File E341351 Project 4789507340

September 12, 2018

REPORT

on

Power Supplies for use with Audio/Video, Information and Communication Technology Equipment

GLOBTEK (HONG KONG) LTD

KOWLOON HONG KONG

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UL TEST REPORT AND PROCEDURE

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Standard: Certification Type: CCN:	UL 62368-1, 2nd Edition, 2014-12-01 (Audio/video, Information and Communication Technology Equipment - Part 1: Safety Requirements) CSA C22.2 No. 62368-1-14, 2nd Edition, 2014-12 (Audio/video, Information and Communication Technology Equipment - Part 1: Safety Requirements) Listing QQJQ, QQJQ7 Power Supplies for use in Audio/Video, Information and Communication Technology Equipment)
Complementary Certification CCN	
Product:	ICT/ITE POWER SUPPLY GT-46181-***-T**
Model:	The lst "*" denotes the rated output wattage, with a maximum value of "18", The 2nd "*" denotes the standard rated output voltage designation, with a value of "05", "09", "12", "15", The 3rd "*" is optional deviation, subtracted from standard output voltage, which can be "-0.1" to "- 3.9" with interval of 0.1, or blank to indicate no voltage different, The 2nd and 3rd together denote the output voltage, with a range of 5-15Vdc The 4th "*" can be 3 or 3A, 3 means C14 inlet type, 3A means C6 inlet type. The last * denote any six character = 0-9 or A-Z or ()[] or - or blank for marketing purposes.
Rating:	I/P: 1) 100-240V , 50-60Hz or 50/60Hz, 0.5A (O/P: 5-15Vdc, Max 3.2A, Max 18W
Applicant Name and Address:	GLOBTEK (HONG KONG) LTD UNIT 1402, BENSON TOWER 74 HUNG TO RD

74 HUNG TO RD KWUN TONG KOWLOON HONG KONG

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

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Prepared By:	Amy Wong / Suki
	Project Handler

Reviewed By: Brian

Brian Wong / Reviewer

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The following documents located at the beginning of this Procedure supplement the requirements of this Test Report: A. Authorization - The Authorization page may include additional Factory Identification Code markings. B. Generic Inspection Instructions Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report

C. Listing Mark/Recognized Component Mark Data Page - details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

Supporting Documentation

The equipment for Class I, The equipment intended for use with Audio/video, information and communication technology Equipment, there electronic components mounted on PWB, and housed in a thermoplastic enclosure by ultrasonic welding.

Model Differences

All models are similar to each other except ratings, Transformer T1, secondary component , and model designation, see below the table for details.

Model	Output Voltage	Max.Output Current	Max.Output Wattage	Transformer (T1)	Resistor (R10)
GT-46181-*05-T**	5V	3.2A	18W	XF00941	1.2Ω 1W
GT-46181-*09*-T**	5.1-9V	3.2A	18W	XF00941(5.1-7.5V) XF00962(7.6-9V)	1.1 Ω 1W
GT-46181-*12*-T**	9.1-12V	1.97A	18W	XF00962(9.1-10.5V) XF00933(10.6-12V)	1.0Ω 1W
GT-46181-*15*-T**	12.1-15V	1.48A	18W	XF00933	1.0Ω 1W

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Test Item Particulars (NOT FOR FIELD REPRESE	NTATIVE'S USE)
Classification of installation and use by . :	☑ Ordinary person □ Instructed person □ Skilled person
Supply Connection:	<pre> pluggable equipment</pre>
Equipment mobility:	<pre>Movable hand-held transportable stationary for building-in direct plug-in rack-mounting wall-mounted</pre>
Over voltage category (OVC):	□ OVC I
Fundamental Frequency:	⊠ 50/60 Hz 50 Hz ☐ 60 Hz ⊠ other 50-60 Hz
Class of equipment:	☐ Class I ☐ Class II ☐ Class III ☐ Not classified ☐ Class II with functional earthing
Access location:	\square restricted access location \square N/A
Pollution degree (PD):	□ PD 1
IP protection class:	∑ IP X0 □ IP
Tested for IT power systems:	🗌 Yes 🛛 🕅 No
IT testing, phase-phase voltage (V):	□ ⊠ N/A
Altitude during operation (m):	🛛 Up to 2,000 🗌 Up to 3,000
Altitude of test laboratory (m):	🛛 Less than 2,000 🗌 Approximately
Mass of equipment (kg):	0.133 kg

