SGS

Summary of Test Report No.	Date	No. of pages in Test Report
BG:HL:8510000407	06-11-2017	1 to 113
Name of Manufacturer	**GlobTek (Suzhou) Co., Ltd**	
Product	**ITE POWER SUPPLY (Power Adapter for IT Equipment)**	
Model	**GT-46181-1805-T3** **GT-46181-1605-T3,** **GT-46181-1505-T3,** **GT-46181-0809-3.8-T3,** **GT-46181-1209-3.05-T3,** **GT-46181-1809-3.05-T3,** **GT-46181-1809-T3,** **GT-46181-1812-2.0-T3,** **GT-46181-1812-T3,** **GT-46181-1815-T3**	
Model difference(If applicable)	YES ☒ or NO ☐ or N/A ☐	
Model difference verified as per DEITY Guidelines for series formulation	YES ☒ or NO ☐ or N/A ☐	
Test Result	See below	

PART I: GENERAL

Sl. No.	Test Requirement	Clause	Verdict	Remarks
1	Components	1.5	P	
2	Power interface	1.6	P	
3	Marking and instructions	1.7	P	

SGS INDIA PVT. LIMITED SGS BANGALORE

PART II: PROTECTION FROM HAZARDS

Sl. No.	Test Requirement	Clause	Verdict	Remarks
1	Protection from electric shock and energy hazards	2.1	P	
2	SELV circuits	2.2	P	
3	TNV circuits	2.3	N/A	
4	Limited current circuits	2.4	P	
5	Limited power sources	2.5	P	
6	Provisions for earthing and bonding	2.6	P	
7	Overcurrent and earth fault protection in primary circuits	2.7	P	
8	Safety interlocks	2.8	N/A	
9	Electrical insulation	2.9	P	
10	Clearances, creepage distances and distances through insulation	2.10	P	

PART III: WIRING, CONNECTIONS AND SUPPLY

Sl. No.	Test Requirement	Clause	Verdict	Remarks
1	General	3.1	P	
2	Connection to a mains supply	3.2	P	
3	Wiring terminals for connection of external conductors	3.3	N/A	
3	Disconnection from the mains supply	3.4	P	
4	Interconnection of equipment	3.5	P	

SGS INDIA PVT. LIMITED BANGALORE

PART IV: PHYSICAL REQUIREMENTS

Sl. No.	Test Requirement	Clause	Verdict	Remarks
1	Stability	4.1	N/A	
2	Mechanical strength	4.2	P	
3	Design and construction	4.3	P	
4	Protection against hazardous moving parts	4.4	N/A	
5	Thermal requirements	4.5	P	
6	Openings in enclosures	4.6	N/A	
7	Resistance to fire	4.7	P	

PART V: ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS

Sl. No.	Test Requirement	Clause	Verdict	Remarks
1	Touch current and protective conductor current	5.1	P	
2	Electric strength	5.2	P	
3	Abnormal operating and fault conditions	5.3	P	

PART VI: CONNECTION TELECOMMUNICATION NETWORKS TO CABLE DISTRIBUTION SYSTEMS

Sl. No.	Test Requirement	Clause	Verdict	Remarks
1	Protection of telecommunication network service persons, and users of other equipment connected to the network, from hazards in the equipment	6.1	N/A	
2	Protection of equipment users from overvoltages on telecommunication networks	6.2	N/A	

SGS INDIA PVT. LIMITED SGS BANGALORE

Summary Report... (Page no. I to IV)

3	Protection of the telecommunication wiring system from overheating	6.3	N/A	
4	General	7.1	N/A	
5	Protection of cable distribution system service persons, and users of other equipment connected to the system, from hazardous voltages in the equipment	7.2	N/A	
6	Protection of equipment users from overvoltages on the cable distribution system	7.3	N/A	
7	Insulation between primary circuits and cable distribution systems	7.4	N/A	

General Information:

The conformity certificates of critical components are verified to ensure complete compliance of equipment under test and details regarding harmonized IEC standards (where IEC standards are not available) are also provided in the list of critical component

Abbreviations: P = Pass N/A = Not Applicable

CONCLUSION:

I hereby, undertake that the verdict stated in the test reports for all the tests matches with the test results.

1. Sample meets all requirements of IS 13252 (Part 1): 2010 + A1: 2013 + A2 : 2015: YES ☒ or NO ☐
2. Sample fails to meet the following test requirements: YES ☐ or NO ☒

SGS INDIA PVT. LIMITED SGS BANGALORE

Date: 06-11-2017 (Signature of Authorized person with stamp)

Manufacturer:	**GlobTek (Suzhou) Co., Ltd** No. 76, Jinling East Road, Suzhou Industrial Park, China		
Test item:	**ITE POWER SUPPLY (Power Adapter for IT Equipment)**		
Identification:	**GT-46181-1805-T3**	*Serial No.:*	**NIL**
	GT-46181-1605-T3		NIL
	GT-46181-1505-T3		NIL
	GT-46181-0809-3.8-T3		NIL
	GT-46181-1209-3.05-T3		NIL
	GT-46181-1809-3.05-T3		NIL
	GT-46181-1809-T3		NIL
	GT-46181-1812-2.0-T3		NIL
	GT-46181-1812-T3		NIL
	GT-46181-1815-T3		NIL
Receipt No.:	**8510000407**	*Date of receipt:*	**26.09.2017**
Testing laboratory and its address:	**SGS India Pvt. Ltd.** Ahmed Plaza, No.38/1 and 38/2, New BBMP No.88/45/45 Beratena Agrahara, Begur Hobli, Hosur Main Road,Bangalore – 560 100.		
Test specification:	**IS 13252 (Part 1): 2010 + A1: 2013 + A2 : 2015 /** **IEC 60950-1: 2005 + A1: 2009 + A2 : 2013**		
Test Result:	*The test item passed the test specification(s).*		
Other Aspects: - *Test report total pages: 1 to 113*			
This test report relates to the test sample submitted and list of documents attached.			

Tested by:	**Approved by / Authorized Signatory:**	**Issued by:**
Harsha	Nagaraj Aithal	Nagaraj Aithal
Harsha Joshi/Test Engineer	**Nagaraj Aithal /Senior Executive**	**Nagaraj Aithal /Senior Executive**
Date: 06.11.2017	**Date: 06.11.2017**	**Date: 06.11.2017**

SGS INDIA PVT. LTD. SGS BANGALORE

SGS

TEST REPORT

IS 13252 (Part 1): 2010 + A1: 2013+ A2: 2015 / IEC 60950-1: 2005 + A1: 2009 + A2: 2013 Information technology equipment – Safety – Part 1: General requirements

"Power Adaptor for IT Equipment"

Report Reference No.....:	BG:HL:8510000407
Date of issue.....:	(see cover page)
Total number of pages .....:	(see cover page)
Testing Laboratory.....:	**SGS India Pvt. Ltd.**
Address .....:	Ahmed Plaza, No.38/1 and 38/2, New BBMP No.88/45/45 Beratena Agrahara, Begur Hobli, Hosur Main Road Bangalore – 560 100.
Manufacturer's name .....:	**GlobTek (Suzhou) Co., Ltd**
Address .....:	No. 76, Jinling East Road, Suzhou Industrial Park, China
Test specification:	
Standard.....:	**IS 13252 (Part 1): 2010 + A1: 2013+ A2:2015 / IEC 60950-1: 2005 + A1: 2009 +A2:2013**
Test procedure .....:	Compliance Report
Non-standard test method.....:	N/A
Test Report Form No.....:	BIS_IT/PA_IS13252_V1.3
Test Report Form(s) Originator .....:	Bureau of Indian Standards
Master TRF.....:	03/06/2016
Test item description .....:	**ITE POWER SUPPLY (Power Adapter for IT Equipment)**
Trade Mark .....:	GlobTek, Inc.
Model/Type reference .....:	**GT-46181-1805-T3** GT-46181-1605-T3 GT-46181-1505-T3 GT-46181-0809-3.8-T3 GT-46181-1209-3.05-T3 GT-46181-1809-3.05-T3 GT-46181-1809-T3 GT-46181-1812-2.0-T3 GT-46181-1812-T3 GT-46181-1815-T3
Ratings .....:	INPUT: 100-240V ~ ,50-60Hz, 0.5A **OUTPUT: 5V ⎓ 3.6A (GT-46181-1805-T3)** OUTPUT: 5V ⎓ 3.2A (GT-46181-1605-T3)

	OUTPUT: 5V ⎓ 3.0A (GT-46181-1505-T3) OUTPUT: 5.2V ⎓ 1.53A (GT-46181-0809-3.8-T3) OUTPUT: 5.95V ⎓ 2.0A (GT-46181-1209-3.05-T3) OUTPUT: 5.95V ⎓ 3.0A (GT-46181-1809-3.05-T3) OUTPUT: 9.0V ⎓ 2.0A (GT-46181-1809-T3) OUTPUT: 10V ⎓ 1.8A (GT-46181-1812-2.0-T3) OUTPUT: 12V ⎓ 1.5A (GT-46181-1812-T3) OUTPUT: 15V ⎓ 1.2A (GT-46181-1815-T3)
Other Documents submitted.....:	Please refer to Table – List of Attachments at Page No. 13

Tested by:	Approved by / Authorized Signatory:	Issued by:
Harsha	Nagaraj Aithal	Nagaraj Aithal
Harsha Joshi/Test Engineer	Nagaraj Aithal /Senior Executive	Nagaraj Aithal /Senior Executive
Date: 06.11.2017	Date: 06.11.2017	Date: 06.11.2017

