN DE DAHUA ELECTRIC CO LTD	HD	X2, 250Vac, -40~105°C, max 0.22µF; UL E227157	cURus
			FOSHAN SHUNDE CHUANG GE ELECTRONIC INDUSTRIAL CO LTD	MKP-X2	X2, 275Vac, -40~105°C, max 0.22µF; UL E308832	cURus
			HONGZHI ENTERPRISES LTD	X2	250Vac, max 0.22µF; UL E192572	cURus
			WINDAY ELECTRONIC INDUSTRIAL CO LTD	MPX	X2, 250/275/280/300/310Vac, -40~110°C, max 0.22µF; UL E302125	cURus
			JIANGSU XINGHUA HUAYU ELECTRONICS CO LTD	MPX	X2, 250Vac, max 0.22µF; UL E311166	cURus
			WELSON INDUSTRIAL CO LTD	Type WD#	250Vac, max 0.22µF; UL E104572	cURus
3	7	Y capacitor (CY1) (optional)	TDK-EPC CORPORATION	CD##	Y1, 250VAC, max 2200pF; UL E37861	cURus
			SUCCESS ELECTRONICS CO LTD	SE, SB	Y1, 500VAC, max 2200pF, -40~+125°C; UL E114280	cURus
			MURATA MFG CO LTD	KX	Y1, 250/300VAC, max 2200pF, -25~+125°C; UL E37921	cURus
			WALSIN TECHNOLOGY CORP	AH	Y1, 250/400VAC, max 2200pF, -25~+125°C; UL E146544	cURus
			JYA-NAY CO LTD	JN	Y1, 250/400VAC, max 2200pF, -25~+125°C; UL E201384	cURus
			HAOHUA ELECTRONIC CO	CT7	Y1, 250VAC, max 2200pF, -25~+125°C; UL E233106	cURus
			HONGZHI ENTERPRISES LTD	Y	250VAC, max 2200pF, UL E192572	cURus

4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
			JERRO ELECTRONICS CORP	JX	250VAC, max 2200pF, UL E333001	cURus
2	8	Optocoupler (US3)	EVERLIGHT ELECTRONICS CO LTD	EL817	Double protection optical isolators, providing 5000 Vac isolation; UL E214129	cURus
			COSMO ELECTRONICS CORP	K1010 / KP1010	Optical isolators, double protection type, rated 5000 Vac; UL E169586	cURus
			LITE-ON TECHNOLOGY CORP	LTV-817	Double protection optical isolators having an isolation voltage of 5300Vrms; UL E113898	cURus
			FAIRCHILD SEMICONDUCTOR CORP	H11A817B / FOD817B	Double Protection Optical isolators, providing 5000 V ac isolation; UL E90700	cURus
			SHARP CORP ELECTRONIC COMPONENTS AND DEVICES GROUP	PC817	Double protection optical isolated switches, providing 5000 Vac isolation; UL E64380	cURus
			BRIGHT LED ELECTRONICS CORP	BPC-817 / BPC-817 M / BPC-817 S	Optical isolators, double protection isolation; UL E236324	cURus
3	9	Insulation tape provided on heatsink (Alternative to Insulation tubing)	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1 / 1350T-1	130°C; UL E17385	cURus
			BONDTEC PACIFIC CO LTD	370S	130°C; UL E175868	cURus
			JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ, CT	130°C; UL E165111	cURus
			JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A	130°C; UL E246950	cURus
			CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX	130°C; UL E246820	cURus
			Various	Various	130°C	ETL, UL or other US and Canada mark approved

4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
3	10	Insulation tubing provided on heatsink (Alternative to tape)	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	RSFR RSFR-H RSFR-HPF	600V, 125°C; UL E203950	cURus
			QIFURUI ELECTRONICS CO	QFR-h	600V, 125°C; UL E225897	cURus
			DONGGUAN SALIPT CO LTD	SALIPT S-901-300 SALIPT S-901-600	600V, 125°C; UL E209436	cURus
			GUANGZHOU KAIHENG ENTERPRISE GROUP	K-2 (+) K-2 (CB)	600V, 125°C; UL E214175	cURus
			CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	CB-HFT	600V, 125°C; UL E180908	cURus
			Various	Various	Min 300V, 125°C	ETL, UL or other US and Canada mark approved
3	11	Heatsink (HS2)	Various	Various	Aluminum. Approximate overall dimension 60mm × 18.5mm, min.1.5mm thick, secured to primary side of PWB by soldering. Heatsink near BD1 is cut off a part with dimension 25mm (length) × 2.0mm (height to PCB). The height may be enlarged to 5.0mm as alternative to tape or heat shrinkable tubing.	NR
3	12	Heatsink (HS1)	Various	Various	Aluminum. Approximate overall dimension 62mm × 18.5mm, min.1.2mm thick, secured to secondary side of PWB by soldering	NR