Only those products bearing the UL Mark should be considered as being covered by $% \left({{{\boldsymbol{x}}_{i}}} \right)$

Technical Consideration (NOT FOR FIELD REPRESENTATIVE'S USE)

- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 40 degree C
- The means of connection to the mains supply is: Detachable power cord, Pluggable A
- The product is intended for use on the following power systems: TN
- Considered current rating of protective device as part of the building installation (A) : 20
- Mains supply tolerance (%) or absolute mains supply values : +10%, -10%
- The equipment disconnect device is considered to be: Appliance inlet
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual

Engineering Conditions of Acceptability (NOT FOR FIELD REPRESENTATIVE'S USE)

N/A

Additional Information

N/A

Additional Standard

The product fulfils the requirements of: N/A

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U U U U U U U U U U U U U U U U	ions and instruction	nal safeguards				
Clause Title	Marking or Instr	uction Details				
Equipment identification marking - Manufacturer identification	Listee's or Reco Number.	gnized company's name,	Trade Nar	ne, Tradem	ark or File	
Equipment identification marking - model identification	Model Number					
Equipment rating marking -ratings		oltage, frequency, curr voltage, dc, current)	ent)			
Fuses - replaceable F1, T1AL, 250V located on or adjacent to fuse or fuseholder. by skilled person (component ID:F1)						
-	ns to UL Representa					
record and specific specification shee	cation sheet provid	are conducted at other ed by the component man utine test specified in opent manufacturer	ufacture	r. Verify	the	
Production-Line Tex Electric Strength	sting Requirements Test Special Constru	uctions - Refer to Gene	ric Inspe	ection Ins	structions,	
Production-Line Tea	sting Requirements Test Special Constr r information.		ric Inspe	ection Ins		
Production-Line Tes Electric Strength '	sting Requirements Test Special Constru- r information. Removable			ection Ins V dc	Test Time, s	
Production-Line Ter Electric Strength ? Part AC for furthe:	sting Requirements Test Special Constru- r information. Removable nent Parts	uctions - Refer to Gene	V rms		Test	
Production-Line Ter Electric Strength S Part AC for further Model Composition	sting Requirements Test Special Constru- r information. Removable nent Parts N/A	uctions - Refer to Gene Test probe location	V rms 3000	V dc	Test Time, s	
Production-Line Termination Electric Strength Part AC for further Model Comport All models T1 All models EU	sting Requirements Test Special Constru- r information. Removable nent Parts N/A T N/A	uctions - Refer to Gene Test probe location Primary to Secondary	V rms 3000 3000	V dc 4242 4242	Test Time, s 1 1	
Production-Line Termination Electric Strength Part AC for further Model Comport All models T1 All models EU	sting Requirements Test Special Constru- r information. Removable nent Parts N/A T N/A	Test probe location Primary to Secondary Primary to Secondary	V rms 3000 3000	V dc 4242 4242	Test Time, s 1 1	
Production-Line Ter Electric Strength ' Part AC for further Model Compose All models T1 All models EU Earthing Continuity	sting Requirements Test Special Constru- r information. Removable nent Parts N/A T N/A T N/A y Test Exemptions -	Test probe location Primary to Secondary Primary to Secondary This test is not requi	V rms 3000 3000 red for 1	V dc 4242 4242 the follow	Test Time, s 1 1 ying models:	
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Production-Line Ter Electric Strength ' Part AC for further Model Compose All models T1 All models EU Earthing Continuity Electric Strength '	sting Requirements Test Special Constru- r information. Removable nent Parts N/A T N/A T N/A y Test Exemptions - The Test Exemptions - The	Test probe location Primary to Secondary Primary to Secondary This test is not requi	V rms 3000 3000 red for the d for the	V dc 4242 4242 the follow	Test Time, s 1 1 ying models:	
Production-Line Ter Electric Strength ' Part AC for further Model Compor All models T1 All models EU Earthing Continuity Electric Strength ' 	sting Requirements Test Special Constru- r information. Removable nent Parts N/A T N/A T N/A Y Test Exemptions - Test Exemptions - Thest Exemptions - Thest Exemptions - Thest Exemptions - Thest Component Exemptions - Thest Component Exemptions - Thest Exemptions - The term of term of the term of t	Test probe location Primary to Secondary Primary to Secondary This test is not requi	V rms 3000 3000 red for the d for the solid-sta	V dc 4242 4242 the follow	Test Time, s 1 1 ying models:	
Production-Line Tere Electric Strength ' Part AC for further Model Compor All models T1 All models EU Earthing Continuity Electric Strength ' 	sting Requirements Test Special Constru- r information. Removable nent Parts N/A T N/A T N/A Y Test Exemptions - Test Exemptions - Thest Exemptions - Thest Exemptions - Thest Exemptions - Thest Component Exemptions - Thest Component Exemptions - Thest Exemptions - The term of term of the term of t	Test probe location Primary to Secondary Primary to Secondary This test is not requi his test is not require ptions - The following	V rms 3000 3000 red for the d for the solid-sta	V dc 4242 4242 the follow	Test Time, s 1 1 ying models:	
Production-Line Ter Electric Strength ' Part AC for further Model Compon All models T1 All models EU Earthing Continuity Electric Strength ' disconnected from the N/A	sting Requirements Test Special Constru- r information. Removable nent Parts N/A T N/A T N/A Y Test Exemptions - Test Exemptions - Thest Exemptions - Thest Exemptions - Thest Exemptions - Thest Component Exemptions - Thest Component Exemptions - Thest Exemptions - The term of term of the term of t	Test probe location Primary to Secondary Primary to Secondary This test is not requi his test is not require ptions - The following e circuitry during the	V rms 3000 3000 red for the d for the solid-sta	V dc 4242 4242 the follow	Test Time, s 1 1 ying models:	
Production-Line Ter Electric Strength ' Part AC for further Model Compon All models T1 All models EU Earthing Continuity Electric Strength ' disconnected from the N/A	sting Requirements Test Special Constru- r information. Removable nent Parts N/A T N/A T N/A T N/A Y Test Exemptions - Test Component Exempt the remainder of the ecifics for Follow-1	Test probe location Primary to Secondary Primary to Secondary This test is not requi his test is not require ptions - The following e circuitry during the	V rms 3000 3000 red for the solid-sta performan	V dc 4242 4242 the follow e followin	Test Time, s 1 1 ying models:	