SGS INDIA PVT. LIMITED BANGALORE

Test Code	Description	Measurement/ testing	Total No. of tests	Total no. of applicable tests/ Req.	No. of tests/ Req. passed	Page No.
EL 2100	General Requirements	Components (Cl.1.5)	18	08	08	17
EL 2101	General Requirements	Power interface (Cl.1.6)	05	04	04	18
EL 2102	Marking Requirements	Marking & instructions(Cl.1.7)	39	17	17	21
EL 2103	Electrical safety	Protection from electric shock and energy hazards (Cl.2.1)	14	06	06	23
EL 2104	Electrical safety	SELV Circuits (Cl.2.2)	04	04	04	24
EL 2105	Electrical safety	TNV Circuits (Cl.2.3)	12	00	00	25
EL 2106	Electrical safety	Limited current circuits (Cl.2.4)	04	04	04	26
EL 2107	Electrical safety	Limited Power sources (Cl.2.5)	07	03	03	28
EL 2108	Electrical safety	Provisions for earthing and bonding (Cl.2.6)	19	14	14	29
EL 2109	Electrical safety	Overcurrent and earth fault protection in primary circuits (Cl.2.7)	07	05	05	30
EL 2110	Electrical safety	Safety Interlocks (Cl.2.8)	13	00	00	31
EL 2111	Electrical safety	Electrical Insulation (Cl.2.9)	05	05	05	32
EL 2112	Electrical safety	Clearances, Creepage distances and distances through insulation (Cl.2.10)	63	31	31	36
EL 2113	Wiring	Wiring, connections and supply (Cl.3)	11	07	07	37
EL 2114	Wiring	Connection to a main supply (Cl.3.2)	14	03	03	39
EL 2115	Wiring	Wiring terminals for connection of external conductors (Cl.3.3)	09	00	00	40
EL 2116	Wiring	Disconnection for the main supply (Cl.3.4)	12	05	05	41
EL 2117	Wiring	Interconnection of equipment (Cl.3.5)	05	03	03	42
EL 2118	Mechanical properties	Stability (Cl.4.1)	05	01	01	43

SGS INDIA PVT. LIMITED SGS BANGALORE

EL 2119	Mechanical properties	Mechanical strength (Cl.4.2)	13	06	06	44
EL 2120	Mechanical properties	Design and construction (Cl.4.3)	25	04	04	46
EL 2121	Mechanical properties	Protection against hazardous moving parts (Cl.4.4)	14	00	00	47
EL 2122	Thermal Properties	Thermal requirements (Cl.4.5)	06	06	06	48
EL 2123	Mechanical properties	Openings in Enclosures (Cl.4.6)	18	00	00	50
EL 2124	Fire Safety	Resistance to fire (Cl.4.7)	25	08	08	55
EL 2125	Insulating properties	Electrical requirements and simulated abnormal conditions(Cl.5),5.1	20	10	10	57
EL 2126	Insulating properties	Electric Strength (Cl.5.2)	03	03	03	58
EL 2127	Insulating properties	Abnormal operating and fault conditions (Cl.5.3)	11	07	07	59
EL 2128	Communicating connection	Protection of telecommunication network service persons, and users of other equipment connected to the network, from hazards in the equipment(Cl.6.1)	04	00	00	61
EL 2129	Communicating connection	Protection of equipment users from overvoltages on telecommunication networks (Cl.6.2)	06	00	00	62
EL 2130	Communicating connection	Protection of the telecommunication wiring system from overheating (Cl.6.3)	05	00	00	64
EL 2131	Connection to cable distribution systems	Connection to cable distribution systems (Cl.7)	08	00	00	65
EL 2132	Fire safety	Tests for resistance to heat and fire (Annex A)	20	00	00	67
EL 2133	Insulating properties	Motor tests under abnormal conditions (Annex B)	19	00	00	69
EL 2134	Electrical Safety	Transformers (Annex C)	03	03	03	70
EL 2135	Insulating	Measuring Instruments For Touch-Current	03	02	02	71

	properties	Tests (Annex D)				
EL 2136	Thermal Properties	Temperature Rise Of A Winding(Annex E)	01	00	00	72
EL 2137	Electrical safety	Measurement Of Clearances And Creepage Distances(Annex F)	01	01	01	73
EL 2138	Electrical safety	Alternative Method For Determining Minimum Clearances(Annex G)	17	00	00	75
EL 2139	Radiation Safety	Ionizing Radiation(Annex H)	01	00	00	76
EL 2140	Electrical Safety	Table of electrochemical potentials (Annex J)	01	00	00	77
EL 2141	General Requirements	Thermal controls (Annex K)	07	00	00	78
EL 2142	General Requirements	Normal load conditions for some types of electrical business equipment (Annex L)	08	02	02	79
EL 2143	Electrical Safety	Criteria for telephone ringing signals (Annex M)	13	00	00	80
EL 2144	Electrical safety	Impulse Test Generators(Annex N)	03	00	00	81
EL 2145	General Requirements	Normative References(Annex P)	01	01	01	82
EL 2146	General Requirements	Voltage dependent resistors (VDRs) (Annex Q)	03	00	00	83
EL 2147	General Requirements	Examples Of Requirements For Quality Control Programmes(Annex R)	03	00	00	84
EL 2148	General Requirements	Procedure For Impulse Testing (Annex S)	04	00	00	85
EL 2149	Protection against Ingress of water	Guidance On Protection Against Ingress Of Water (Annex T)	01	00	00	86
EL 2150	Wiring	Insulated Winding Wires For Use Without Interleaved Insulation (Annex U)	17	00	00	88
EL 2151	Electrical Safety	Ac Power Distribution Systems(Annex V)	05	03	03	89
EL 2152	Electrical	Summation Of Touch	08	00	00	90

	Safety	Currents (Annex W)				
EL 2153	Electrical Safety	Maximum Heating Effect In Transformer Tests(Annex X)	03	03	03	91
EL 2154	Radiation safety	Ultraviolet light conditioning test (Annex Y)	05	00	00	92
EL 2155	Electrical Safety	Overvoltage Categories (Annex Z)	01	01	01	93
EL 2156	Mechanical properties	Mandrel Test(Annex AA)	01	00	00	94
EL 2157	Electrical Safety	Changes In The Second Edition(Annex BB)	--	--	--	--
EL 2158	Electrical Safety	Evaluation Of Integrated Circuit (IC) Current Limiters (Annex CC)	06	00	00	95
EL 2159	Mechanical properties	Requirements For The Mounting Means Of Rack-Mounted Equipment (Annex DD)	04	00	00	96
EL 2160	Electrical Safety	Household And Home/Office Document/Media Shredders (Annex EE)	06	00	00	97

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

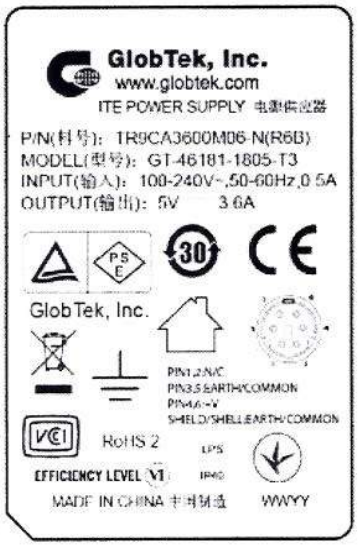
.....

(Approving Authority)

Copy of marking plate:

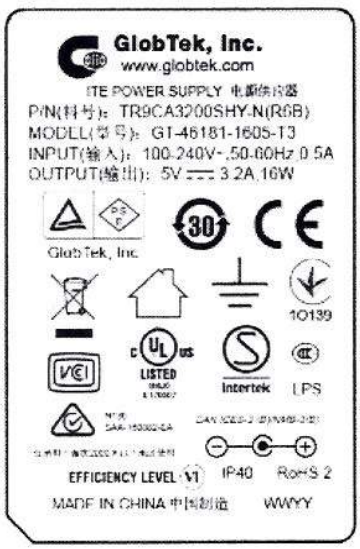
Base Model:

1. GT-46181-1805-T3



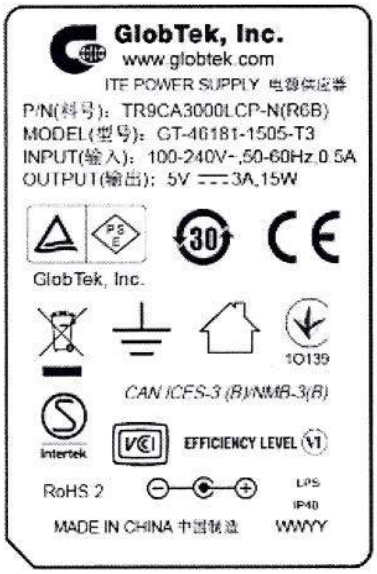
Series Model(s):

