RECOGNIZED COMPONENT
Constructional Data Report (CDR)

1.0 Reference and Address					
Report Number	131200394SHA-001	Original Issued:	3-Jan-2014	Revised:	None
Standard(s)	Standard for Safety for Information Technology Equipment Safety Part 1: General Requirements: (UL 60950-1 Issued: 2007/03/27 Ed:2 Rev: 2011/12/19 & CAN/CSA C22.2 No.60950-1 Issued: 2007/03/27 Ed:2 (R 2012) Rev: 2011/12/19)				

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
Country	USA	Country	China
Contact	Hans Moritz	Contact	Demon Zhou
Phone	(201)784-1000 Ext.253	Phone	86 512 6279 0301 Ext.189
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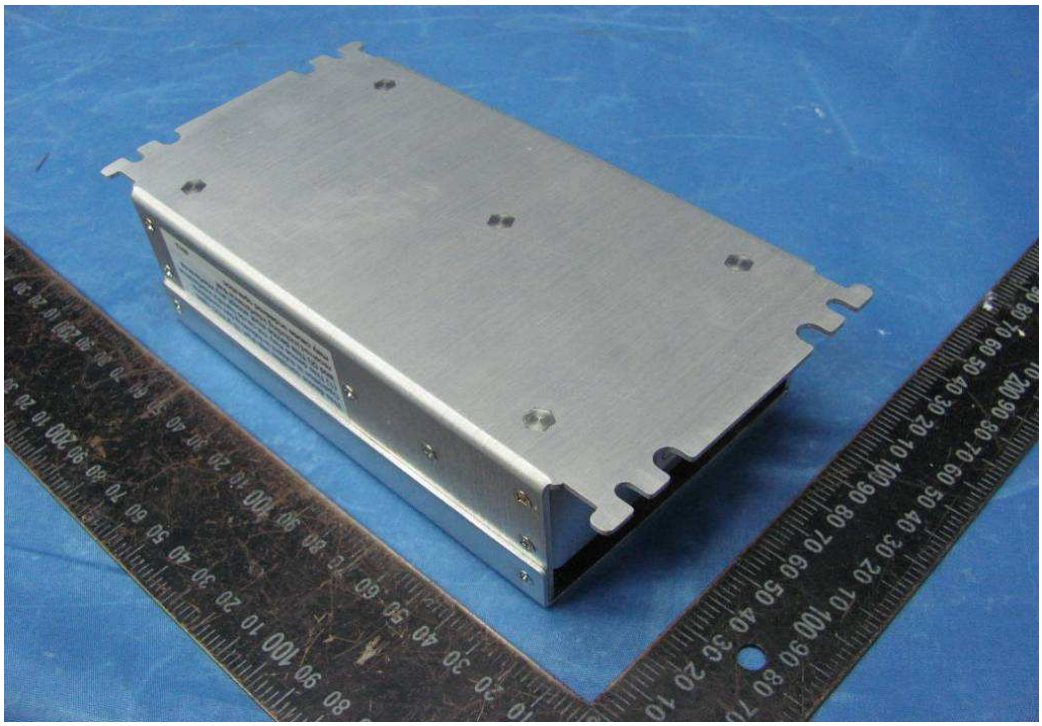
Email	Moritzh@globtek.com	Email	demon.zhou@globtek.cn

2.0 Product Description	
Product	DC/DC Converter
Brand name	GlobTek
Description	Product covered by this report is DC to DC converter module, which is build-in type and designed for continuous operation. It is intended to be used as a part of vehicle power system. One assembly structure is optional that internal circuits are sealed through gum preventing water and dust. For that, the equipment was submitted and evaluated for maximum manufacturer's recommended ambient temperature of 50 ℃. Otherwise, the recommended ambient temperature is 40 ℃ for the structure with out gum sealed. The two structures are evaluated separately for temperature rise. In consideration of application, mains transient voltage is assumed to be 1500Vpeak as worst case.
Models	GTD93035L6013.2-F, GTD93035H6013.2-F
Model Similarity	Models GTD93035L6013.2-F and GTD93035H6013.2-F are identical in appearance and also share most of the critical components except input rating. Both two models were evaluated in the report. And it could be considered as the same if no more difference were specified.
Ratings	Model GTD93035L6013.2-F: Input: 9-60Vdc, 9.0A; output: 13.2Vdc, 4.54A. Model GTD93035H6013.2-F: Input: 50-150Vdc, 2.0A; output: 13.2Vdc, 4.54A.
Other Ratings	N/A
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. (Typical Conditions of Acceptability to be considered for recognized component products follow:) 1. Suitability of the enclosure should be evaluated when installed in the end product. 2. Temperature Testing should be performed on this component when installed in the end product. 3. Only output terminal is considered accessible through wiring. Other parts shall be determined in the final installation