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4.1.2	TABLE: list of c	ritical compone	ents			Pass
Object/part or Description	Manufacturer/ type/model trademark		technical data	Product Category CCN(s)	Required Marks of Conformit Y	Supplement ID
01. Enclosure	SABIC INNOVATIVE PLASTICS US L L C	915R(GG)	Two pieces construction, secured together by ultrasonic welding, rated V-0 or better, 120 degree C min. Minimum 2.0 mm thickness. See Illustration-1 and Illustration-2 for dimensions	QMFZ2	UL	
01a. Enclosure	SABIC JAPAN L L C	945 (GG)	Two pieces construction, secured together by ultrasonic welding, rated V-0 or better, 120 degree C min. Minimum 2.0 mm thickness. See Illustration-1 and Illustration-2 for dimensions	QMFZ2	UL	
01b. Enclosure	LG CHEM (GUANGZHOU) ENGINEERING PLASTICS CO LTD	LUPOY EF- 1006F(m)	Two pieces construction, secured together by ultrasonic welding, rated V-0 or better, 115 degree C min. Minimum 2.0 mm thickness. See Illustration-1 and Illustration-2 for dimensions	QMFZ2	UL	
01c. Enclosure	COVESTRO DEUTSCHLAND AG	FR6005 + (z)	Two pieces construction, secured	QMFZ2	UL	