2. GT-46181-1605-T3

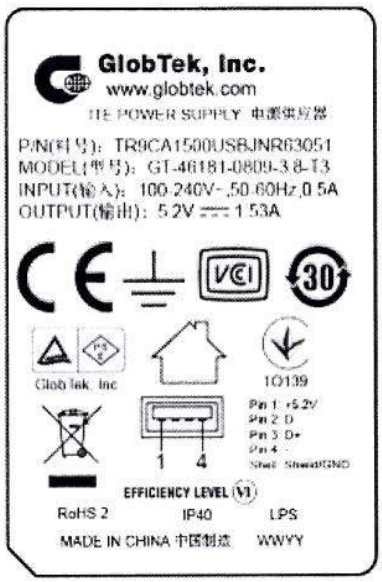


SGS INDIA PVT. LIMITED BANGALORE

3. GT-46181-1505-T3

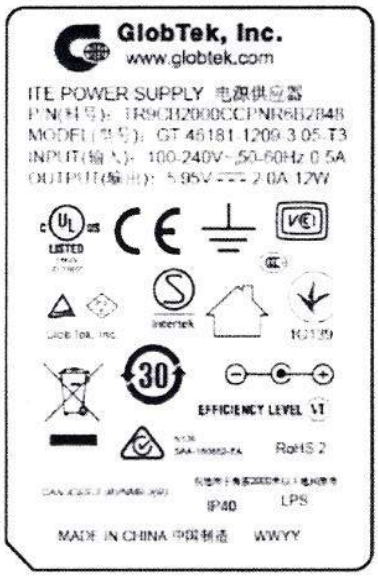


4. GT-46181-0809-3.8-T3

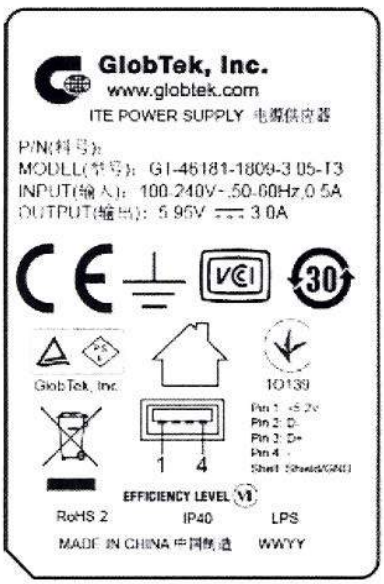


SGS INDIA PVT. LIMITED BANGALORE

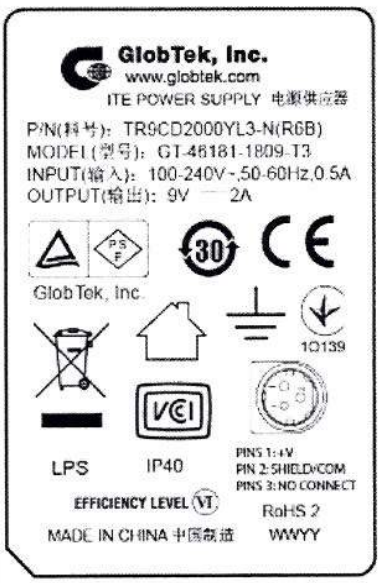
5. GT-46181-1209-3.05-T3



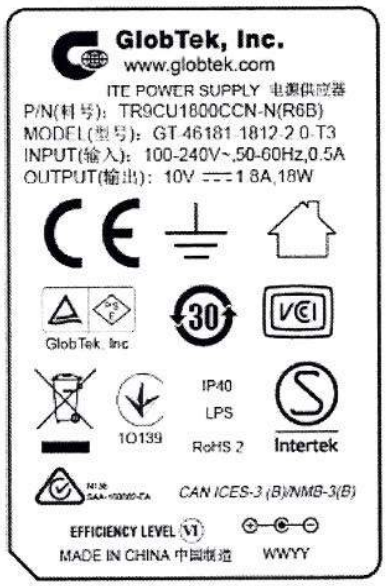
6. GT-46181-1809-3.05-T3



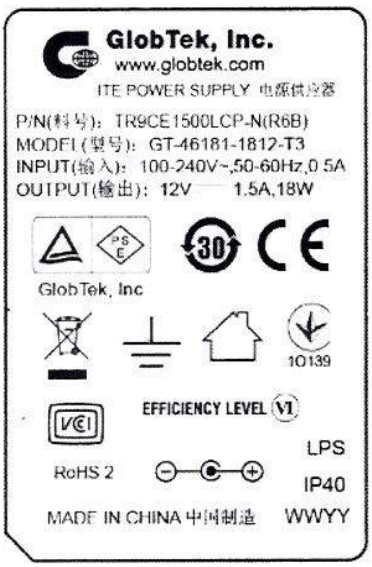
7. GT-46181-1809-T3



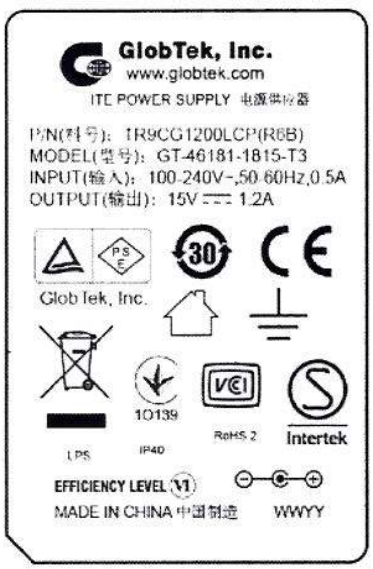
8. GT-46181-1812-2.0-T3



9. GT-46181-1812-T3



10. GT-46181-1815-T3



SGS INDIA PVT. LIMITED SGS BANGALORE

Table – List of Attachments

Attachment No.	Attachment Description	No. of pages in Attachment
Attachment – 1	Photo Document	10

General remarks:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

Possible test case verdicts:

- test case does not apply to the test object..... : N/A
- test object does meet the requirement..... : P (Pass)
- test object does not meet the requirement ..... : F (Fail)

Testing.....:

Date of receipt of test item..... : 26.09.2017

Date(s) of performance of tests..... : 27.09.2017 to 03.11.2017

Laboratory conditions.....:

Ambient Temperature..... : 25 +/- 3 °C

Ambient Humidity..... : 45% to 75% RH

Test item particulars ..... :	
Equipment mobility ..... :	☒ movable ☐ hand-held ☒ transportable ☐ stationary ☐ for building-in ☐ direct plug-in
Connection to the mains ..... :	☒ pluggable equipment [X] type A [] type B ☐ permanent connection ☒ detachable power supply cord ☐ non-detachable power supply cord ☐ not directly connected to the mains
Operating condition ..... :	☒ continuous ☐ rated operating / resting time:
Access location ..... :	☒ operator accessible ☐ restricted access location
Over voltage category (OVC) ..... :	☐ OVC I ☒ OVC II ☐ OVC III ☐ OVC IV ☐ other:
Mains supply tolerance (%) or absolute mains supply values ..... :	-10%, +6%
Class of equipment ..... :	☒ Class I ☐ Class II ☐ Class III ☐ Not classified
Considered current rating of protective device as a part of the building installation (A) ..... :	16A (for India)
Pollution degree (PD) ..... :	☐ PD 1 ☒ PD 2 ☐ PD 3
IP protection class ..... :	IP40
Altitude during operation (m) ..... :	Up to 2000
Altitude of test laboratory (m) ..... :	< 1000
Mass of equipment (kg) ..... :	0.16

Abbreviations that may be used throughout this test report:

PE/PB ..... :	protective earth/protective bonding	Pri ..... :	primary
CB ..... :	circuit breaker	sec ..... :	secondary
(SW)PS ..... :	(switching) power supply	gnd ..... :	ground
HV ..... :	high voltage	I/O ..... :	input/output
PCB ..... :	printed circuit (wiring) board	ii ..... :	installation instruction
TIW ..... :	triple insulated wire	PSU ..... :	Power Supply Unit

B/I ..... : built-in application (compliance shall be guarantee in host equipment)

F/B/S/R : Functional/Basic/Supplementary/Reinforced Insulation

SGS INDIA PVT. LIMITED SGS BANGALORE

General product information:

1) Application details / Description of the product:

The product is a Class I power supply intended for use with Information Technology Equipment (ITE), there electronic components mounted on PWB, and housed in a thermoplastic enclosure by ultrasonic welding.

Manufacturer is not supplying power cord with EUT; hence it is not a part of evaluation.

Model(s) list:

The EUT has following variants with below specification (Refer section 2 in conjunction with below table)

Specifications / Model Name	output voltage(V)	output current(A)	output power(W)	transformer model
GT-46181-1505-T3	5.0	3.0	15	XF00941
GT-46181-1605-T3	5.0	3.2	16	XF00941
GT-46181-1805-T3	5.0	3.6	18	XF00941
GT-46181-0809-3.8-T3	5.2	1.53	8	XF00941
GT-46181-1209-3.05-T3	5.95	2.0	12	XF00941
GT-46181-1809-3.05-T3	5.95	3.0	18	XF00941
GT-46181-1809-T3	9.0	2.0	18	XF00962
GT-46181-1812-2.0-T3	10.0	1.8	18	XF00962
GT-46181-1812-T3	12.0	1.5	18	XF00933
GT-46181-1815-T3	15.0	1.2	18	XF00933

Each standard rated output voltage designation corresponds to a transformer model. Each transformer model is identical in insulation construction (Class B) including clearance and creepage except number of turns in secondary per coil which is not safety relevant (SELV).

All testing performed at 50Hz, which is the standard frequency in India as per National Electrical Code.

Max. specified ambient temperature (°C)..... : 40 °C

2) Differences between the models:

All models are with same rated input voltage, same class of construction & same mains PCB design layout except Output Voltage, Output Current & No. of turns in Secondary winding of transformer.

Base model: GT-46181-1805-T3

Series model(s): GT-46181-1605-T3, GT-46181-1505-T3, GT-46181-0809-3.8-T3, GT-46181-1209-3.05-T3, GT-46181-1809-3.05-T3, GT-46181-1809-T3, GT-46181-1812-2.0-T3, GT-46181-1812-T3, GT-46181-1815-T3

Note: The output voltage varies from base model by number of turns in secondary winding of transformer which is not safety relevant (refer general product information for technical clarification.

Model No. tested with-in the family series .: GT-46181-1805-T3

3) Options:

The equipment was tested without any optional accessory installed. Hence, this report does not cover parameters that are influenced by the installation of optional accessory that might affect safety in the meaning of this standard.

Tests relating to General Requirements

EL 2100 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
1.5	Components*	EL 2100-00	Complies	P
1.5.1	General:	EL 2100-01	Verification of approvals with due correlation between the components used and the approval certificates submitted (Please see the table 1.5.1)	P
	Components shall be complying with IEC 60950-1 or relevant component standard.		As above	P
	Components and subassemblies approved for IEC 62368-1 can be considered as complying with this standard		As above	P
1.5.2	Evaluation and testing of components	EL 2100-02	Components which are certified for IEC and / or national standards are checked for correct applications and use in accordance with its rating	P
1.5.3	Thermal controls	EL 2100-03	No thermal controls	N/A
1.5.4	Transformers	EL 2100-04	Transformer complied with the relevant requirements See Annex C	P
1.5.5	Interconnecting cables*	EL 2100-05	Output cable for providing power to other equipment is carrying SELV under hazardous energy level 240VA	P
1.5.6	Capacitors bridging insulation *	EL 2100-06	Certified CX1 & CY1 capacitor used See appended table 1.5.1	P
1.5.7	Resistors bridging insulation	EL 2100-07	See below	P
1.5.7.1	Resistors bridging functional, basic or supplementary insulation*	EL 2100-08	Bleeder resistor (R1 & R2) are located between line and neutral after current fuse (F1), treat as providing protective device while short circuit.	P
1.5.7.2	Resistors bridging double or reinforced insulation between a.c. mains and other circuits	EL 2100-09	No such construction	N/A
1.5.7.3	Resistors bridging double insulation or reinforced insulation between the a.c. mains supply and circuits connected to an antenna or coaxial cable	EL 2100-10	No such construction	N/A
1.5.8	Components in equipment for IT power distribution systems*	EL 2100-11	Not intended for IT power distribution systems	N/A
1.5.9	Surge suppressors	EL 2100-12	Not used	N/A
1.5.9.1	General*	EL 2100-13	No VDR's used	N/A
1.5.9.2	Protection of VDRs*	EL 2100-14	As above	N/A