4.0 Critical Components

Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
3	13	Transformer	SHAN DONG BOAM ELECTRIC CO LTD / GLOBTEK INC / WUXI ZHONGTONG ELECTRONICS CO LTD	XF00582 / XF00583	Core dimension: 28.1×18.8×18.7mm; XF00582 (for model with 12-15.9V output) / XF00583 (for model with 16-24V output), Class 130 (B) electrical insulation systems, designated BOAM-01 (UL E252329) / Class 130 (B) electrical insulation systems, designated GTX-130-TM (UL E243347) / Class 130 (B) electrical insulation systems, designated ZT-130 (UL E315275) / Class 130 (B) electrical insulation systems, designated ENG130-1 (UL E308897).	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
3	13	Transformer	SHAN DONG BOAM ELECTRIC CO LTD / GLOBTEK INC / WUXI ZHONGTONG ELECTRONICS CO LTD / ENG ELECTRIC CO LTD	XF00582 / XF00583

Electrical Rating:	N/A	Insulation class	130
Component Standard used:	Class 2 Power Units – UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including May 30, 2014 Power Supplies with Extra-low Voltage Class 2 Outputs – CSA C22.2 No.223-M91 Dated June 1991, Reaffirmed 2013 with General Instruction No. 1 Dated June 1991 and Update No. 2 Dated September 2009		

MATERIALS LIST (refer to illustration 3 for assembly drawing)

Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Bobbin	CHANG CHUN PLASTICS CO LTD	T375J / T375HF	PMC; V-0, RTI 150; Minimum thickness: 0.6mm; UL E59481
	SUMITOMO BAKELITE CO LTD	PM-9820	PF; V-0, RTI 150; Minimum thickness: 0.6mm; UL E41429
	HITACHI CHEMICAL CO LTD	CP-J-8800	PF; V-0, RTI 150; Minimum thickness: 0.6mm; UL E42956
Insulating tape	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1 / 1350T-1	130°C; UL E17385
	BONDTEC PACIFIC CO LTD	370S	130°C; UL E175868
	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ, CT	130°C; UL E165111
	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A	130°C; UL E246950
	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX	130°C; UL E246820
	Various	Various	130°C; ETL, UL or other US and Canada mark approved

5.0 Critical Unlisted CEC Components			
Magnet wire	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWN/U	MW28-C, 130°C; UL E201757
	PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD	UEWS/U	MW75-C, 130°C; UL E201757
	JUNG SHING WIRE CO LTD	UEW-4	MW75C, 130°C; UL E174837
	JUNG SHING WIRE CO LTD	UEY-2	MW28-C, 130°C; UL E174837
	JIANGSU HONGLIU MAGNET WIRE TECHNOLOGY CO LTD	2UEW/130	MW75-C, 130°C; UL E335065
	CHANGZHOU DAYANG WIRE & CABLE CO LTD	2UEW/130	MW75-C, 130°C; UL E158909
	WUXI JUFENG COMPOUND LINE CO LTD	2UEWB	MW75#, 130°C; UL E206882
	JIANGSU DARTONG M & E CO LTD	UEW	MW 75-C, 130°C; UL E237377
	SHANDONG SAINT ELECTRIC CO LTD	UEW/130	MW75#, 130°C; UL E194410
	ZHEJIANG LANGLI ELECTRIC EQUIPMENTS CO LTD	UEW	MW 79#, 130°C; UL E222214
	Various	Various	MW 28, 75, 79, 130°C; ETL, UL or other US and Canada mark approved
Triple insulated winding wire	GREAT LEOFLON INDUSTRIAL CO LTD	TRW (B)	Reinforced Insulation, rated 130°C (Class B), 600 Volts peak for Information Technology; UL E211989
	COSMOLINK CO LTD	TIW-M (B)	Reinforced insulation rated 130°C (Class B), 1.41 kV peak for Information Technology Equipment; UL E213764
	FURUKAWA ELECTRIC CO LTD	TEX-E	Reinforced insulation rated 130°C (Class B), 1.41 kV peak for Information Technology Equipment; UL E206440
	TOTOKU ELECTRIC CO LTD	TIW-2X	Reinforced insulation rated 130°C (Class B), 1.41 kV peak for Information Technology Equipment; UL E166483

5.0 Critical Unlisted CEC Components			
PTFE tubing	GREAT HOLDING INDUSTRIAL CO LTD	TFS	600V, 200°C; UL E156256
	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	WF	600V, 200°C; UL E203950
	CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	CB-TT-S	600V, 200°C; UL E180908
	Various	Various	600V, 200°C; ETL, UL or other US and Canada mark approved
Varnish	NOROO PAINT & COATINGS CO LTD	DVB-2085(1), DVB-2085(C)	MW28, TP 130, HC 130; UL E93947
	WU JIANG TAIHU INSULATING MATERIAL CO LTD	T-4260(a) ET-90(a)	MW28, TP 130; UL E228349

WINDING(S) RESISTANCE (Model XF00582)