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	[PC RESINS]		together by ultrasonic		
			welding, rated V-0 or		
			better, 105 degree C		
			min. Minimum 2.0 mm		
			thickness. See		
			Illustration-1 and		
			Illustration-2 for		
			dimensions		
01d. Enclosure	SILVER AGE	PC2330	Two pieces	QMFZ2	UL
	ENGINEERING		construction, secured		
	PLASTICS		together by ultrasonic		
	(DONGGUAN) CO		welding, rated V-0 or		
	LTD		better, 115 degree C		
			min. Minimum 2.0 mm		
			thickness. See		
			Illustration-1 and		
			Illustration-2 for		
			dimensions		
	TEGU IDITONG	TTT 201 GD			
02. Appliance	TECX-UNIONS	TU-301-SP,	Rated 250 V, 15 A, 105	AXUT2	UL
Inlet (for T3	TECHNOLOGY CORP	TU-301-A, TU-	degree C min. (C14		
model) (for x=B)		301-AP, TU-	type)		
		301-S, TU-			
		301-AP-A and			
		TU-301-AL			
02a. Appliance	SUN FAIR	S-03	Rated 250 V, 10 A, 75	AXUT2	UL
Inlet (alternate)	ELECTRIC WIRE &		degree C min. (C14		
(for T3 model)	CABLE (HK) CO		type)		
(for x=B)	LTD				
02b. Appliance	ZHEJIANG LECI	DB-14, DB-14-	Rated 250 V, 15 A, 75	AXUT2	UL
Inlet (alternate)	ELECTRONICS CO	1, DB-14-2,	degree C min. (C14		
(for T3 model)	LTD	DB-14-3, DB-	type)		
$\frac{1}{(\text{for } x=B)}$		14-5, DB-14-	'		
		6, DB-14-1-7,			
		DB-14-8, DB-			
		14-10 DB			
02c. Appliance	ZHE JIANG BEI ER		Rated 250 V, 10 A, 75	AXUT2	UL
Inlet (alternate)	JIA ELECTRONIC	ST-A01-0030, ST-A01-001L,	degree C min. (C14	AAU 1 2	
(for T3 model)	CO LTD	ST-A01-002L,	-		
(TOT IS MODEL)			type) Form Issued: 2015-02-25		

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(for x=B)		ST-A01-003K			
02d. Appliance Inlet (alternate) (for T3 model) (for x=B)	ECHO ELECTRIC CO LTD	AC-P01, AC- P03, AC-P06, AC-P07	Rated 250 V, 10 A, 75 degree C min. (C14 type)	AXUT2	UL
02-1. Appliance Inlet (for T3A model) (for x=N)	TECX-UNIONS TECHNOLOGY CORP	TU-333	Rated 250 V, 2.5 A, 105 degree C min. (C6 type)	AXUT2	UL
02-1a. Appliance Inlet (alternate) (for T3A model) (for x=N)	SUN FAIR ELECTRIC WIRE & CABLE (HK) CO LTD	S-02	Rated 250 V, 2.5 A, 75 degree C min. (C6 type)	AXUT2	UL
02-1b. Appliance Inlet (alternate) (for T3A model) (for x=N)	ZHEJIANG LECI ELECTRONICS CO LTD	DB-6, DB-6-2, DB-6-3, DB-6- 4, DB-6- 2BP27P27	Rated 250 V, 2.5 A, 75 degree C min. (C6 type)	AXUT2	UL
02-1c. Appliance Inlet (alternate) (for T3A model) (for x=N)	ZHE JIANG BEI ER JIA ELECTRONIC CO LTD	ST-A04-002, ST-A04-001	Rated 250 V, 2.5 A, 75 degree C min. (C6 type)	AXUT2	UL
03. Fuse (F1)	Various	Various	Listed, T1AL, 250Vac	JDYX	UL
03a. Fuse (F1) (Alternate)	CONQUER ELECTRONICS CO LTD	MST	Rated T1AL, 250Vac.	JDYX2	UL
03b. Fuse (F1) (Alternate)	EVER ISLAND ELECTRIC CO LTD & WALTER ELECTRIC	2010	Rated T1AL, 250Vac.	JDYX2	UL
03c. Fuse (F1) (Alternate)	HOLLYLAND CO LTD	5ET	Rated T1AL, 250Vac.	JDYX2	UL
03d. Fuse (F1) (Alternate)	BEL FUSE INC	RST	Rated T1AL, 250Vac.	JDYX2	UL
03e. Fuse (F1) (Alternate)	COOPER BUSSMANN LLC	SS-5	Rated T1AL, 250Vac.	JDYX2	UL
03f. Fuse (F1) (Alternate)	LITTELFUSE WICKMANN WERKE	392	Rated T1AL, 250Vac.	JDYX2	UL