Tests relating to General Requirements **EL 2100 – V1.4**

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
1.5.9.3	Bridging of functional insulation by a VDR*	EL 2100-15	As above	N/A
1.5.9.4	Bridging of basic insulation by a VDR*	EL 2100-16	No such VDR used	N/A
1.5.9.5	Bridging of supplementary, double or reinforced insulation by a VDR*	EL 2100-17	No such VDR used	N/A

*- Total number of Requirements to be observed / inspected = 10
Total No of applicable Requirement = 04
No of Requirements for which the sample passed= 04

Total number of tests to be conducted = 08
Total No of applicable Tests = 04
No. of tests for which the sample passed = 04

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED SGS BANGALORE

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2101 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
1.6	Power interface*	EL 2101-00	Complies	P
1.6.1	AC power distribution systems*	EL 2101-01	TN power distribution system considered	P
1.6.2	Input current	EL 2101-02	See appended table 1.6.2	P
1.6.3	Voltage limit of hand-held equipment*	EL 2101-03	Not a handheld equipment	N/A
1.6.4	Neutral conductor *	EL 2101-04	Neutral is insulated from body by reinforced insulation throughout the equipment.	P

*- Total number of Requirements to be observed / inspected = 04
Total No of applicable Requirement = 03
No of Requirements for which the sample passed= 03

Total number of tests to be conducted = 01
Total No of applicable Tests = 01
No. of tests for which the sample passed= 01

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Marking Requirements **EL 2102 – V1.4**

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
1.7	Marking and instructions*	EL 2102-00	Complies	P
1.7.1	Power rating and identification markings		See below	P
1.7.1.1	Power rating marking*	EL 2102-01	Required marking is located on the outside surface of the equipment	P
	Rated voltage(s) or voltage ranges(s) (V)*.	EL 2102-02	100-240V ~	P
	Multiple mains supply connections*.	EL 2102-03	Single supply connection	N/A
	Symbol for nature of supply, for d.c. only*:	EL 2102-04	AC mains supply only	N/A
	Rated frequency or rated frequency range (Hz) *:	EL 2102-05	50-60Hz	P
	Rated current (mA or A)*:	EL 2102-06	0.5A	P
1.7.1.2	Identification markings*	EL 2102-07	See below	P
	Manufacturer's name or trade-mark or identification mark *:	EL 2102-08	GlobTek, Inc.	P
	Model identification or type reference *:	EL 2102-09	**GT-46181-1805-T3**, GT-46181-1605-T3, GT-46181-1805-T3, GT-46181-0809-3.8-T3, GT-46181-1209-3.05-T3, GT-46181-1809-3.05-T3, GT-46181-1809-T3, GT-46181-1812-2.0-T3, GT-46181-1812-T3, GT-46181-1815-T3	P
	Symbol for Class II equipment only* :	EL 2102-10	Class I equipment	N/A
	Other markings and symbols*:	EL 2102-11	Additional markings and symbols does not rise to misunderstanding	P
1.7.1.3	Use of graphical symbols*	EL 2102-12	For indoor use only: IEC 60417-5957 symbol marked.	P
1.7.2	Safety instructions and marking*	EL 2102-13	Complies	P
1.7.2.1	General	EL 2102-14	Complies	P
1.7.2.2	Disconnect devices*	EL 2102-15	Appliance inlet is provided as disconnect device	P
1.7.2.3	Overcurrent protective devices*	EL 2102-16	Not pluggable equipment B or permently connected device	N/A

Tests relating to Marking Requirements

EL 2102 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
1.7.2.4	IT power distribution systems*	EL 2102-17	Equipment not intended for IT power distribution systems	N/A
1.7.2.5	Operator access with a tool*	EL 2102-18	No operator accessible area which needs to be accessed by use of tool	N/A
1.7.2.6	Ozone*	EL 2102-19	Not producing ozone	N/A
1.7.3	Short duty cycles*	EL 2102-20	For continous operation	N/A
1.7.4	Supply voltage adjustment*	EL 2102-21	No voltage adjustment	N/A
1.7.5	Power outlets on the equipment*	EL 2102-22	No power outlets provided	N/A
1.7.6	Fuse identification (marking, special fusing characteristics, cross-reference) Fuse(s) shall clearly and adequately marked with fuse number and rating*.	EL 2102-23	Fuse are marked clearly and adequately with fuse number and rating F1: T1AL/ 250V	P
1.7.7	Wiring terminals	EL 2102-24	See below	P
1.7.7.1	Protective earthing and bonding terminals*	EL 2102-25	Appliance inlet used	P
1.7.7.2	Terminals for a.c. mains supply conductors*	EL 2102-26	Appliance inlet provided for connection of a detachable power supply cord.	N/A
1.7.7.3	Terminals for d.c. mains supply conductors*	EL 2102-27	No d.c. mains supply	N/A
1.7.8	Controls and indicators	EL 2102-28	No such controls used	N/A
1.7.8.1	Identification, location and marking *:	EL 2102-29	No safety relevant indicators, switches and controls provided	N/A
1.7.8.2	Colours*	EL 2102-30	Not used	N/A
1.7.8.3	Symbols according to IEC 60417*:	EL 2102-31	No such symbol used	N/A
1.7.8.4	Markings using figures* :	EL 2102-32	No safety relevant figures used	N/A
1.7.9	Isolation of multiple power sources*	EL 2102-33	Single supply connection	N/A
1.7.10	Thermostats and other regulating devices*	EL 2102-34	No thermostats and other regulating devices used	N/A
1.7.11	Durability	EL 2102-35	Legible, not easily removable, and No curling	P
1.7.12	Removable parts*	EL 2102-36	Marking is not placed on removable parts	N/A
1.7.13	Replaceable batteries*	EL 2102-37	No replaceable batteries used	N/A
	Language(s)		See above	N/A

SGS INDIA PVT. LIMITED SGS BANGALORE

Tests relating to Marking Requirements

EL 2102 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
1.7.14	Equipment for restricted access locations*	EL 2102-38	Equipment not intended for restricted access location	N/A

*- Total number of Requirements to be observed / inspected = 35
Total No of applicable Requirement = 14
No of Requirements for which the sample passed = 14

Total number of tests to be conducted = 04
Total No of applicable Tests = 03
No. of tests for which the sample passed = 03

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....

(Approving Authority)

Tests relating to Electrical Safety

EL 2103 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
2.1	Protection from electric shock and energy hazards*	EL 2103-00	Complies	P
2.1.1	Protection in operator access areas*	EL 2103-01	The accessibility of hazardous voltage prevented with the final system	P
2.1.1.1	Access to energized parts	EL 2103-02	Adequate protection provided against contact in operator access area	P
	Test by inspection :		No access to energized parts	P
	Test with test finger (Figure 2A)		Complies	P
	Test with test pin (Figure 2B):		Complies	P
	Test with test probe (Figure 2C)		No TNV circuits	N/A
2.1.1.2	Battery compartments *	EL 2103-03	No battery compartment	N/A
2.1.1.3	Access to ELV wiring	EL 2103-04	No ELV circuits	N/A
	Working voltage (Vpeak or Vrms); minimum distance through insulation (mm)		As above	N/A
2.1.1.4	Access to hazardous voltage circuit wiring	EL 2103-05	Not accessible to hazardous voltage circuit wiring in operator access area	P
2.1.1.5	Energy hazards :	EL 2103-06	Energy not exceeding 240VA between any two points in output connector of secondary circuit See appended table 2.1.1.5	P
2.1.1.6	Manual controls	EL 2103-07	No manual controls	N/A
2.1.1.7	Discharge of capacitors in equipment		Complies	P
	Measured voltage (V); time-constant (s):	EL 2103-08	9.5V <1s See appended table 2.1.1.7	P
2.1.1.8	Energy hazards – d.c. mains supply		No d.c. mains supply	N/A
	a) Capacitor connected to the d.c. mains supply :	EL 2103-09	As above	N/A
	b) Internal battery connected to the d.c. mains supply :	EL 2103-10	As above	N/A
2.1.1.9	Audio amplifiers to be tested according to IEC 60065, cl. 9.1.1.:	EL 2103-11	No audio amplifiers	N/A
2.1.2	Protection in service access areas	EL 2103-12	See below	N/A

Tests relating to Electrical Safety

EL 2103 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
2.1.3	Protection in restricted access locations	EL 2103-13	No restricted access locations	N/A

*- Total number of Requirements to be observed / inspected = 03
Total No of applicable Requirement = 02
No of Requirements for which the sample passed= 02

Total number of tests to be conducted = 11
Total No of applicable Tests = 04
No. of tests for which the sample passed = 04

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....

(Approving Authority)

Tests relating to Electrical Safety

EL 2104 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
2.2	SELV circuits*	EL 2104-00	Complies	P
2.2.2	Voltages under normal conditions	EL 2104-01	SELV limits not exceeded under normal conditions See appended table 2.2.2	P
2.2.3	Voltages under fault conditions	EL 2104-02	SELV limits not exceeded under fault conditions See appended table 2.2.3	P
2.2.4	Connection of SELV circuits to other circuits* :	EL 2104-03	SELV circuits to other SELV circuits	P

*- Total number of Requirements to be observed / inspected = 02
Total No of applicable Requirement = 02
No of Requirements for which the sample passed = 02

Total number of tests to be conducted = 02
Total No of applicable Tests = 02
No. of tests for which the sample passed = 02

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2105 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
2.3	TNV circuits*	EL 2105-00	No TNV circuits	N/A
2.3.1	Type of TNV circuits: TNV-1 / TNV-2 / TNV-3	EL 2105-01	As above	N/A
	a) Limits of TNV-1:	EL 2105-02	As above	N/A
	b) Limits of TNV-2 or TNV-3: Continuous voltages, combination of AC and DC values, are such that : $\frac{U_{ac}}{71} + \frac{U_{dc}}{120} \leq 1$	EL 2105-03	As above	N/A
2.3.2	Separation from other circuits and from accessible parts*	EL 2105-04	As above	N/A
2.3.2.1	General Requirements	EL 2105-05	As above	N/A
2.3.2.2	Protection by basic insulation	EL 2105-06	As above	N/A
2.3.2.3	Protection by earthing	EL 2105-07	As above	N/A
2.3.2.4	Protection by other constructions :	EL 2105-08	As above	N/A
2.3.3	Separation from hazardous voltages	EL 2105-09	As above	N/A
2.3.4	Connection of TNV circuits to other circuits	EL 2105-10	As above	N/A
2.3.5	Test for operating voltages generated externally	EL 2105-11	As above	N/A

*- Total number of Requirements to be observed / inspected = 02
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 10
Total No of applicable Tests = 00
No. of tests for which the sample passed = 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....