Winding Designation	Wire Size (mm)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 5%:
NP1 (Pin 3-C)	Φ 0.45	MW75	18	-	-	-
E1 (Pin 4)	0.05×6	Copper film	0.9	-	-	-
NS (Pin A-B)	Φ 1.0	TIW	4	-	-	-
E2 (Pin 4)	0.05×6	Copper film	0.9	-	-	-
NP2 (Pin C-2)	Φ 0.45	MW75	18	-	-	-
ND (Pin 1-4)	Φ 0.35×2	MW75	5	-	-	-

WINDING(S) RESISTANCE (Model XF00583)

Winding Designation	Wire Size (mm)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 5%:
NP1 (Pin 3-C)	Φ 0.45	MW75	18	-	-	-
E1 (Pin 4)	0.05×6	Copper film	0.9	-	-	-
NS (Pin A-B)	Φ 1.0	TIW	6	-	-	-
E2 (Pin 4)	0.05×6	Copper film	0.9	-	-	-
NP2 (Pin C-2)	Φ 0.45	MW75	18	-	-	-
ND (Pin 1-4)	Φ 0.35×2	MW75	5	-	-	-

VERIFICATION PROCESS

Frequency: **Annual**	Test Site: **CEC**	Number of samples to test: **1**

Test Name	Test Parameters		
Winding wire size and turns	See wire size and turns 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.

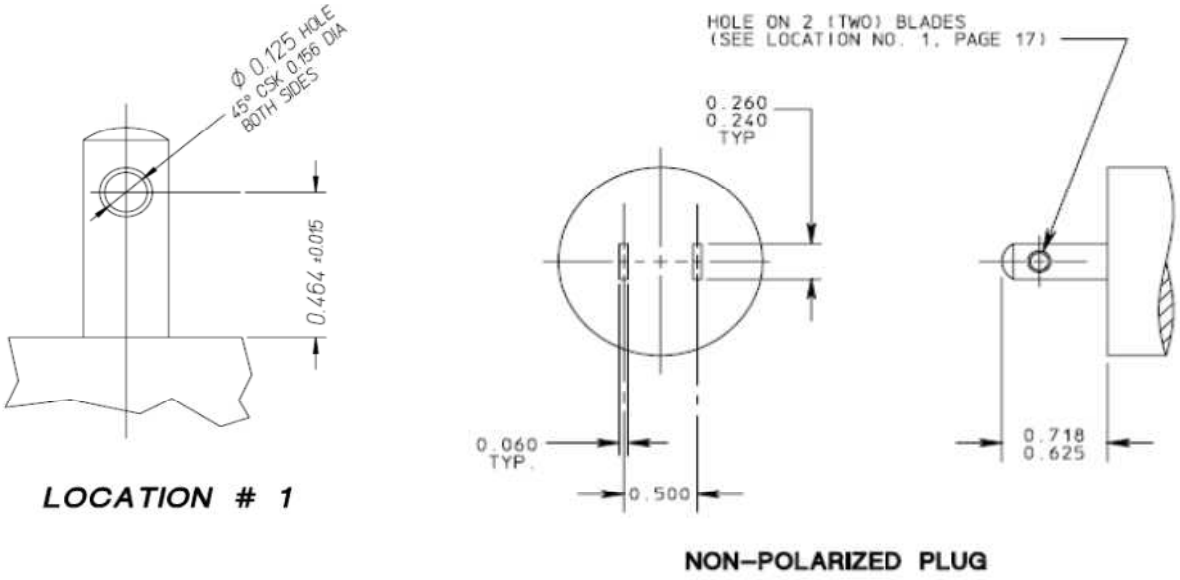
1. Spacing - In primary circuits, 1.6 mm minimum spacing is maintained through air and 3.5 mm minimum spacing over surfaces of insulating material between current-carrying parts of opposite polarity which is evaluated by UL840, 4.8 mm minimum between such current-carrying parts and low voltage isolated circuits, and 6.4 mm between such current-carring parts and touchable plastic enclosure.
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. Transformer- Refer to Illustration No. 3 for transformer construction requiring verification during Field Representative Inspection Audits.
10. Plug-Refer to Illustration No. 4 for plug construction requiring verification during Field Representative Inspection Audits.
11. PWB Layout - Refer to Illustration No.2 for PWB layout requiring verification during Field Representative Inspection Audits.
12. Markings - The product is marked on a labeling system as described in Section 4.0. Refer to Illustration No.5 for markings.
13. Cautionary Markings - The following are required: refer to illustation No.5 for detail.
14. Installation, Operating and Safety Instructions - Specification for installation and use of this product are provided by the manufacturer. Refer to Illustration No. 6 for details.