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03g. Fuse (F1) (Alternate)	DONGGUAN BETTER ELECTRONIC TECHNOLOGY CO LTD	932	Rated T1AL, 250Vac.	JDYX2	UL
04. X-Capacitor (CX1) (optional)	Cheng Tung Industrial Co Ltd	СТХ	Rated max 0.22 uF, min 250 V, X1 or X2 type, 110 degree C. (Compliance with IEC 60384-14)	FOWX2	UL
04a. X-Capacitor (CX1) (optional) (Alternate)	Tenta Electric Industrial Co Ltd	MEX	Rated max 0.22uF, min 250 V, X1 or X2 type, 100 degree C. (Compliance with IEC 60384-14)	FOWX2	UL
04b. X-Capacitor (CX1) (optional) (Alternate)	Ultra Tech Xiphi Enterprise Co Ltd	HQX	Rated max 0.22uF, min 250 V, X1 or X2 type, 100 degree C. (Compliance with IEC 60384-14)	FOWX2	UL
04c. X-Capacitor (CX1) (optional) (Alternate)	CARLI ELECTRONICS CO LTD	MPX	Rated max 0.22uF, min 250 V, X1 or X2 type, 100 degree C. (Compliance with IEC 60384-14)	FOWX2	UL
04d. X-Capacitor (CX1) (optional) (Alternate)	JOEY ELECTRONICS (DONG GUAN) CO LTD	MPX	Rated max 0.22uF, min 250 V, X1 or X2 type, 105 degree C. (Compliance with IEC 60384-14)	FOWX2	UL
04e. X-Capacitor (CX1) (optional) (Alternate)	XIANGTAI ELECTRONIC (SHENZHEN) CO LTD	МКР/МРХ	Rated max 0.22uF, min 250 V, X1 or X2 type, 110 degree C. (Compliance with IEC 60384-14)	FOWX2	UL
05. Bleeder Resistors (R1, R2)	TZAI YUAN ENTERPRISE CO LTD	HSMD******** , SMD*******	100K ohm - 2M ohm, min. 1/4W	AZOP2	UL

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05a. Bleeder	PROSPERITY	FVS06, TF12V,	100K ohm - 2M ohm, min.	AZOT2	UL
Resistors (R1, R2)	DIELECTRICS CO	FVS20, TF20V,	1/4W	ADOIZ	
	LTD	FVS25, TF25V			
05b. Bleeder	Ralec Electronic	RTV06, RTV12,	100K ohm - 2M ohm, min.		
Resistors (R1, R2)	Corp	RTV20, RTV25	1/4W		
06. Bridge Diode			Rated 2A, minimum 600		
(BD1)			V.		
07. Storage			Rated 400 V, rated		
Capacitor (C1)			33uF, min. 105 degree		
			C, provided with		
			integral pressure		
			relief		
08. Transistor	Various	Various	Rated 4-10 A, minimum		
(Q1)			600 V.		
09. Bridge	Success	SE, SB, SF	CY1 Rated max. 2200pF,	FOWX2	UL
Capacitors (CY1,	Electronics Co		CY2 Rated max. 100pF		
CY2) (optional)	Ltd		min. 250 Vac, 125		
			degree C, Y1 type.		
			(Compliance with IEC		
			60384-14)		
09a. Bridge	TDK CORPORATION	CD	CY1 Rated max. 2200pF,	FOWX2	UL
Capacitors (CY1,			CY2 Rated max. 100pF		
CY2) (optional)			min. 250 Vac, 125		
(Alternate)			degree C, Y1 type.		
			(Compliance with IEC		
09b. Bridge	Walsin	АН	60384-14)	FOWX2	TUT.
Capacitors (CY1,	Technology Corp	AH	CY1 Rated max. 2200pF, CY2 Rated max. 100pF	FOWXZ	
_	recumorogy corp		_		
CY2) (optional) (Alternate)			min. 250 Vac, 125 degree C, Y1 type.		
(AILEINALE)			(Compliance with IEC		
			60384-14)		
09c. Bridge	Haohua	СТ 7	CY1 Rated max. 2200pF,	FOWX2	UL
Capacitors (CY1,	Electronic Co		CY2 Rated max. 100pF		
CY2) (optional)			min. 250 Vac, 125		
(Alternate)			degree C, Y1 type.		