3.0 Product Photographs

Photo 1 - External view - 1 of EUT

Photo 2 - External view - 2 of EUT



3.0 Product Photographs

Photo 3 - Internal view of EUT with gum sealed

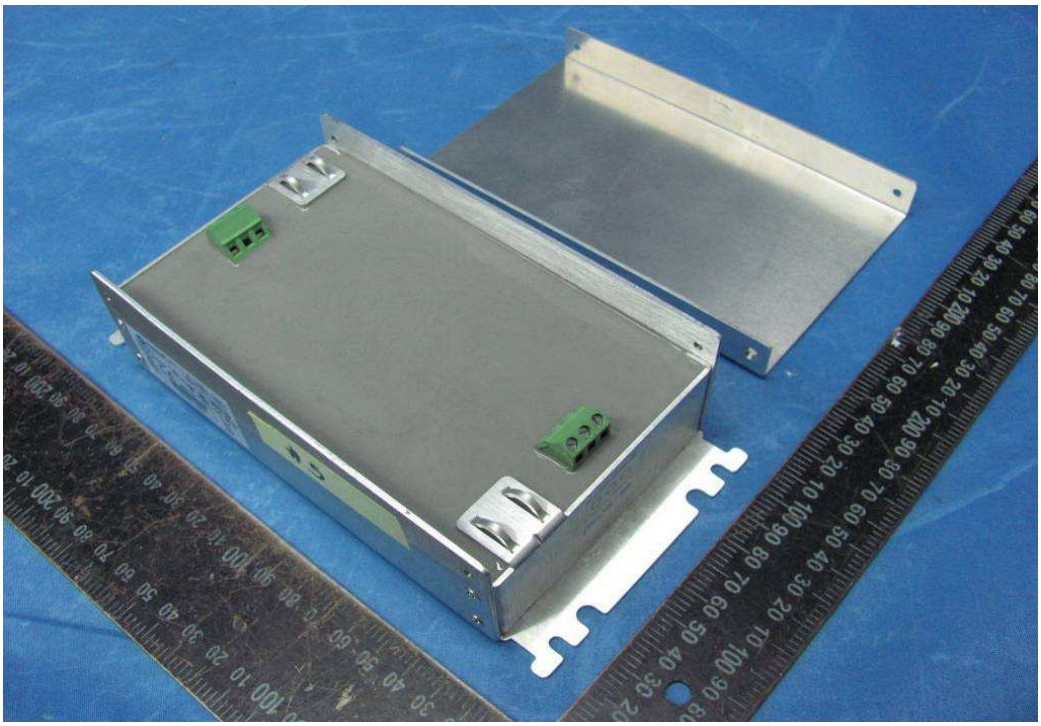
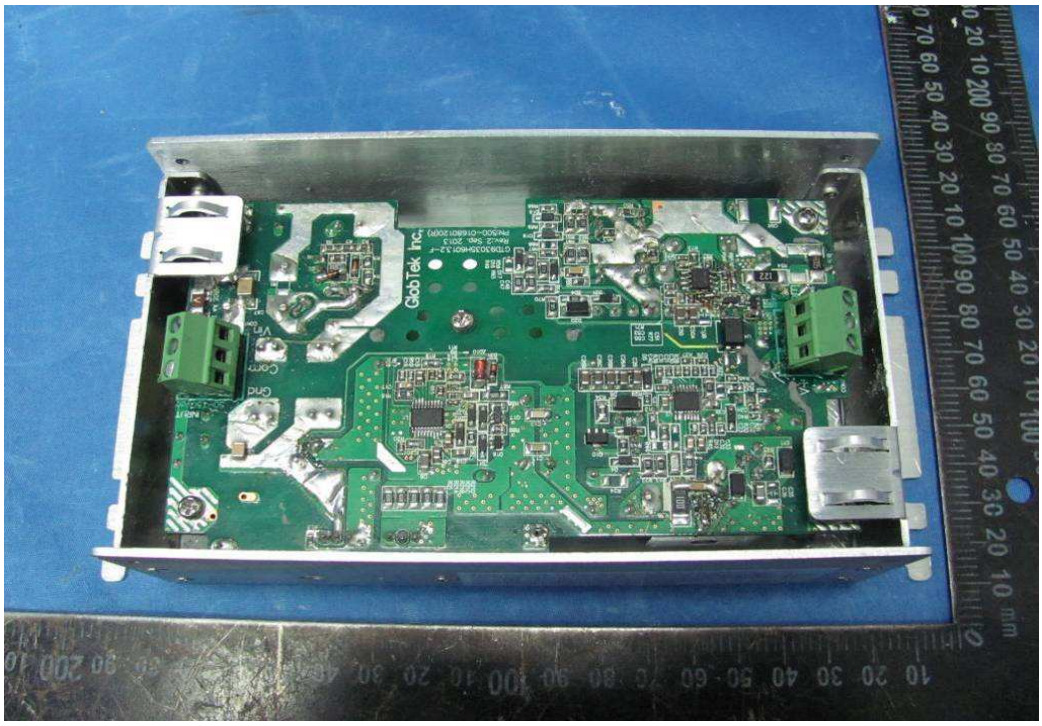