7.0 Illustrations

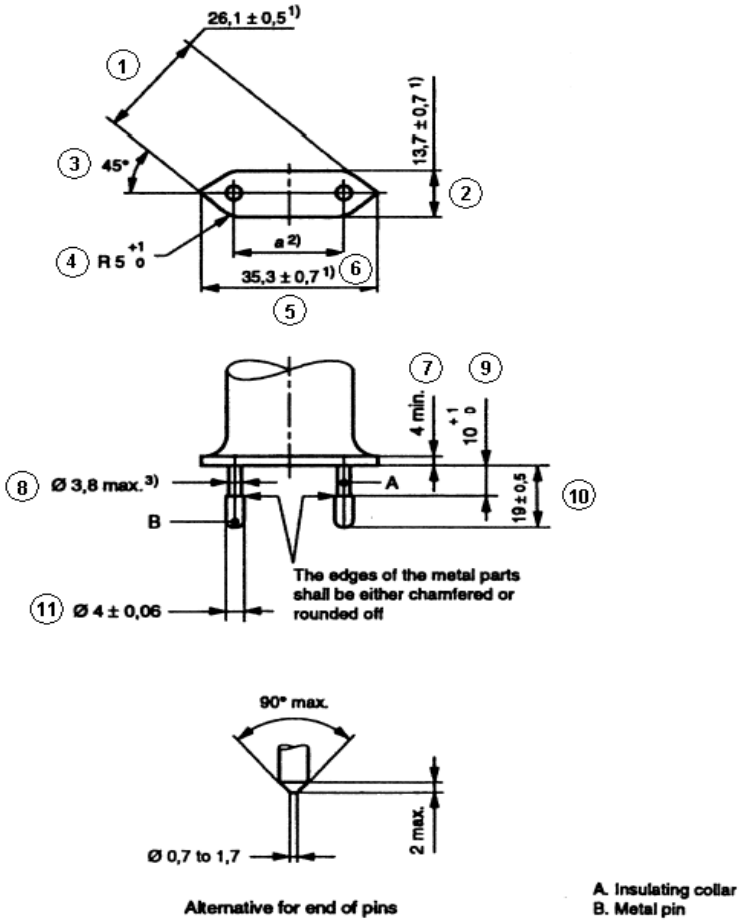
Illustration 4 - Illustrations about the plug pins

NEMA 1-15P

FIGURE 1–15
PLUG AND RECEPTACLE
125 volts, 15 amperes, 2 pole, 2 wire



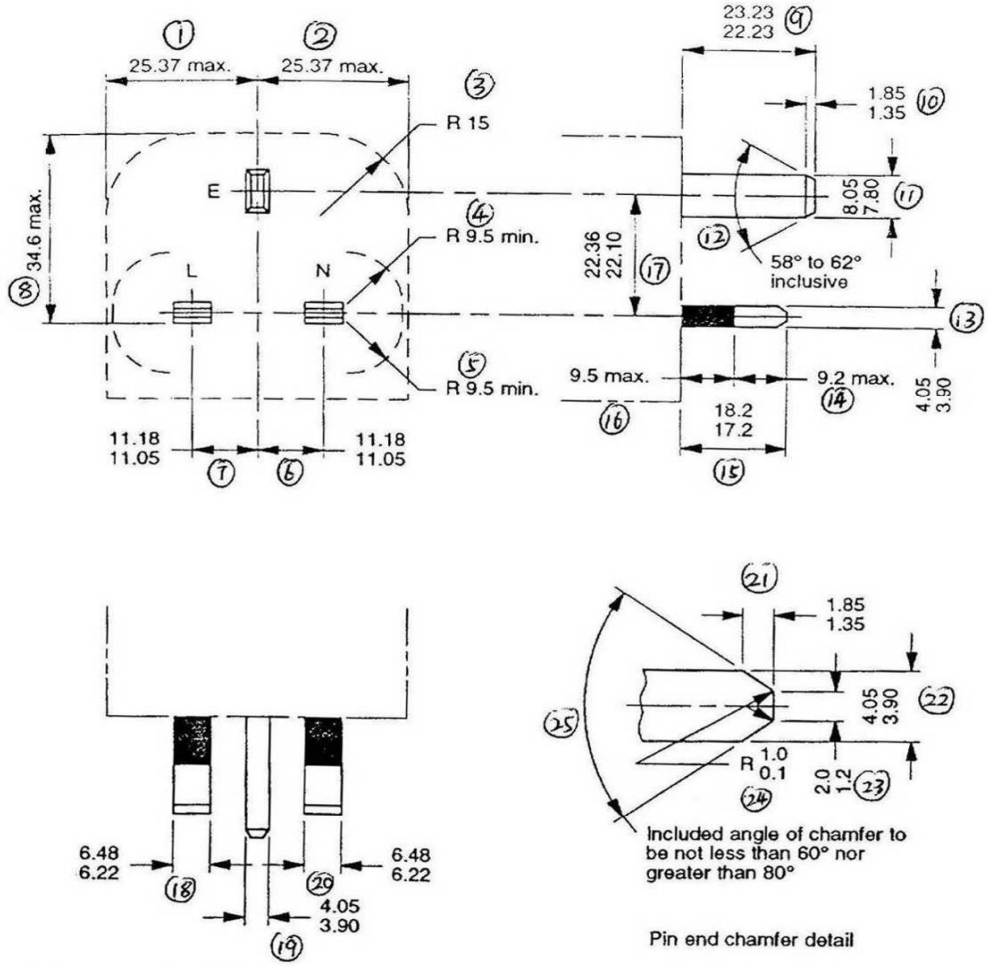
EN50075



7.0 Illustrations

Illustration 4 - Illustrations about the plug pins (continued)