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			(Compliance with IEC			
			60384-14)			
09d. Bridge	XIANGTAI	YOB, YOF, YOE	CY1 Rated max. 2200pF,	FOWX2	UL	
Capacitors (CY1,	ELECTRONIC	100, 101, 101	CY2 Rated max. 100pF	1 0 1 2 2	01	
CY2) (optional)	(SHENZHEN) CO		min. 250 Vac, 125			
(Alternate)	LTD		degree C, Y1 type.			
(Arternate)			(Compliance with IEC			
			60384-14)			
09e. Bridge	JUHONG ELE CO	JB	CY1 Rated max. 2200pF,	FOWX2	UL	
Capacitors (CY1,			CY2 Rated max. 100pF			
CY2) (optional)			min. 250 Vac, 125			
(Alternate)			degree C, Y1 type.			
			(Compliance with IEC			
			60384-14)			
09f. Bridge	MURATA MFG CO	КХ	CY1 Rated max. 2200pF,	FOWX2	UL	
Capacitors (CY1,	LTD		CY2 Rated max. 100pF			
CY2) (optional)			min. 250 Vac, 125			
(Alternate)			degree C, Y1 type.			
			(Compliance with IEC			
			60384-14)			
10. Optical	Lite-On	LTV-817	Isolation: 5000 Vac,	FPQU2	UL	
Isolator (PC1)	Technology Corp		minimum 100 degree C.			
10a. Optical	Everlight	EL817	Isolation: 5000 Vac,	FPQU2	UL	
Isolators (PC1)	Electronics Co		minimum 110 degree C.			
(Alternate)	Ltd					
10b. Optical	COSMO	K1010	Isolation voltage	FPQU2	UL	
Isolators (PC1)	ELECTRONICS CORP		minimum 5000 Vac,			
(Alternate)			minimum 115 degree C.			
10c. Optical	BRIGHT LED	BPC-	Isolation voltage	FPQU2	UL	
Isolators (PC1)	ELECTRONICS CORP	817XXXXXX,	minimum 5000 Vac,			
(Alternate)		BPC-	minimum 100 degree C.			
		817MXXXXXX,				
		BPC-				
		817SXXXXXX,				
		where XXXXXX				
		can be any				
		alphanumeric				

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		character or blank.			
10d. Optical Isolators (PC1) (Alternate)	RENESAS ELECTRONICS CORPORATION	PS2561-1	Isolation voltage minimum 5000 Vac, minimum 100 degree C.	FPQU2	UL
10e. Optical Isolators (PC1) (Alternate)	SHENZHEN ORIENT COMPONENTS CO LTD	ORPC-817Mx@, ORPC-817Sx@, ORPC-817x@	Isolation voltage minimum 5000 Vac, minimum 100 degree C.	FPQU2	UL
11. Line filter (NF1) (Optional)	Various	NF00030	Open type construction. Rated 105 degree C. See Illustion-09 for construction details.		
11a Core	Various	Various	Ferrite, toroidal, measured overall approx. 15.6 mm OD by 9.8 mm ID by 3.0 mm wide.		
11b Coil	Various	Various	Rated minimum 105 degree C.	OBMW2	UL
12. Transformer (T1)	ENG Electric Co Ltd	XF00941	Class B, See Illustion- 06 for construction details.		
12. Transformer (T1)	ENG Electric Co Ltd	XF00962	Class B, See Illustion- 07 for construction details.		
12. Transformer (T1)	ENG Electric Co Ltd	XF00933	Class B, See Illustion- 08 for construction details.		
12-01. Insulation system for Transformer (T1)	ENG Electric Co., Ltd.	ENG130-1	Insulation system Class B (130 degree C, adapted form GREAT LEOFLON INDUSTRIAL CO LTD, Type GH-130)	ОВЈҰ2	UL
12-02. Core			EE type, Ferrite, dimension 22.8mm OD by 19.2mm ID by 5.7mm		