Photo 4 - Internal view of EUT with gum removed



3.0 Product Photographs

Photo 5 - Internal view of EUT with side plates removed

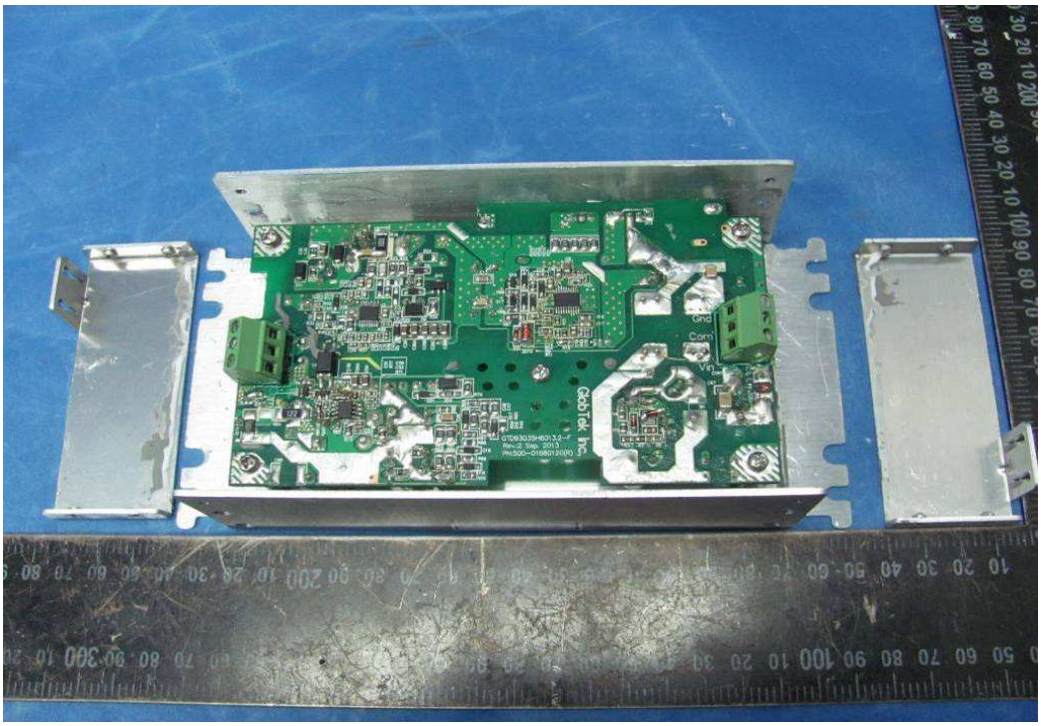
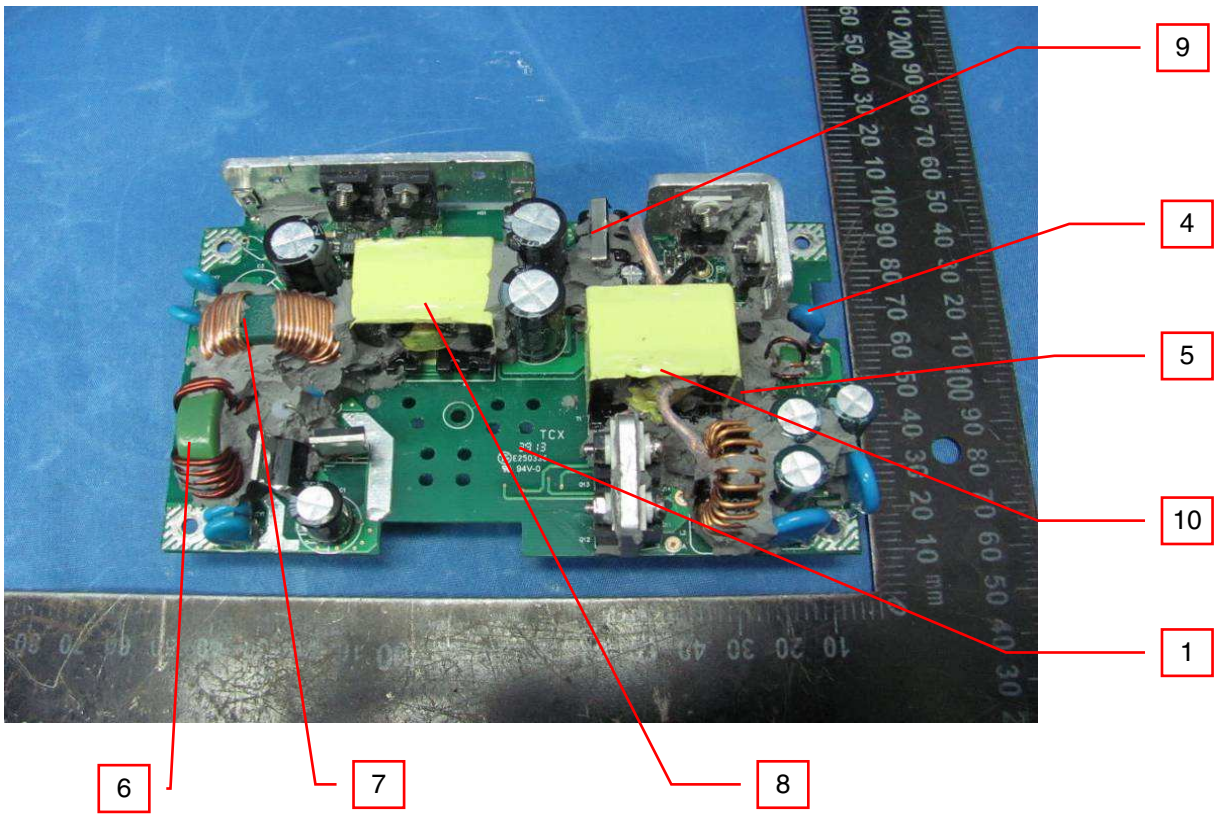