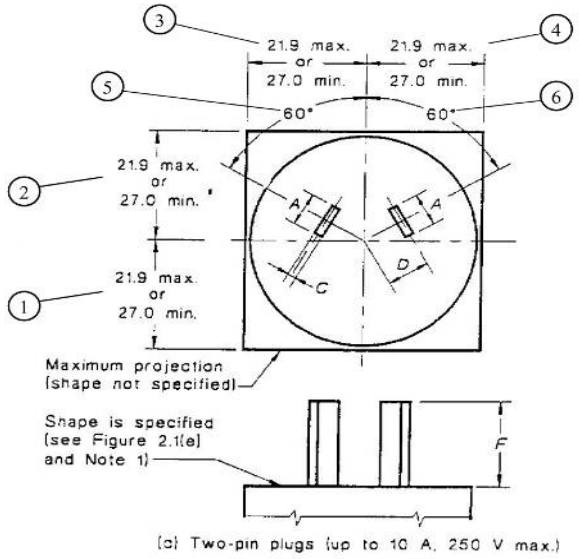
BS1363-3



All dimensions are in millimetres.

Figure 4. Dimensions and disposition of pins (see clause 12)

AS/NZS 3112



(a) Two-pin plugs (up to 10 A, 250 V max.)

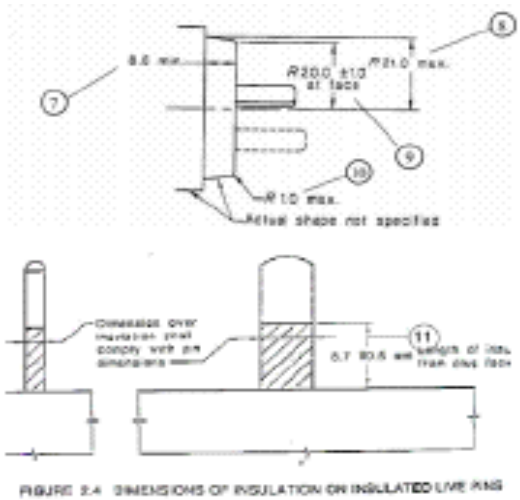
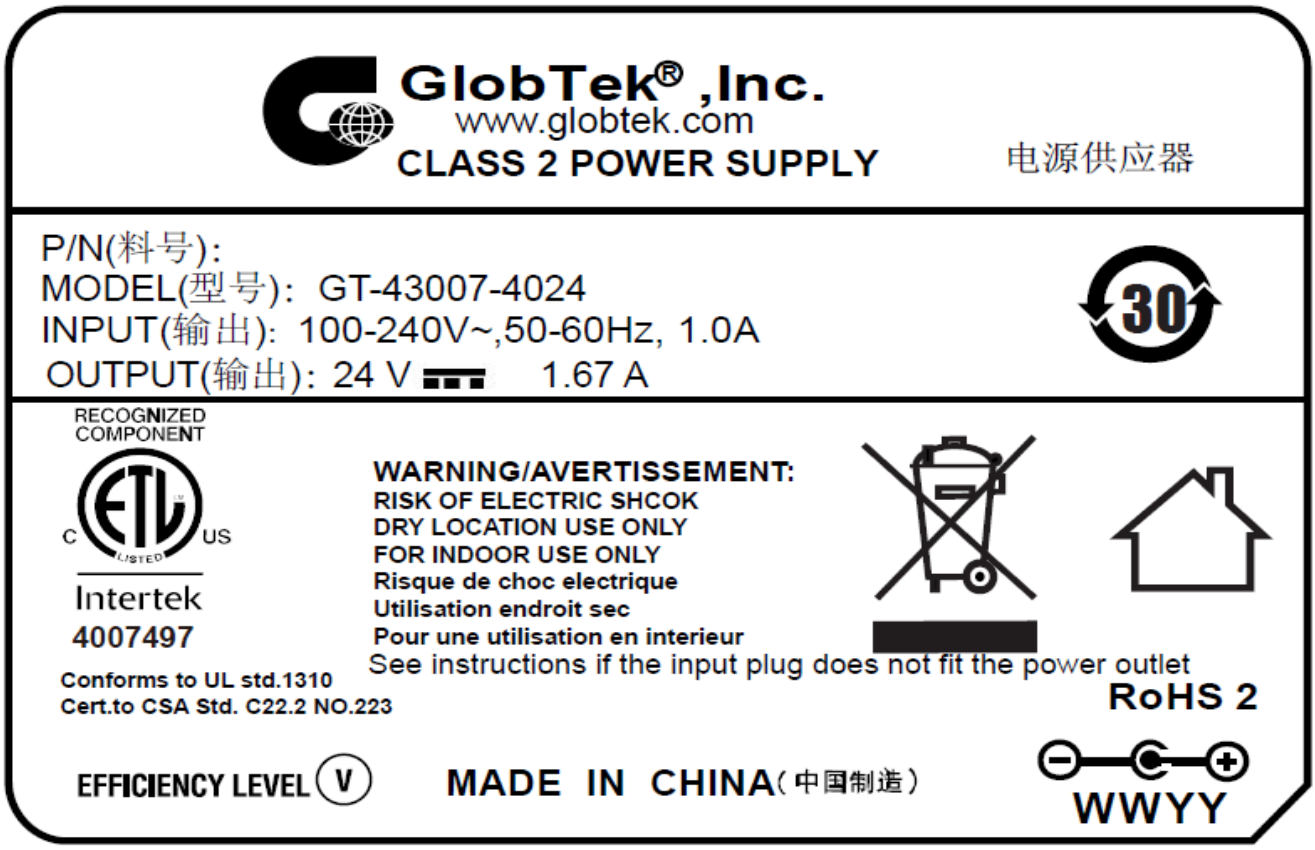