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			wide.			
12-03. Coil			130 degree C	OBMW2	UL	
12-04. Bobbin	Chang Chun Plastics Co., Ltd.	Т375Ј	V-0, 150degree C, Phenolic, thickness 0.8mm minimum	QMFZ2	UL	
12-04a. Bobbin (Alternate)	SUMITOMO BAKELITE CO LTD	PM-9820	V-0, 150degree C, Phenolic, thickness 0.71mm minimum	QMFZ2	UL	
12-05. Tubing/Sleeving	Great Holding Industrial Co. Ltd.	TFL, TFS, TFT	Rated 200 degree C, VW- 1, 600V max.	YDPU2	UL	
12-06. Triple Insulated Wire	Great Leoflon Industrial Co. Ltd.	TRW(B)	130 degree C	OBJT2	UL	
12-07. Varnish	Elantas Electrical Insulation Elantas Pdg Inc	V1630FS	Rated minimum 130 degree C.	OBOR2	UL	
12-07a. Varnish (Alternate)	JOHN C DOLPH CO	BC-346A	Rated minimum 200 degree C.	OBOR2	UL	
12-08. Insulation Tape	3M Company	1350F-1	130 degree C.	OANZ2	UL	
12-08a. Insulation Tape (Alternate)	3M Company	1350T-1	130 degree C.	OANZ2	UL	
12-08a. Insulation Tape (Alternate)	BONDTEC PACIFIC CO LTD	370S	130 degree C.	OANZ2	UL	
13. Internal Glue Materials			Rated V-2 minimum.	QMFZ2	UL	
14. Internal Plastic Part Materials			Rated minimum V-2.	QMFZ2	UL	
15. Strain Relief	Various	Various	V-1 or better. See Illustion-03 for strain relief dimension details.	QMFZ2	UL	
16. PWB	Various	Various	V-0 or better, minimum	ZPMV2		

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			105 degree C.			
17. Label (optional)	Various	Various	Minimum 70 degree C. if maximum surface temperature not specified.	PGDQ2, PGJI2	UL	
18. Heat Sink (HS1) (Consideration as Primary)	Various	Various	Aluminum, minimum 2.0 mm thick. See Illustration-4 for dimensions.			
19. Heat Sink (HS2) (Consideration as secondary)	Various	Various	Aluminum, minimum 1.0 mm thick. See Illustration-5 for dimensions.			
20. Current sense resistor (R10) (for GT-46181- 1605-T**)			1.1 ohm, 1W.			
20. Current sense resistor (R10) (for GT-46181- 1505-T**) (for 6A- 182DX05A)			1.2 ohm, 1W.			
20. Current sense resistor (R10) (for for GT-46181- *09*-T**, GT- 46181-*12*-T**, GT-46181-*15*-T**)			1.0 ohm, 1W.			
21. Bonding Conductor	Various	Various	Green or green/yellow wire, minimum No. 18 AWG. Min 105 degree C, rated 300V minimum. One end mechanically secured and soldered to the ground pin of the appliance inlet, the other end mechanically	AVLV, AVLV2	UL	

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			secured and soldered to PWB.			
22. Secondary Capacitor (C8)	Various	Various	Min. 105°C	QMFZ2	UL	
23. Output Cord	Various		Minimum 300 V, 80 degree C, maximum 3.05 m, marked VW-1 or FT-1. Suitable for external use.	AVLV2	UL	

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ENCLOSURES

Туре	Supplement ID	Description
Figures	Figure - 1	Overall View - 1 (for Cl4 Inlet type)
	Figure - 2	Overall View - 2 (for C6 Inlet type)
	Figure - 3	Overall View - 3
	Figure - 4	Internal View - 1 (for Cl4 Inlet type)
	Figure - 5	Internal View - 2 (for C6 Inlet type)
	Figure - 6	PWB View - 1 (for C14 Inlet type (Earthing wire and output fixed by glue))
	Figure - 7	PWB View - 2 (for C6 Inlet type (Earthing wire and output fixed by glue))
	Figure - 8	PWB View - 3
Illustrations	Illustration - 1	Enclosure drawing (for Cl4 Inlet type)
	Illustration - 2	Enclosure drawing (for C6 Inlet type)
	Illustration - 3	Strain Relief Means drawing
	Illustration - 4	Heatsink HS1 drawing
	Illustration - 5	Heatsink HS2 drawing
	Illustration - 6	T1 spec. (p/n XF00941 -)
	Illustration - 7	T1 spec. (p/n XF00962)
	Illustration - 8	T1 spec. (p/n XF00933)
	Illustration - 9	NF1 spec.
	Illustration - 10	Layout
	Illustration - 11	Model difference

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