Photo 6: Internal view – Component side view of PCB for model GTD93035H6013.2-F



3.0 Product Photographs

Photo 7 - Internal view – Soldering side view of PCB for model GTD93035H6013.2-F

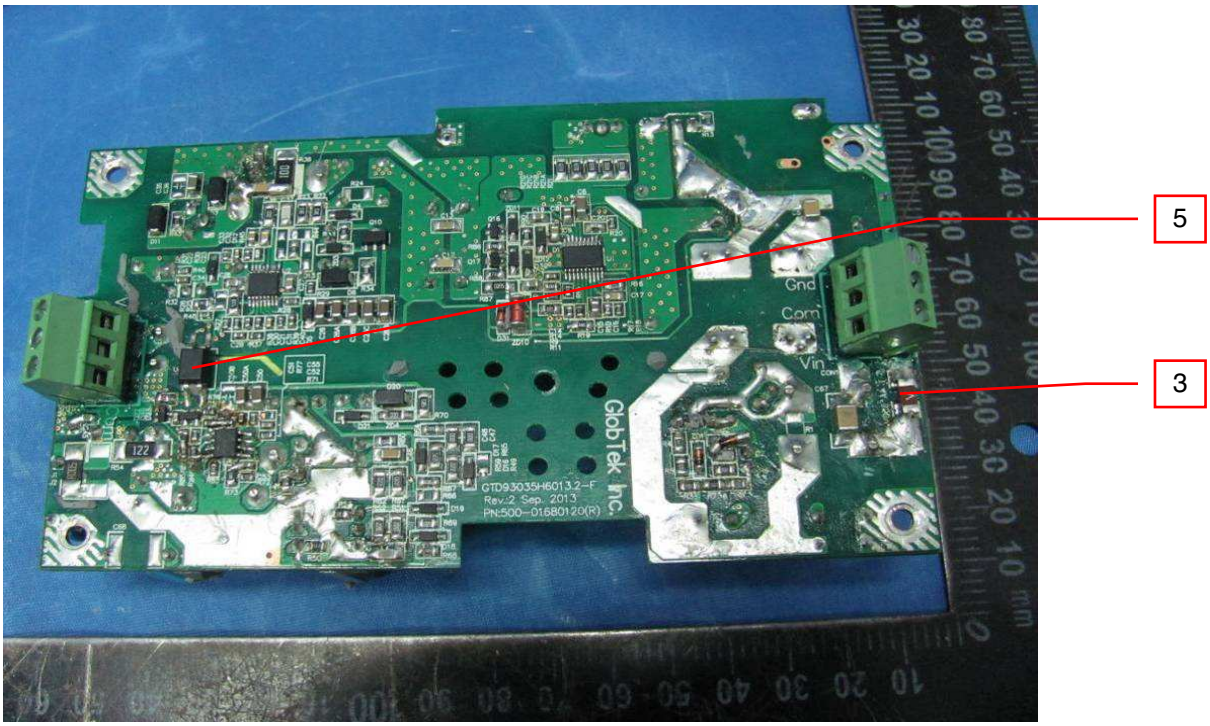
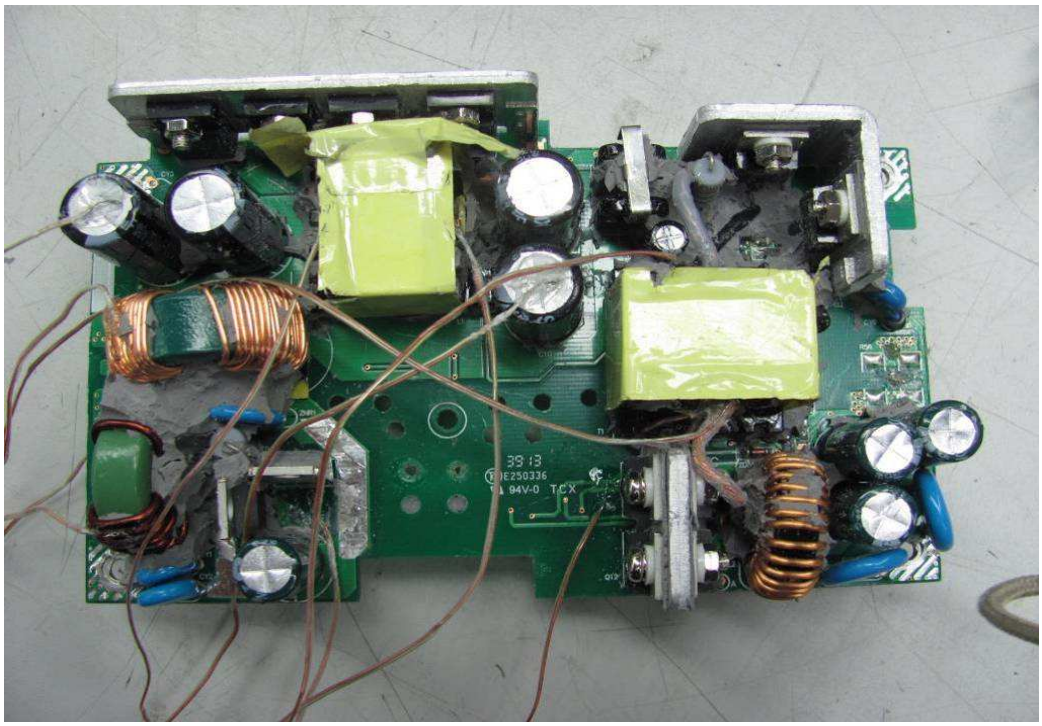
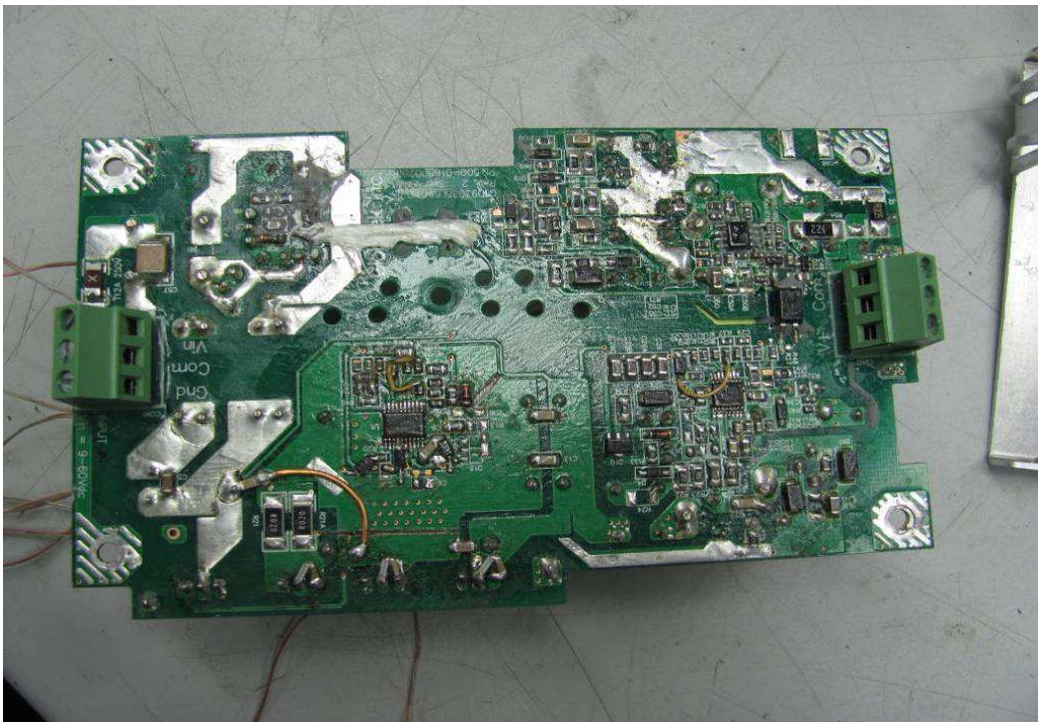