(Approving Authority)

Tests relating to Electrical Safety

EL 2106 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
2.4	Limited current circuits *	EL 2106-00	Complies	P
2.4.1	General requirements *	EL 2106-01	See appended table 2.4.2	P
2.4.2	Limit values	EL 2106-02	As above	P
2.4.3	Connection of limited current circuits to other circuits*	EL 2106-03	Output circuit as limited current circuit connected to other circuits	P

*- Total number of Requirements to be observed / inspected = 03
Total No of applicable Requirement = 03
No of Requirements for which the sample passed = 03

Total number of tests to be conducted = 01
Total No of applicable Tests = 01
No. of tests for which the sample passed = 01

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2107 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
2.5	Limited power sources *	EL 2107-00	See below	P
	a) Inherently limited output	EL 2107-01	Complies	P
	b) Impedance limited output	EL 2107-02	No such construction used	N/A
	c) Regulating network limited output under normal operating and single fault condition Use of integrated circuit (IC) current limiters	EL 2107-03	A regulating network limits the output in compliance with table 2B both under normal operating conditions and after any single fault See appended table 2.5 No integrated circuit (IC) current limiters used	P
	d) Overcurrent protective device limited output	EL 2107-04	No over current protective device	N/A
	Max. output voltage (V), Max. output current (A), Max. apparent power (VA)	EL 2107-05	As above	N/A
	Current rating of overcurrent protective device (A)	EL 2107-06	As above	N/A

*- Total number of Requirements to be observed / inspected = 01
Total No of applicable Requirement = 01
No of Requirements for which the sample passed = 01

Total number of tests to be conducted = 06
Total No of applicable Tests = 02
No. of tests for which the sample passed = 02

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2108 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
2.6	Provisions for earthing and bonding*	EL 2108-00	Complies	P
2.6.1	Protective earthing	EL 2108-01	Protective earthing provided as one level of protection against electric shock	P
2.6.2	Functional earthing : The Functional earthing either separated from hazardous voltages by double or reinforced insulation or by protectively earthed screen or conductive part separated by at least basic insulation, or safely connected to Protective Bonding Conductor.*	EL 2108-02	Secondary functional earthing is safely connected to Protective earth terminal	P
	Use of symbol for functional earthing:*	EL 2108-03	No such symbol used	N/A
2.6.3	Protective earthing and protective bonding conductors*	EL 2108-04	Complies	P
2.6.3.2	Size of protective earthing conductors	EL 2108-05	Power supply cord not provided with equipment Suitable power supply cord with earthing conductor shall be used as per manufacturer instruction	N/A
	Rated current (A), cross-sectional area (mm2),		As above	N/A
2.6.3.3	Size of protective bonding conductors	EL 2108-06	See sub-clause 2.6.3.4	P
	Protective current Rating (A), cross-sectional area (mm2)		As above	N/A
2.6.3.4	Resistance of earthing conductors and their terminations; resistance (Ω), voltage drop (V), test current (A), duration (min):	EL 2108-07	Refer appended table 2.6.3.4	P
2.6.3.5	Colour of insulation*:	EL 2108-08	Protective bonding conductor is green with yellow stripe	P
2.6.4	Terminals		See below	P
2.6.4.2	Protective earthing and bonding terminals : Rated current(A), Type, Nominal thread diameter (mm)	EL 2108-09	The earthing terminal in the appliance inlet is regarded as the main protective earthing terminal	P
2.6.4.3	Separation of the protective earthing conductor from protective bonding conductors*	EL 2108-10	Protective bounding conductor is connected to an approved appliance inlet	P
2.6.5	Integrity of protective earthing*		See below	P

2.6.5.1	Interconnection of equipment*	EL 2108-11	This unit has its own earthing connection. Any other units connected via the output shall be provided SELV only	P
2.6.5.2	Components in protective earthing conductors and protective bonding conductors*	EL 2108-12	No switch or over current protective device is connected in protective earthing or bonding conductor	P
2.6.5.3	Disconnection of protective earth*	EL 2108-13	Appliance inlet provided	P
2.6.5.4	Parts that can be removed by an operator*	EL 2108-14	Plug or inlet, the earth connection is made before and after the hazardous voltage removed. No other operator removable parts	P
2.6.5.5	Parts removed during servicing*	EL 2108-15	It is not necessary to disconnect the earth connection except for the removing of the earthed part Itself	P
2.6.5.6	Corrosion resistance*	EL 2108-16	Plastic Enclosure used	N/A
2.6.5.7	Screws for protective bonding*	EL 2108-17	No such self-tapping screws used	N/A
2.6.5.8	Reliance on telecommunication network or cable distribution system*	EL 2108-18	No TNV circuits used	N/A

*- Total number of Requirements to be observed / inspected = 14
Total No of applicable Requirement =10
No of Requirements for which the sample passed = 10

Total number of tests to be conducted = 05
Total No of applicable Tests = 04
No. of tests for which the sample passed = 04

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2109 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
2.7	Overcurrent and earth fault protection in primary circuits*	EL 2109-00	Complies	P
2.7.1	Basic requirements: Protection in primary circuits against overcurrents, short-circuits and earth faults shall be provided, either as an integral part of the equipment or as part of building installation.	EL 2109-01	The built-in fuse provided for over current protection	P
	If pluggable equipment Type B or permanently connected equipment relies on protective device external to the equipment for protection, the equipment installation Instructions shall so state and shall also specify the requirements for short-circuit protection or overcurrent protection or, where necessary, for both.		Pluggable equipment type A	N/A
2.7.2	Faults not simulated in 5.3.7* need not be fitted as an integral part of the equipment	EL 2109-02	Considered	P
2.7.3	Short-circuit backup protection	EL 2109-03	For pluggable equipment type A, the building installation is considered as providing short-circuit protection	P
2.7.4	Number and location of protective devices :	EL 2109-04	Protective device by one number built in fuse	P
2.7.5	Protection by several devices*	EL 2109-05	Protection by one built in fuse	N/A
2.7.6	Warning to service personnel* :	EL 2109-06	No service required	N/A

*- Total number of Requirements to be observed / inspected = 03
Total No of applicable Requirement = 01
No of Requirements for which the sample passed = 01

Total number of tests to be conducted = 04
Total No of applicable Tests = 04
No. of tests for which the sample passed = 04

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2110 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
2.8	Safety Interlocks*	EL 2110-00	No safety interlock provided	N/A
2.8.1	General principles*	EL 2110-01	As above	N/A
2.8.2	Protection requirements	EL 2110-02	As above	N/A
2.8.3	Inadvertent reactivation	EL 2110-03	As above	N/A
2.8.4	Fail-safe operation	EL 2110-04	As above	N/A
2.8.5	Moving parts	EL 2110-05	As above	N/A
2.8.6	Overriding*	EL 2110-06	As above	N/A
2.8.7	Switches, relays and their related circuits	EL 2110-07	As above	N/A
2.8.7.1	Separation distances for contact gaps and their related circuits`	EL 2110-08	As above	N/A
2.8.7.2	Overload test	EL 2110-09	As above	N/A
2.8.7.3	Endurance test	EL 2110-10	As above	N/A
2.8.7.4	Electric strength test	EL 2110-11	As above	N/A
2.8.8	Mechanical actuators	EL 2110-12	As above	N/A

*- Total number of Requirements to be observed / inspected = 03
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 10
Total No of applicable Tests = 00
No. of tests for which the sample passed = 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED SGS BANGALORE

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2111 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
2.9	Electrical insulation*	EL 2111-00	Complies	P
2.9.1	Properties of insulating materials*	EL 2111-01	Natural rubber, asbestos, hygroscopic materials are not used	P
2.9.2	Humidity conditioning	EL 2111-02	Humidity treatment conducted for 120h	P
	Relative Humidity : 93 ±3 %, Temperature: t at 40 ± 2°C Duration : 120 hours		Relative Humidity : 93%, Temperature: 40°C	P
2.9.3	Grade of insulation*	EL 2111-03	Insulation considered to be functional, basic, supplementary, double or reinforced insulation used	P
2.9.4	Separation from hazardous voltages*	EL 2111-04	See below	P
	Method(s) used		Method 1: a	P

*- Total number of Requirements to be observed / inspected = 04
Total No of applicable Requirement = 04
No of Requirements for which the sample passed = 04

Total number of tests to be conducted = 01
Total No of applicable Tests = 01
No. of tests for which the sample passed = 01

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED SGS BANGALORE

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2112 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
2.10	Clearances, creepage distances and distances through Insulation*	EL 2112-00	Complies	P
2.10.1.1	Frequency *	EL 2112-01	Considered	P
2.10.1.2	Pollution degrees*	EL 2112-02	Pollution degree 2	P
2.10.1.3	Reduced values for functional insulation	EL 2112-03	Considered See clause 5.3.4	P
2.10.1.4	Intervening unconnected conductive parts	EL 2112-04	No such construction used	N/A
2.10.1.5	Insulation with varying dimensions	EL 2112-05	No such construction used	N/A
2.10.1.6	Special separation requirements	EL 2112-06	Special separation not used	N/A
2.10.1.7	Insulation in circuits generating starting pulses	EL 2112-07	No such construction used	N/A
2.10.2	Determination of working voltage	EL 2112-08	See below	P
2.10.2.2	RMS working voltage	EL 2112-09	See appended table 2.10.2	P
2.10.2.3	Peak working voltage	EL 2112-10	See appended table 2.10.2	P
2.10.3	Clearances	EL 2112-11	Complies	P
2.10.3.1	General	EL 2112-12	Complies See appended table 2.10.3 and 2.10.4	P
2.10.3.2	Mains transient voltages*		Normal transient levels considered	P
	a) AC mains supply * :	EL 2112-13	2500V considered	P
	b) Earthed d.c. mains supplies*	EL 2112-14	No connection to d.c. mains	N/A
	c) Unearthed d.c. mains supplies* :	EL 2112-15	No connection to d.c. mains	N/A
	d) Battery operation* :	EL 2112-16	No such battery operation	N/A
2.10.3.3	Clearances in primary circuits	EL 2112-17	See appended table 2.10.3 and 2.10.4	P
2.10.3.4	Clearances in secondary circuits	EL 2112-18	Sub-clause 5.3.4 considered	P
2.10.3.5	Clearances in circuits having starting pulses	EL 2112-19	No discharge lamp used	N/A
2.10.3.6	Transients from a.c. mains supply :	EL 2112-20	Normal transient voltage considered (overvoltage category II for primary circuit)	P
2.10.3.7	Transients from d.c. mains supply :	EL 2112-21	No d.c. mains	N/A
2.10.3.8	Transients from telecommunication networks and cable distribution systems	EL 2112-22	No TNV network	N/A
2.10.3.9	Measurement of transient voltages		Normal transient levels considered see Cl. 2.10.3.6	N/A