FIGURE 2.4 DIMENSIONS OF INSULATION ON INSULATED LIVE PINS

7.0 Illustrations

Illustration 5 - 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 6 - Instruction

⚠ 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 assmble 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

For connection to a supply not in the U.S.A., use an attachment plug adapter of the proper configuration for the power outlet, if needed.

Or,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.

! 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

1. NOTES:
DIMENSIONS ARE IN MM UNLESS SPECIFIED OTHERWISE.

2. ELECTRICAL SPECIFICATIONS:

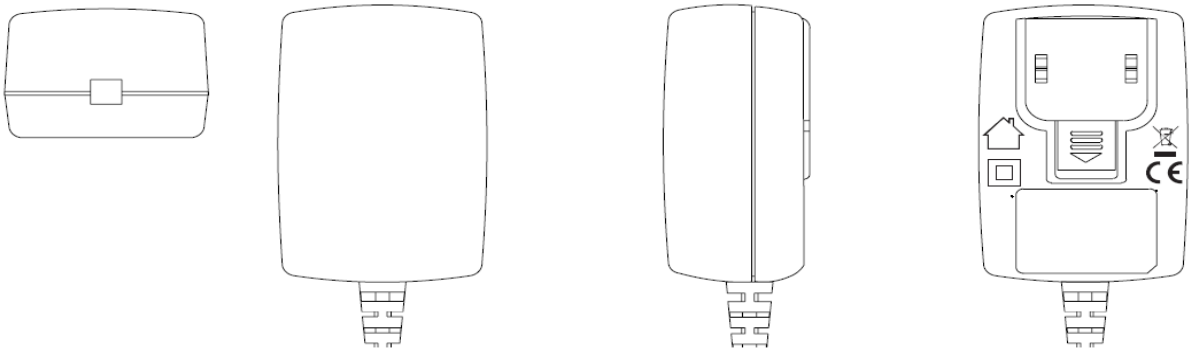
INPUT VOLTAGE:	100-240	VAC
INPUT CURRENT:	1.0	Amp RMS MAX
INPUT FREQUENCY:	50-60	Hz
OUTPUT VOLTAGE:	XXX	VDC
OUTPUT CURRENT:	X.X	A, NO MINIMUM LOAD REQUIRED TO MAINTAIN OUTPUT VOLTAGE REGULATION
OUTPUT POWER (RATED):	XXX	WATTS MAX
OUTPUT LOAD REGULATION:		+/- 5% MEASURED AT O/P CONNECTOR
LINE VOLTAGE REGULATION:		+/- 1%TYPICAL MEASURED AT THE OUTPUT CONNECTOR
OUTPUT RIPPLE (PEAK TO PEAK):		+/-1% OR 150 mV WHICHEVER IS GREATER AT NOMINAL OUTPUT VOLTAGE. MEASURED AT 20 MHz BANDWIDTH WITH 0.1µf CERAMIC CAPACITOR IN PARALLEL WITH 10 µf ELECTROLYTIC CAPACITOR CONNECTED AT THE END OF THE OUTPUT CONNECTOR.
TURN-ON/TURN-OFF OVERSHOOT:		5% MAX 500uS MAX RECOVERY TIME FOR 25% STEP LOAD
TURN-ON DELAY:		3000 mSEC MAX
HOLD-UP TIME:		10 mSEC MIN AT NOMINAL INPUT AND FULL LOAD
INRUSH CURRENT:		30 A MAX AT COLD START 120 VAC, 60A MAX COLD START 230VAC
SWITCHING FREQUENCY:		66.5 KHz TYPICAL
PROTECTION		
OVER-VOLTAGE:		PROTECTED. UNIT WILL AUTORECOVER UPON REMOVAL OF FAULT
SHORT CIRCUIT:		PROTECTED. UNIT WILL AUTORECOVER 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 DOCUMENTS ARE AVAILABLE ONLINE BY CLICKING THIS LINK.
SAFETY APPROVAL:		UL60950-1 2nd EDITION, CUL TO 22.2 #60950-1, DEMKO TO EN60950-1 2nd EDITION, CCC (PENDING) TO GB4943-2001, GB9254-1998, GB17625.12003, GOST-R CE CLASS II, AS/NZ TO 60950 (PENDING), C-TICK TO 55022 (PENDING), PSE TO J60950, CB REPORT 2nd EDITION
EMI:		COMPLIES WITH EN55022 CLASS B AND FCC PART 15 CLASS B, VCCI WHEN TESTED WITH RESISTIVE LOAD, BOTH CONDUCTED AND RADIATED EMI
CE MARK:		TESTED TO COMPLY WITH EN55022:2006/A1:2007 Class B, EN610003-2, EN610003-3 INCLUDING 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)