Photo 8 - Internal view – Component side view of PCB for model GTD93035L6013.2-F



3.0 Product Photographs

Photo 9 - Internal view – Soldering side view of PCB for model GTD93035L6013.2-F



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]
6	1	PCB material	TECHNI TECHNOLOGY LTD	T2A T2B T4	Min 1.6 mm thickness, min. V-0, 130℃	cURus
			DONGGUAN HE TONG ELECTRONICS CO LTD	CEM1		
			CHEERFUL ELECTRONIC	03 03A		
			DONGGUAN DAYSUN ELECTRONIC CO LTD	DS2		
			SUZHOU CITY YILIHUA ELECTRONICS CO LTD	YLH-1		
			SHANGHAI AREX PRECISION ELECTRONIC CO LTD	02V0 04V0		
			BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	DKV0-3A		
			SHENZHEN TONGCHUANGXIN ELECTRONICS CO LTD	TCX		
			Various	Various		
6	2	Mylar sheet used between PCB and metal case (Not shown)	TORAY INDUSTRIES INC	Lumirror H10	VTM-2, min. 0.4 mm thickness	cURus
			SKC CO LTD	SH71S	VTM-2, min. 0.4 mm thickness	
			FORMEX	FORMEX GK series	V-0, min. 0.4 mm thickness	
			SABIC INNOVATIVE PLASTICS US L L C	FR60 series FR63 series FR65 series FR7 series FR700 series	V-0, min. 0.4 mm thickness	
			MIANYANG LONGHUA FILM CO LTD	PP-BK20 PP-(i)(j)	VTM-0, min. 0.4 mm thickness	
			CHENGDU KANGLONGXIN PLASTICS CO LTD	KLX PP WT-10 series	VTM-0, min. 0.4 mm thickness	
7	3	SMT fuse (F1)	AEM COMPONENTS (SUZHOU) CO LTD	AF2	3.50A, 125V for 50-150Vdc model; 12A, 65V for 9-60Vdc model; Rated breaking capacity 50A.	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]
6	4	Y-Capacitor (CY6) (optional)	SUCCESS ELECTRONICS CO LTD	SE SB	Type Y1, max. 1000pF, min. 250V, min. 125℃	cURus
			TDK-EPC CORPORATION	CD	Type Y1, max. 1000pF, min. 250V, min. 125℃	
			MURATA MFG CO LTD	KX	Type Y1, max. 1000pF, min. 250V, min. 125℃	
			WALSIN TECHNOLOGY CORP	AH	Type Y1, max. 1000pF, min. 250V, min. 125℃	
			JYA-NAY CO LTD	JN	Type Y1, max. 1000pF, min. 250V, min. 125℃	
			HAOHUA ELECTRONIC CO	CT7	Type Y1, max. 1000pF, min. 250V, min. 125℃	
			JERRO ELECTRONICS CORP	JX-series	Type Y1, max. 1000pF, min. 250V, min. 125℃	
6, 7	5	Optocoupler (U3, U4)	LITE-ON Technology Corporation	LTV-817	Ext. Cr: min. 8.0 mm; DTI: min. 0.6 mm; Thermal cycling test. Max. operating temp.: 115℃.	cURus, Semko
			Fairchild Semiconductor Pte. Ltd.	FOD817B	Ext. Cr: min. 7.8 mm; DTI: min. 0.6 mm; Thermal cycling test. Max. operating temp.: 115℃	
			Bright Led Electronics Corp.	BPC-817 BPC-817 M BPC-817 S	Ext. Cr: min. 7.0 mm; DTI: min. 0.4 mm; Thermal cycling test. Max. operating temp.: 100℃.	
			Everlight Electronics Co., Ltd.	EL817	Ext. Cr: min. 7.7 mm; DTI: min. 0.5 mm; Thermal cycling test. Max. operating temp.: 110℃.	cURus, Nemko
			Cosmos Electronics Corp	K1010 KPC817X	Ext. Cr: min. 8.0 mm; Int. Cr: 6.5 mm; DTI: min. 0.4 mm. Max. operating temp.: 100℃	cURus
			Sharp Corporation	PC817	Ext. Cr: min. 7.8 mm; Int. Cr: 6.4 mm; DTI: min. 0.4 mm. Max. operating temp.: 100℃	
6	6	Line filter (LF1) (Optional)	GlobTek/ZhongTong /HEJIA/BOAM	LF011	130℃	NR
6	7	Line filter (LF2) (Optional)	GlobTek/ZhongTong /HEJIA/BOAM	LF012	130℃	NR
6	8	Boost inductor (L1) (Optional)	GlobTek/ZhongTong /HEJIA/BOAM	LF013	130℃	NR
6	9	Current transducer (T2)	GlobTek/ZhongTong /HEJIA/BOAM	LF019	130℃	NR
6	10	Transformer (T1)	GlobTek/ZhongTong /BOAM	TF017	Class B, with insulation system listed below. Refer to illustration No. 8&9 for Spec.	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]
6	10a	Insulation system	GLOBTEK INC	GTX-130-TM	Class 130(B)	cURus
			WUXI ZHONGTONG ELECTRONICS CO LTD	ZT-130		
			SHAN DONG BOAM ELECTRIC CO LTD	BOAM-01		

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
No Unlisted CEC components are used in this report.