SGS INDIA PVT. LIMITED SGS BANGALORE

	a) Transients from a mains supply	EL 2112-23	As above	N/A
	For an a.c. mains supply		As above	N/A
	For a d.c. mains supply		No d.c. mains supply	N/A
	b) Transients from a telecommunication network	EL 2112-24	No TNV network	N/A
2.10.4	Creepage distances*	EL 2112-25	Complies	P
2.10.4.1	General	EL 2112-26	As above	P
2.10.4.2	Material group and comparative tracking index : CTI tests*	EL 2112-27	Material group III a/b is assumed to be used	P
2.10.4.3	Minimum creepage distances	EL 2112-28	See appended table 2.10.3 and 2.10.4	P
2.10.5	Solid insulation	EL 2112-29	Complies	P
2.10.5.1	General	EL 2112-30	Complies	P
2.10.5.2	Distances through insulation	EL 2112-31	See appended table 2.10.5	P
2.10.5.3	Insulating compound as solid insulation	EL 2112-32	As above	P
2.10.5.4	Semiconductor devices	EL 2112-33	No semiconductor devices	N/A
2.10.5.5.	Cemented joints	EL 2112-34	See clause 2.10.5..3	P
2.10.5.6	Thin sheet material – General	EL 2112-35	Complies	P
2.10.5.7	Separable thin sheet material	EL 2112-36	Thin sheet materials (polyester tape) used around transformer T1, HS2, NF2	P
2.10.5.8	Non-separable thin sheet material	EL 2112-37	No non-separable thin sheet material used	N/A
2.10.5.9	Thin sheet material – standard test procedure	EL 2112-38	See below 2.10.5.10	N/A
	Electric strength test as per Cl.5.2.2		As above	N/A
2.10.5.10	Thin sheet material – alternative test procedure	EL 2112-39	Complies	P
	Electric strength test as per Cl.5.2.2		See appended table 5.2	P
2.10.5.11	Insulation in wound components	EL 2112-40	See below	P
2.10.5.12	Wire in wound components		Certified triple insulated wire used See appended table 1.5.1	P
	If Peak Working voltage >71 V		See appended table 2.10.2	P
	a) Basic insulation not under stress	EL 2112-41	Not applicable	N/A
	b) Basic, supplementary, reinforced insulation	EL 2112-42	Complies	P
	c) Compliance with Annex U	EL 2112-43	Certified triple insulated wire used	P
	d) Where two winding wires in contact inside wound component; angle between 45° and 90°	EL 2112-44	Insulation tape provided in all windings of transformer	P

2.10.5.13	Wire with solvent-based enamel in wound components		No such material used	N/A
	a) Electric strength test (Type test as per Cl.5.2.2)	EL 2112-45	As above	N/A
	b) Electric Strength test (Routine test as per Cl.5.2.2)	EL 2112-46	As above	N/A
2.10.5.14	Additional insulation in wound components		No additional insulation used	N/A
	If Peak Working Voltage >71V		As above	N/A
	a) Basic insulation not under stress	EL 2112-47	As above	N/A
	b) Supplementary, reinforced insulation	EL 2112-48	As above	N/A
2.10.6	Construction of printed boards*		See below	P
2.10.6.1	Uncoated printed boards	EL 2112-49	Uncoated printed boards used	P
2.10.6.2	Coated printed boards	EL 2112-50	No coated printed boards used	N/A
2.10.6.3	Insulation between conductors on the same inner surface of a printed board	EL 2112-51	Not used to provide supplementary or double/reinforced insulation	N/A
2.10.6.4	Insulation between conductors on different surfaces of a printed board*		Not used to provide supplementary or double/reinforced insulation	N/A
	a) Minimum Thickness of insulation: 0.4mm or	EL 2112-52	As above	N/A
	b) Confirm with one of the specification and pass the relevant tests as per Table 2R	EL 2112-53	As above	N/A
2.10.7	Component external terminations	EL 2112-54	Not Applicable	N/A
2.10.8	Tests on coated printed boards and coated components		Coating not provided as part of insulation system	N/A
2.10.8.1	Sample preparation and preliminary inspection*	EL 2112-55	As above	N/A
2.10.8.2	Thermal conditioning	EL 2112-56	As above	N/A
2.10.8.3	Electric strength test	EL 2112-57	As above	N/A
2.10.8.4	Abrasion resistance test	EL 2112-58	As above	N/A
2.10.9	Thermal cycling	EL 2112-59	See below	P
2.10.10	Test for Pollution Degree 1 environment and insulating compound	EL 2112-60	No such construction	N/A
2.10.11	Tests for semiconductor devices and cemented joints	EL 2112-61	No such devices used	N/A
2.10.12	Enclosed and sealed parts	EL 2112-62	No sealed components	N/A

SGS INDIA PVT. LIMITED BANGALORE

*- Total number of Requirements to be observed / inspected = 10
Total No of applicable Requirement = 06
No of Requirements for which the sample passed = 06

Total number of tests to be conducted = 53
Total No of applicable Tests = 25
No. of tests for which the sample passed = 25

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Wiring

EL 2113 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
3.0	Wiring, connections and supply*	EL 2113-00	Complies	P
3.1.1	Current rating and over current protection	EL 2113-01	All internal wiring used in the distribution of secondary protected against overcurrent & short circuit by suitably rated protective devices	P
3.1.2	Protection against mechanical damage*	EL 2113-02	No sharp edges	P
3.1.3	Securing of internal wiring*	EL 2113-03	The wires are positioned in such a manner that prevents excessive strain, loosening of terminal connections and damage of conductor insulation	P
3.1.4	Insulation of conductors	EL 2113-04	See clause 3.1.1	P
3.1.5	Beads and ceramic insulators	EL 2113-05	Not used	N/A
3.1.6	Screws for electrical contact pressure*	EL 2113-06	No screws used for electrical connection	N/A
3.1.7	Insulating materials in electrical connections*	EL 2113-07	No contact pressure through insulating material	P
3.1.8	Self-tapping and spaced thread screws*	EL 2113-08	No such screws used	N/A
3.1.9	Termination of conductors : 10 N pull test	EL 2113-09	Conductors suitably terminated. Creepage and clearances maintained. 10N applied to relevant conductors	P
3.1.10	Sleeving on wiring*	EL 2113-10	No sleeving used to provide Supplementary insulation	N/A

*- Total number of Requirements to be observed / inspected = 07
Total No of applicable Requirement = 04
No of Requirements for which the sample passed = 04

Total number of tests to be conducted = 04
Total No of applicable Tests = 03
No. of tests for which the sample passed = 03

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

SGS INDIA PVT. LIMITED SGS BANGALORE

Tests relating to Wiring

EL 2114 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
3.2	Connection to a mains supply*	EL 2114-00	Complies	P
3.2.1	Means of connection		See below	P
3.2.1.1	Connection to an a.c. mains supply*	EL 2114-01	Appliance inlet provided	P
3.2.1.2	Connection to a d.c. mains supply*	EL 2114-02	No connection to d.c. main supply	N/A
3.2.2	Multiple supply connections	EL 2114-03	No multiple supply connection	N/A
3.2.3	Permanently connected equipment	EL 2114-04	Not a permanent connected equipment	N/A
3.2.4	Appliance inlets: Are so Located that parts at hazardous voltage are not accessible during insertion or removal of the connector, connector can be inserted without difficulty and after insertion of the connector, the equipment is not supported by the connector for any position of normal use on a flat surface (Appliance inlets complying with IEC 60309 or IEC 60320 considered to comply with this requirement.	EL 2114-05	The appliance inlet complied with IEC 60320-1; the connector inserted without difficulty and not supporting the equipment on a flat surface	P
3.2.5	Power supply cords		Power supply cord not provided with equipment Suitable power supply cord to be used as per manufacturer instruction	N/A
3.2.5.1	AC power supply cords*	EL 2114-06	As above	N/A
	Rated current (A), cross-sectional area (mm²), AWG		As above	N/A
3.2.5.2	DC power supply cords*	EL 2114-07	No DC power supply cord	N/A
3.2.6	Cord anchorages and strain relief		Detachable power supply cord	N/A
	Mass of the equipment: Pull Force (N):	EL 2114-08	As above	N/A
	b) Longitudinal displacement: 2 mm (Max)	EL 2114-09	As above	N/A
3.2.7	Protection against mechanical damage	EL 2114-10	Detachable power supply cord	N/A
3.2.8	Cord guards		Detachable power supply cord	N/A

SGS INDIA PVT. LIMITED BANGALORE

	a) Diameter or minor dimension D (mm) : Test mass (g) :	EL 2114-11	As above	N/A
	b) Radius of curvature of cord : 1.5 D (Min)	EL 2114-12	As above	N/A
3.2.9	Supply wiring space	EL 2114-13	Not a permanent connected equipment or non- detachable power supply cord type	N/A

*- Total number of Requirements to be observed / inspected = 05
Total No of applicable Requirement = 02
No of Requirements for which the sample passed = 02

Total number of tests to be conducted = 09
Total No of applicable Tests = 01
No. of tests for which the sample passed = 01

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED SGS BANGALORE

.....
(Approving Authority)

Tests relating to Wiring

EL 2115 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
3.3	Wiring terminals for connection of external conductors*	EL 2115-00	Not a permanent connected equipment or non- detachable power supply cord type	N/A
3.3.1	Wiring terminals*	EL 2115-01	As above	N/A
3.3.2	Connection of non-detachable power supply cords	EL 2115-02	As above	N/A
3.3.3	Screw terminals*	EL 2115-03	As above	N/A
3.3.4	Conductor sizes to be connected	EL 2115-04	As above	N/A
	Rated current (A), cord/cable type, cross-sectional area (mm2)		As above	N/A
3.3.5	Wiring terminal sizes	EL 2115-05	As above	N/A
	Rated current (A), type, nominal thread diameter (mm)		As above	N/A
3.3.6	Wiring terminal design	EL 2115-06	As above	N/A
3.3.7	Grouping of wiring terminals*	EL 2115-07	As above	N/A
3.3.8	Stranded wire	EL 2115-08	As above	N/A

*- Total number of Requirements to be observed / inspected = 04
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 05
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....