7.0 Illustrations

Illustration 6 - Instruction (continued)

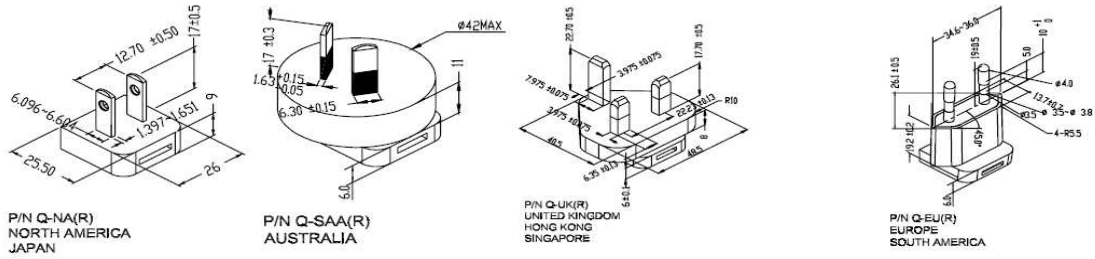
3. ENCLOSURE:

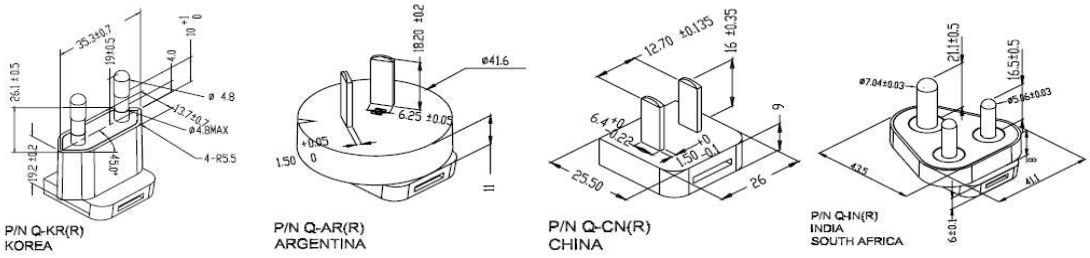
MATERIAL 94V-0 POLYCARBONATE
COLOR: COOL GRAY PANTONE # 11C
DIMENSIONS: 43.5 x 74.0 x 35.3mm +/- 1.0
SYMBOLS CAN BE EITHER PAD PRINTED OR MOLDED IN THE CASE



4. INPUT CONNECTORS:

	STANDARD BLACK COLOR					
	COOL GRAY PANTONE # 11C (OPTIONAL) ADD -GY TO THE END OF THE P/N	x				
	AC INPUT - INTERCHANGEABLE BLADES	**AC INPUT KIT OPTIONS**				
	INTERCHANGEABLE BLADES OR KITS MUST BE ORDERED SEPARATELY	Q-KIT	Q-KIT-NTL	Q-KIT-6	-7	-8
1	CLASS II MODEL NEMA 1-15P: AC POWER PLUG WITH 2 PRONGS, Q-NA(R)	X		X	X	X
2	AUSTRALIAN CONFIGURATION: 2 PINS CLASS II, Q-SAA(R)	X	X	X	X	X
3	UK CONFIGURATION: 2 PINS, CLASS II, Q-UK(R)	X	X	X	X	X
4	EUROPEAN CONFIGURATION: 2 PINS, CLASS II, Q-EU(R)	X	X	X	X	X
5	KOREAN CONFIGURATION: 2 PINS, CLASS II, Q-KR(R)			X	X	X
6	ARGENTINA CONFIGURATION: 2 PINS, CLASS II, Q-AR(R)			X	X	X
7	CHINA CONFIGURATION: 2 PINS, CLASS II, Q-CN(R)				X	X
8	INDIA CONFIGURATION: 2 PINS CLASS II, Q_IN(R)					X
9	IEC 320 INLET CONNECTOR: Q-C18(R)					