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.

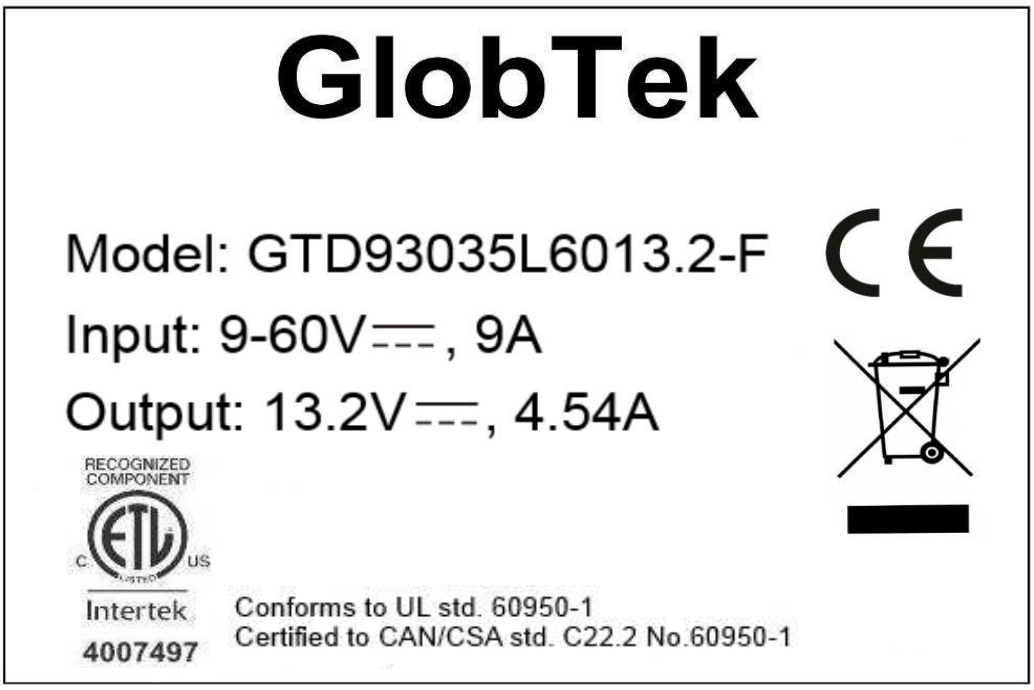
1. Spacing - In primary circuits, 3.0 mm minimum spacing are maintained through air between current-carrying parts of opposite polarity and 6.0 mm minimum between such current-carrying parts and dead-metal parts or low voltage isolated circuits. In primary circuits, 3.0 mm minimum spacing are maintained over surfaces of insulating material between current-carrying parts of opposite polarity and 6.0 mm minimum between such current-carrying parts and dead-metal parts or low voltage isolated circuits. With the equipment to be operated at 5000m above sea level max. the minimum clearances shall be multiplied by the factor 1.48.
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 - For adapter models, all uninsulated live parts in primary circuitry are housed within a non-metallic enclosure constructed with no openings and metal enclosure earthed with ventilation holes other than those specifically described in Sections 4 and 5.
5. Grounding - All exposed dead-metal parts and all dead-metal parts within the enclosure that are exposed are connected to the grounding lead of the power supply cord and the equipment grounding terminal.
6. Polarized Connection - This product is 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 internal wiring is contained in the recognized subassembly.
8. Schematics - Refer to Illustration No(s). 1-4 for schematics & PCB layout requiring verification during Field Representative Inspection Audits.
9. Markings - The product is marked as follows: brand name, model number, electrical ratings, manufacturer. Refer to Illustration No. 5 for details.
10. Cautionary Markings - Refer to illustrations No. 6&7 for details.
11. Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer. Refer to Illustration No. 6&7 for details.

7.0 Illustrations

Illustration 5 - Marking label

The marking plate of model GTD93035H6013.2-F listed in this report is identical with below except model name and input parameter.

The below marking is complying with the minimum requirements required by the safety standard. For the final production samples, the additional markings which do not give rise to misunderstanding may be added.



7.0 Illustrations

Illustration 6 - Product manual

Note: The product manual of model GTD93035L6013.2-F listed in this report is identical with below except model name and input parameter.

POWER SUPPLY INFORMATION

TYPE:	Enclosed-Metal
TECHNOLOGY:	Regulated Switchmode AC-DC (R)
CASE COLOR:	Metal
VOLTAGE IN:	50-150 Vdc
INPUT CONFIG:	Terminal Block 2 Conductor
WATTS:	60.0
VOLTS OUT:	13.2
CURRENT OUT (Amps):	4.5
BLADES:	N/A,Not Applicable
BLADE/CORD INSTALLED:	N/A,Not Applicable
EFFICIENCY LEVEL:	N/A
OUTPUT CORD	mm, /2 Cond, , (2) Position Terminal Block, Ferrite: None, , Cord # C0198
CONNECTOR PIN OUT:	Marked Terminal Block (+V)
LABEL SPECS:	Standard GT,L-1186
PACK SPEC:	Standard DT, Individually Box

NOTES / DEVIATIONS:

Design still under development between GTnj & GTsz

Safety Approval Pending (must be designed to meet)

1.00) EMC/EMI
--EMI (Emissions) FCC Part 15, subpart B, Class B, EN 55022, Class B (CISPR 22)
--EMC (Immunity) EN 55024:1998; ESD Level-4, Class-A e-mark in accordance with EU Directive 72/245/EEC

2.00) Safety (Standard I.T.E. device)
2.01) UL/cUL/CB 60950-1/ w/ deviations
-CSA C22.2 No. 60950-1, IEC 60950 (will use cUL as equivalent)
2.02) AU + NZ C-Tick + Safety (S3548,Class B (CISPR22),GB9254)
2.03) Brazil-In-Metro
2.04) Mexico-NOM
2.05) Russia-Gost-R
2.06) Saudi Arabia-KSA PCP(SASO)
2.07) South Africa-NRCS (Safety) & SABS (EMC)
2.08) Malaysia-MS Mark
2.09) Argentina- S-Mark
2.10) China-CCC Certification
2.11) Vibration & Bump-IEC 60068-2-64 Fh (Random)/IEC 60068-2-29 Eb
2.12 RoHS & REACH Compliance: The terminal and associated peripherals and accessories will be European Commission directive 2011/65/EU (ROHS),

NOTES:
DIMENSIONS ARE IN MM UNLESS SPECIFIED OTHERWISE.