(Approving Authority)

Tests relating to Wiring

EL 2116 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
3.4	Disconnection from the mains supply*	EL 2116-00	Complies	P
3.4.1	General Requirement A disconnect device or devices shall be provided to disconnect the equipment from the mains supply for servicing.	EL 2116-01	Disconnect device provided	P
3.4.2	Disconnect devices*	EL 2116-02	Appliance inlet	P
3.4.3	Permanently connected equipment*	EL 2116-03	Not a permanent connected equipment	N/A
3.4.4	Parts which remain energized*	EL 2116-04	No parts remain energized	P
3.4.5	Switches in flexible cords*	EL 2116-05	No switches in flexible cord	N/A
3.4.6	Number of poles - single-phase and d.c. equipment*	EL 2116-06	Appliance inlet disconnects both poles simultaneously	P
3.4.7	Number of poles - three-phase equipment*	EL 2116-07	Single phase equipment	N/A
3.4.8	Switches as disconnect devices*	EL 2116-08	No switch used	N/A
3.4.9	Plugs as disconnect devices*	EL 2116-09	No power supply cord used	N/A
3.4.10	Interconnected equipment*	EL 2116-10	No such interconnection	N/A
3.4.11	Multiple power sources*	EL 2116-11	No multiple supply connection	N/A

*- Total number of Requirements to be observed / inspected = 11
Total No of applicable Requirement = 04
No of Requirements for which the sample passed = 04

Total number of tests to be conducted = 01
Total No of applicable Tests = 01
No. of tests for which the sample passed = 01

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Wiring

EL 2117 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
3.5	Interconnection of equipment*	EL 2117-00	Complies	P
3.5.1	General requirements*	EL 2117-01	See below	P
3.5.2	Types of interconnection circuits*	EL 2117-02	SELV circuits	P
3.5.3	ELV circuits as interconnection circuits *	EL 2117-03	No ELV interconnections	N/A
3.5.4	Data ports for additional equipment	EL 2117-04	No such ports	N/A

*- Total number of Requirements to be observed / inspected = 04
Total No of applicable Requirement = 03
No of Requirements for which the sample passed = 03

Total number of tests to be conducted = 01
Total No of applicable Tests = 00
No. of tests for which the sample passed = 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Mechanical Properties

EL 2118 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
4	PHYSICAL REQUIREMENTS*	EL 2118-00	Complies	P
4.1	Stability	EL 2118-01	As below	N/A
	a) A unit having a mass of 7 kg or more shall not fall over when tilted to an angle of 10° from its normal upright position. Alternatively, the unit is placed in its intended position of use on a plane, inclined at an angle of 10° to the horizontal, and then rotated slowly through an angle of 360° about its normal vertical axis.	EL 2118-02	Mass of the equipment less than 7 kg	N/A
	b) A floor-standing unit having a mass of 25 kg or more shall not fall over when a force equal to 20 % of the weight of the unit, but not more than 250 N, is applied in any direction except upwards, at a height not exceeding 2 m from the floor.	EL 2118-03	Not a floor -standing equipment	N/A
	c) A floor-standing unit shall not fall over when a constant downward force of 800 N is applied at the point of maximum moment to any horizontal surface of at least 125 mm by at least 200 mm, at a height up to 1 m from the floor.	EL 2118-04	Not a floor -standing equipment	N/A

*- Total number of Requirements to be observed / inspected = 01
Total No of applicable Requirement = 01
No of Requirements for which the sample passed= 01

Total number of tests to be conducted = 04
Total No of applicable Tests = 00
No. of tests for which the sample passed = 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

SGS INDIA PVT. LIMITED BANGALORE

Tests relating to Mechanical Properties

EL 2119 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
4.2	Mechanical Strength	EL 2119-00	See below	P
4.2.1	General	EL 2119-01	Complies	P
4.2.2	Steady force test, 10 N	EL 2119-02	10N applied to relevant components	P
4.2.3	Steady force test, 30 N	EL 2119-03	No internal enclosure	N/A
4.2.4	Steady force test, 250 N	EL 2119-04	250 N applied to outer enclosure	P
4.2.5	Impact test	EL 2119-05	Transportable equipment	N/A
	a) Fall test as per Fig. 4A	EL 2119-06	As above	N/A
	b) Swing test as per Fig. 4A	EL 2119-07	As above	N/A
4.2.6	Drop test; height (mm) :	EL 2119-08	Complies 1000 mm	P
4.2.7	Stress relief test	EL 2119-09	Complies; 79.1°C, 7h	P
4.2.8	Cathode Ray Tubes	EL 2119-10	No Cathode Ray Tubes	N/A
4.2.9	High Pressure Lamps*	EL 2119-11	No High Pressure Lamps	N/A
4.2.10	Wall or ceiling mounted equipment; force(N)	EL 2119-12	Not a Wall or ceiling mounted	N/A

*- Total number of Requirements to be observed / inspected = 01
Total No of applicable Requirement = 00
No of Requirements for which the sample passed = 00

Total number of tests to be conducted = 12
Total No of applicable Tests = 06
No. of tests for which the sample passed = 06

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Mechanical Properties

EL 2120 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
4.3	Design and Construction*	EL 2120-00	Complies	P
4.3.1	Edges and corners*	EL 2120-01	All edges and corners are rounded and smoothed	P
4.3.2	Handles and manual controls; force (N).....	EL 2120-02	No handles and manual controls provided	N/A
4.3.3	Adjustable controls	EL 2120-03	No adjustable controls	N/A
4.3.4	Securing of parts	EL 2120-04	Securing of parts expected to withstand mechanical stress No loosening of parts impairing safety as per relevant requirement of standard	P
4.3.5	Connections by Plugs and Sockets*	EL 2120-05	In operator and service access areas mismatching is prevented by incompatible form of location	P
4.3.6	Direct plug-in equipment	EL 2120-06	Transportable equipment	N/A
	Torque	EL 2120-07	As above	N/A
	Compliance with the relevant mains plug standard	EL 2120-08	As above	N/A
4.3.7	Heating elements in earthed equipment*	EL 2120-09	No heating elements provided	N/A
4.3.8	Batteries Portable secondary sealed cells and batteries (other than button) containing alkaline or other non-acid electrolyte shall comply with IEC 62133		No batteries provided	N/A
	a) Overcharging of a rechargeable battery	EL 2120-10	As above	N/A
	b) Unintentional charging of a non-rechargeable battery	EL 2120-11	As above	N/A
	c) Reverse charging of a rechargeable battery	EL 2120-12	As above	N/A
	d) Excessive discharging rate for any battery	EL 2120-13	As above	N/A
	e) Electric strength as per Cl.5.3.9.2	EL 2120-14	As above	N/A
4.3.9	Oil & grease*	EL 2120-15	Insulation not in contact with oil and grease	N/A
4.3.10	Dust, powders, liquids and gases	EL 2120-16	Equipment in intended use not considered to be exposed to these	N/A
4.3.11	Containers for liquids or gases	EL 2120-17	No containers for liquids or gases	N/A

4.3.12	Flammable liquids	EL 2120-18	No flammable liquids provided	N/A
4.3.13	Radiation		See below	N/A
4.3.13.2	Ionizing radiation	EL 2120-19	No ultraviolet (UV) radiation	N/A
4.3.13.3	Effect of ultraviolet (UV) radiation on materials	EL 2120-20	No ultraviolet (UV) radiation	N/A
4.3.13.4	Human exposure to ultraviolet (UV) radiation	EL 2120-21	As above	N/A
4.3.13.5	Lasers (including laser diodes) and LED's:		No laser diodes	N/A
4.3.13.5.1	Lasers (including laser diodes) For laser see IEC 60825-1, respective part as applicable.	EL 2120-22	As above	N/A
	Laser class		As above	N/A
4.3.13.5.2	Light emitting diodes (LED's)	EL 2120-23	No LED used	N/A
4.3.13.6	Other types*	EL 2120-24	No other types used	N/A

*- Total number of Requirements to be observed / inspected = 06
Total No of applicable Requirement = 03
No of Requirements for which the sample passed = 03

Total number of tests to be conducted = 19
Total No of applicable Tests = 01
No. of tests for which the sample passed = 01

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....