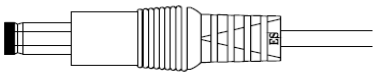


7.0 Illustrations

Illustration 6 - Instruction (continued)

5. OUTPUT CORD AND CONNECTOR:

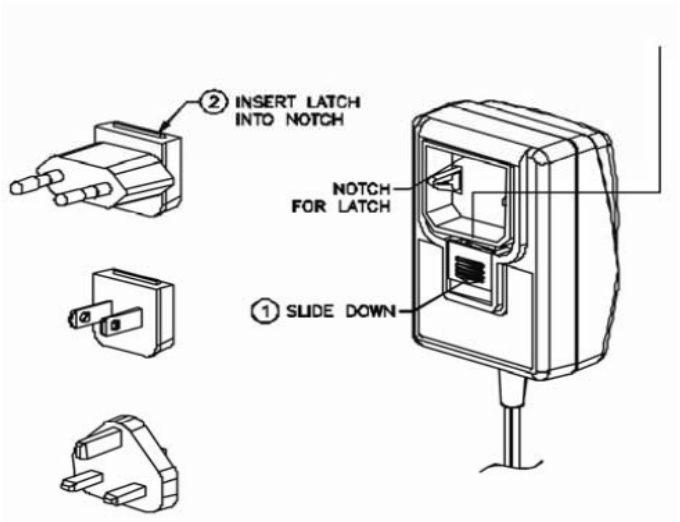
ACTUAL CONNECTOR'S, OVERMOLDS, FERRITES, MAY VARY SLIGHTLY FROM THE PICTURE BELOW



	EQUIVALENT	Y / N	
CABLE TYPE			1C + SHIELD UL 1185
CABLE LENGTH			1830mm + 150 - 0
WIRE GAUGE (AWG)			18AWG
HANK DIMENSION			80 ± 10mm
CABLE / CONNECTOR OVERMOLD COLOR			COOL GRAY PANTONE # 11C
FERRITE TYPE / DIMENSION			14.2 x 28.5 x 8.2
FERRITE # OF TURNS			1
FERRITE DIMENSION FROM STRAIN RELIEF			50mm ±10
FERRITE DIMENSION FROM PLUG			N/A
PLUG TYPE		Y	BARREL
OVER MOLD ORIENTATION			STRAIGHT
PLUG DIMENSIONS			5.5 x 2.5 x 11mm
BARREL PLUG INTERNAL SPRING CLIP			NO
BARREL PLUG LOCKING NOTCH			NO
POLARITY			CENTER POSITIVE
STRIP LENGTH			N/A
TIN LENGTH			N/A
ADDITIONAL REQUIREMENTS			N/A

8. INTERCHANGEABLE BLADE INSERTION INSTRUCTION:

ACTUAL CASE MAY VARY SLIGHTLY FROM THE PICTURE BELOW



8.0 Test Summary					
Evaluation Period	2-July-2013 to 11-July-2013			Project No.	130700043SHA
Sample Rec. Date	27-Jun-2013	Condition	Prototype	Sample ID.	0130627-60-001~020
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 April 26, 2013 Clause	CSA C22.2 No.223-M91 Dated June 1991, Reaffirmed 2013 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 February 6, 2013 Clause
Integral plug dimension check	14.1.1	4.5.1.1	-
Maximum moment measurement	7.11	4.1.4	-
Plug discharge and plug energy stored test	-	4.1.6	
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
Strain-Relief Test after Mold Stress-Relief Distortion	-	-	31

Evaluation Period	11-Jul-2014			Project No.	140700800SHA
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 130700043SHA-001. No test required in below updated standards:					

8.0 Test Summary			
Test Description	UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including May 30, 2014	UL 746C Sixth Edition Dated September 10, 2004 including Revisions through August 29, 2013	

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:	Will Wang	Reviewed by:	Carl Bao
Title:	Supervisor	Title:	Technical Supervisor
Signature:	Will Wang	Signature:	Carl Bao

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:

Product	Test Voltage	Test Time
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 April 26, 2013" to "UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including May 30, 2014."
140700800SHA	Carl Bao	2	-	Modified description of model name.
	Carl Bao	8	-	Updated standard version of UL 1310 from UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including April 26, 2013" to "UL 1310 Sixth Edition Dated August 26, 2011 containing Revisions through and including May 30, 2014." Updated standard version of UL 746C from "UL 746C Sixth Edition Dated September 10, 2004 including Revisions through February,6, 2013" to "UL 746C Sixth Edition Dated September 10, 2004 including Revisions through August 29, 2013" New signatures signed.