ELECTRICAL SPECIFICATIONS

A) ELECTRICAL SPECIFICATIONS:
1. Input Voltage: 50-150 Vdc
2. Output Regulation: +/- 5% measured at the output connector
3. Line Voltage Regulation: +/- 2% typical measured at full load
4. Output Ripple (Vp-p): 120mV maximum, measured at 20 MHz bandwidth with 0.1 uf ceramic capacitor in parallel with 10 uf electrolytic capacitor connected at the end of the output connector at nominal line

7.0 Illustrations

Illustration 7 - Product manual (Cont.)

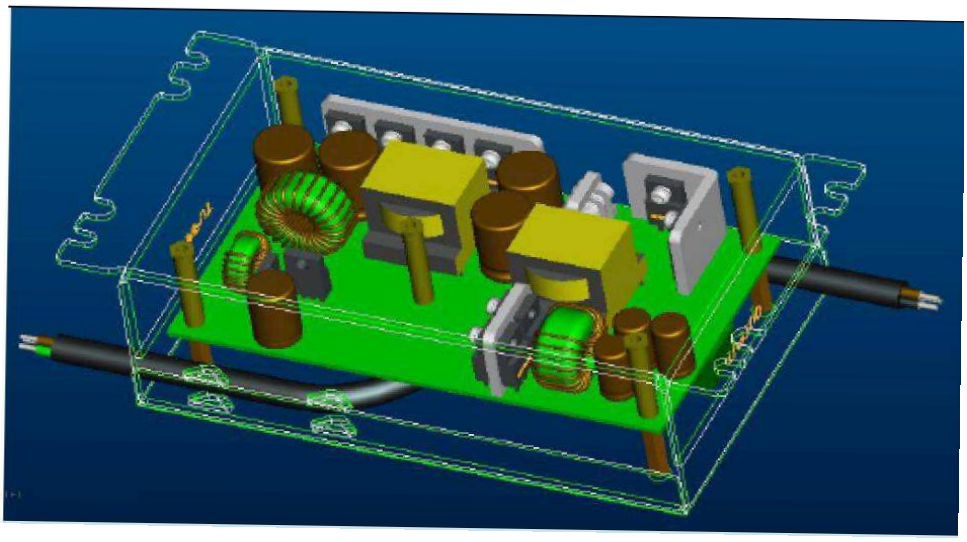
5. Turn-ON/OFF Overshoot: 5% maximum, 500uS typical recovery time for 25% to 50% step load
6. Turn-ON Delay: 3 Seconds, maximum @ full load, nominal line
7. Hold-Up Time: 5mS typical @ nominal input voltage and full load
8. Inrush Current: 60A maximum cold start @ 240Vac input
9. Switching Frequency: TBA KHz typical
10. Efficiency: <80%
11. Transient Response: 200uS to +/-1.5% max value @ 50% load step

B) PROTECTION
1. Over-Voltage: Protected with a Zener diode clamp across the output
2. Short Circuit: Hiccup with auto recovery
3. Over-load: Hiccup with auto recovery
4. Input Protection: Input line and neutral fusing
5. Reverse Polarity Protection: Yes

C) SAFETY
1. Dielectric Withstand Voltage: 1500 Vdc from primary to secondary

D) OTHER:
1. MTBF: 200,000 Hours @ 25°C ambient temperature
2. Operating Temperature: -30°C to 50°C ambient temperature
3. Humidity: 5% to 85% relative humidity
4. Storage Temperature: -40°C to 85°C
5. Cooling: Convection

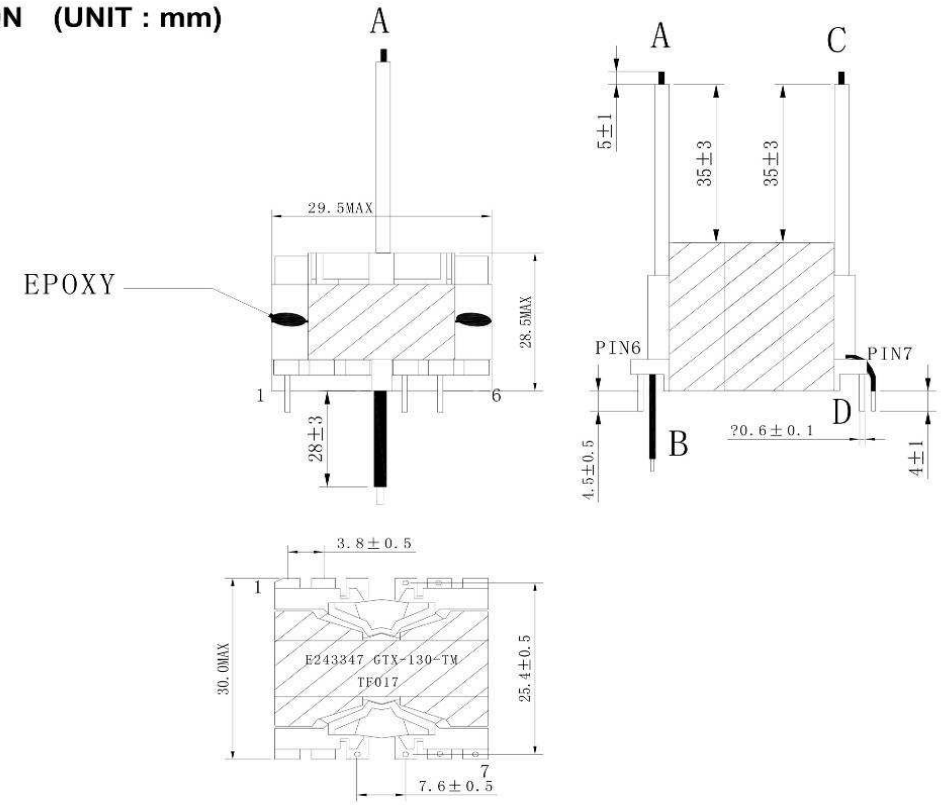
E) ENCLOSURE
1. Housing: Rugged, vehicle mounted. Vibration, shock, contamination, water resistant. Aluminum
2. Size: apprpx. 170mm x 115mm x 40mm mm
3. Markings: Label
4. Vibration: IEC 60068-2-64 Fh (Random)
5. Bump: IEC 60068-2-29 Eb
6. Waterproof: Not required. However, it should be water-resistant. Recommended IEC 60068-2-52
7. Contamination: Resistant to chemicals, rust, etc.



7.0 Illustrations

Illustration 8 - Physical construction of DC-DC transformer T1 (TF017)

1. DIMENSION (UNIT : mm)



1.PIN2，3，6，11，12 空脚。

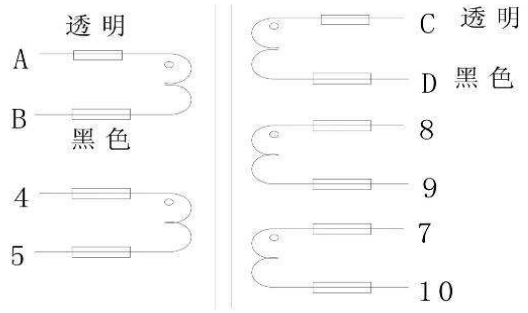
2.A 在 1-6 脚侧顶部出线，透明套管，磁芯开始测量套管 35±3mm，B 在 3-4 脚中间出线，黑色套管。骨架挡板开始测量 28±3mm。飞线焊锡尺寸均为 5±1mm.

3.C 在次级侧顶部出线，透明套管，磁芯开始测量套管 35±3mm，D 线在次级针脚侧出线，黑色套管，套管不超过骨架挡板，飞线焊锡尺寸 C 为 5.0mm±1mm，D 为 4.0mm±1mm.

4.成品沿磁芯方向外包 2 圈 20mm 胶带。

5.磁芯接缝处点黑胶。2 圈 10mm 胶带固定上下磁芯

2. SHCEMATIC:



7.0 Illustrations

Illustration 9 - Physical construction of DC-DC transformer T1 (TF017) (Cont.)

3. ELECTRICAL CHARACTERISTICS

NO	ITEM	TERMINAL	SPECIFICATION	REMARKS
3-1	INDUCTANCE	A-B	130uH±10%	GainKaiTa3250 @1KHz,0.25Vrms
3-2	HI-POT TESTING	Pri-Sec	AC1.5KV/5mA/3S	CJ2670
		Pri-Core	AC 1.5KV/5mA/3S	
		Sec-Core	AC1.5KV/5mA/3S	

4. WINDING SPEC

NO	TERMINAL		TURNS	WIRE	STRANDS	INSULATION MATERIAL	INSULATION LAYERS
	S	F					
N1	A	B	5	2UEW/130 ϕ 0.35	9	PET 0.025	2
E1	1		0.8	0.05*10		PET 0.025	2
N2	C	D	4	2UEW/130 ϕ 0.35	10	PET 0.025	2
N3	4	5	2	2UEW/130 ϕ 0.30	1	PET 0.025	2
N4	8	9	2	2UEW/130 ϕ 0.30	1	PET 0.025	2
N5	7	10	2	2UEW/130 ϕ 0.30	1		

绕组 **4,5** 双线并绕

8.0 Test Summary					
Evaluation Period	2013-12-09~2013-12-29			Project No.	131200394SHA
Sample Rec. Date	9-Dec-2013	Condition	Prototype	Sample ID.	0131209-06-001
Test Location	Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China				
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	Standard for Safety for Information Technology Equipment Safety Part 1: General Requirements: (UL 60950-1 Issued: 2007/03/27 Ed:2 Rev: 2011/12/19 & CAN/CSA C22.2 No.60950-1 Issued: 2007/03/27 Ed:2 (R 2012) Rev: 2011/12/19) Clause
Input current test	1.6.2
Marking durability test	1.7.11
Energy hazards test	2.1.1.5
Voltages under normal conditions test	2.2.2
Voltages under fault conditions test	2.2.3
Limited current circuit test	2.4
Limited power source test	2.5
Humidity test	2.9.2
Working voltage measurement	2.10.2
Clearances and creepage distances	2.10.3/2.10.4
Distance through insulation measurement	2.10.5
Mechanical strength - steady force test, 10 N	4.2.2
Temperature test	4.5.1
Electric strength test	5.2
Abnormal operating and fault conditions test	5.3

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:	Jamie Wu	Reviewed by:	Jenny Zheng
Title:	Project engineer	Title:	Reviewer
Signature:	Jamie Wu	Signature:	

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	DC/DC Converter

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

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 issued 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 primary circuits and accessible dead-metal parts. 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
Between input and output terminals only for model GTD93035H6013.2-F	1600V	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
				None