(Approving Authority)

Tests relating to Mechanical Properties

EL 2121 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
4.4	Protection against hazardous moving parts	EL 2121-00	No hazardous moving parts	N/A
4.4.1	General	EL 2121-01	As above	N/A
4.4.2	Protection in operator access areas	EL 2121-02	As above	N/A
4.4.3	Protection in restricted access locations *	EL 2121-03	As above	N/A
4.4.4	Protection in service access areas*	EL 2121-04	As above	N/A
4.4.5	Protection against moving fan blades	EL 2121-05	As above	N/A
4.4.5.1	General*	EL 2121-06	m = r = N = K =	N/A
	Not considered likely to cause pain or injury. a).....:	EL 2121-07	$\frac{r/\min}{15000} + \frac{K\ \text{factor}}{2400} =$	N/A
	Is considered likely to cause pain, not injury. b)	EL 2121-08	$\frac{r/\min}{22000} + \frac{K\ \text{factor}}{3600} =$	N/A
	Considered likely to cause injury. c).....:	EL 2121-09	As above	N/A
4.4.5.2	Protection for users*	EL 2121-10	As above	N/A
	Use of symbol or warning*	EL 2121-11	As above	N/A
4.4.5.3	Protection for service persons*	EL 2121-12	As above	N/A
	Use of symbol or warning *	EL 2121-13	As above	N/A

*- Total number of Requirements to be observed / inspected = 07
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 07
Total No of applicable Tests = 00
No. of tests for which the sample passed = 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to Thermal Properties

EL 2122 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
4.5	Thermal Requirements*	EL 2122-00	Complies	P
4.5.1	General	EL 2122-01	Not exceeded temperature	P
4.5.2	Temperature tests	EL 2122-02	See appended table 4.5	P
4.5.3	Temperature limits for materials*	EL 2122-03	See appended table 4.5	P
4.5.4	Touch temperature limits*	EL 2122-04	See appended table 4.5	P
4.5.5	Resistance to abnormal heat	EL 2122-05	See appended table 4.5.5	P

*- Total number of Requirements to be observed / inspected = 03
Total No of applicable Requirement = 03
No of Requirements for which the sample passed = 03

Total number of tests to be conducted = 03
Total No of applicable Tests = 03
No. of tests for which the sample passed = 03

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to Mechanical Properties

EL 2123 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
4.6	Openings in enclosures*	EL 2123-00	No openings in whole enclosure	N/A
4.6.1	Top and side openings	EL 2123-01	As above	N/A
	Dimensions (mm) :		As above	N/A
4.6.2	Bottoms of fire enclosures :	EL 2123-02	As above	N/A
	Construction of the bottom, dimensions (mm) :		As above	N/A
4.6.3	Doors or covers in fire enclosures*	EL 2123-03	As above	N/A
4.6.4	Openings in transportable equipment	EL 2123-04	As above	N/A
4.6.4.1	Constructional design measures	EL 2123-05	As above	N/A
	Dimensions (mm)		As above	N/A
4.6.4.2	Evaluation measures for larger openings	EL 2123-06	As above	N/A
4.6.4.3	Use of metallized parts	EL 2123-07	As above	N/A
4.6.5	Adhesives for constructional purposes: Compliance is checked by examination of the construction and of the available data. If such data is not available, compliance is checked by the following tests.	EL 2123-08	As above	N/A
	a)Temperature Conditioning at : 100 °C ± 2 °C for one week; or 90 °C ± 2 °C for three weeks; or 82 °C ± 2 °C for eight weeks.	EL 2123-09	As above	N/A
	After temperature conditioning b) Leave the sample between 20°C to 30°C for 1 hour	EL 2123-10	As above	N/A
	c) Place the sample at - 40°C±2°C for 4 hours	EL 2123-11	As above	N/A
	d) Remove and allow the sample to come to any convenient temperature between 20 °C and 30 °C for 8 h;	EL 2123-12	As above	N/A
	e) Place the sample in a cabinet at 91 % to 95 % relative humidity for 72 h;	EL 2123-13	As above	N/A

SGS INDIA PVT. LIMITED BANGALORE

	f) Remove the sample and leave it at any convenient temperature between 20 °C and 30 °C for 1 h;	EL 2123-14	As above	N/A
	g) Place the sample in an oven at the temperature used for the temperature conditioning for 4 h;	EL 2123-15	As above	N/A
	h) Remove the sample and allow it to reach any convenient temperature between 20 °C; and 30 °C for 8 h.	EL 2123-16	As above	N/A
	i) The sample is then immediately subjected to the tests of Cl.4.2 as applicable.	EL 2123-17	As above	N/A

*- Total number of Requirements to be observed / inspected = 02
Total No of applicable Requirement = 00
No of Requirements for which the sample passed = 00

Total number of tests to be conducted = 16
Total No of applicable Tests = 00
No. of tests for which the sample passed = 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to Fire Safety

EL 2124 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
4.7	Resistance to fire*	EL 2124-00	Complies	P
4.7.1	Reducing the risk of ignition and spread of flame		Materials with required flammability classes are used Safety relevant components used within their rating Electrical part is not likely to ignite nearby material For temperatures see appended table 4.5	P
	Method 1, selection and application of components wiring and materials OR	EL 2124-01	See appended table 1.5.1	P
	Method 2, application of all of simulated fault condition tests	EL 2124-02	Method 1 used	N/A
4.7.2	Conditions for a fire enclosure*		See below	P
4.7.2.1	Parts requiring a fire enclosure*	EL 2124-03	With having following parts fire enclosure required: Components in primary Components in secondary (not supplied by LPS) Insulated wiring	P
4.7.2.2	Parts not requiring a fire enclosure	EL 2124-04	No such parts	N/A
4.7.3	Materials*	EL 2124-05	See below	P
4.7.3.1	General*	EL 2124-06	Materials with the required flammability classes are used	P
	a)Class of material used*	EL 2124-07	See appended table 1.5.1	P
	b) Where HB40 CLASS MATERIAL, HB75 CLASS MATERIAL or HBF CLASS FOAMED MATERIAL, is required,material passing the glow-wire test at 550 °C according to IEC 60695-2-11 is acceptable as an alternative.	EL 2124-08	No such type of material used	N/A

SGS INDIA PVT. LIMITED BANGALORE

	c) Where it is not practical to protect components against overheating under fault conditions, the components shall be mounted on V-1 CLASS MATERIAL. Additionally, such components shall be separated from material of a class lower than V-1 CLASS MATERIAL by at least 13 mm of air, or by a solid barrier of V-1 CLASS MATERIAL.	EL 2124-09	No such type of material used	N/A
4.7.3.2	Materials for fire enclosures		Enclosure material rated V-1 Or better.	P
	a) For MOVABLE EQUIPMENT having a total mass not exceeding 18 kg, the material of a FIRE ENCLOSURE, in the thinnest significant wall thickness used, shall be of V-1 CLASS MATERIAL or shall pass the test of Clause A.2.	EL 2124-10	As above	P
	b) For MOVABLE EQUIPMENT having a total mass exceeding 18 kg and for all STATIONARY EQUIPMENT, the material of a FIRE ENCLOSURE, in the thinnest significant wall thickness used, shall be of 5VB CLASS MATERIAL or shall pass the test of Clause A.1.	EL 2124-11	Not exceeding 18 kg	N/A
	c) Materials for components that fill an opening in a FIRE ENCLOSURE, and that are intended to be mounted in this opening shall : be of V-1 CLASS MATERIAL; or pass the tests of Clause A.2; or comply with the flammability requirements of the relevant IEC component standard	EL 2124-12	No such construction	N/A
	d) Plastic materials of a FIRE ENCLOSURE shall be located more than 13 mm through air from arcing parts such as unenclosed commutators and unenclosed switch contacts.	EL 2124-13	No such construction	N/A

SGS INDIA PVT. LIMITED BANGALORE

	e) Plastic materials of a FIRE ENCLOSURE located less than 13mm through air from non-arcing parts which, under any condition of normal or abnormal operation, could attain a temperature sufficient to ignite the material, shall be capable of passing the test of IEC 60695-2-20. The average time to ignition of the samples shall be not less than 15sec. If the sample melts through without igniting, the time at which this occurs is not considered to be the time to ignition.	EL 2124-14	No such construction	N/A
4.7.3.3	Materials for components and other parts outside fire enclosures *		No parts outside the fire enclosure	N/A
	a) Materials shall be of : – HB75 CLASS MATERIAL if the thinnest significant thickness of this material is < 3 mm, or – HB40 CLASS MATERIAL if the thinnest significant thickness of this material is ≥ 3 mm, or – HBF CLASS FOAMED MATERIAL.*	EL 2124-15	As above	N/A
	b) Connectors shall comply with one of the following: – be made of V-2 CLASS MATERIAL; or – pass the tests of Clause A.2; or – comply with the flammability requirements of the relevant IEC component standard; or – be mounted on V-1 CLASS MATERIAL and be of a small size; or – be located in a SECONDARY CIRCUIT supplied by a power source that is limited to a maximum of 15 VA (see 1.4.11) under normal operating conditions and after a single fault in the equipment (see 1.4.14).	EL 2124-16	As above	N/A

4.7.3.4	Materials for components and other parts inside fire enclosures		Internal components except small parts are flammability class V-2 and HF-2 or better	P
	a) Inside FIRE ENCLOSURES, materials for components and other parts shall comply with one of the following: – be of V-2 CLASS MATERIAL or HF-2 CLASS FOAMED MATERIAL; or – pass the flammability test described in Clause A.2; or – meet the flammability requirements of a relevant IEC component standard that includes such requirements.	EL 2124-17	As above	P
	Requirements for voltage dependent resistors (VDR's) are in Annex Q.*	EL 2124-18	No VDR's used	N/A
4.7.3.5	Materials for air filter assemblies : Air filter assemblies shall be constructed of V-2 CLASS MATERIAL, or HF-2 CLASS FOAMED MATERIAL.	EL 2124-19	No air filters provided	N/A
4.7.3.6	Materials used in high-voltage components		No high voltage components (> 4kV)	N/A
	a) High-voltage components operating at peak-to-peak voltages exceeding 4 kV shall either be of V-2 CLASS MATERIAL, or HF-2 CLASS FOAMED MATERIAL, or comply with 14.4 of IEC 60065 or pass the needle flame test according to IEC 60695-11-5.	EL 2124-20	As above	N/A

SGS INDIA PVT. LIMITED SGS BANGALORE

	b) Compliance is checked by inspection of the equipment and material data sheets and, if necessary, by – the tests for V-2 CLASS MATERIAL or HF-2 CLASS FOAMED MATERIAL; or – the test described in 14.4 of IEC 60065; or – the needle flame test according to IEC 60695-11-5.	EL 2124-21	As above	N/A
	c) In addition to above, the following details apply, referring to clauses of IEC 60695-11-5: Clause 7 - Severities	EL 2124-22	As above	N/A
	Clause 8 - Conditioning	EL 2124-23	As above	N/A
	Clause 11 - Evaluation of test results	EL 2124-24	As above	N/A

*- Total number of Requirements to be observed / inspected = 07
Total No of applicable Requirement = 05
No of Requirements for which the sample passed = 05

Total number of tests to be conducted = 18
Total No of applicable Tests = 03
No. of tests for which the sample passed = 03
Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Insulating Properties

EL 2125 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
5.0	ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS*	EL 2125-00	Complies	P
5.1	Touch current and protective conductor current*	EL 2125-01	Tested accordance with 5.1.2 to 5.1.7	P
5.1.2	Configuration of equipment under test (EUT)*	EL 2125-02	See below	P
5.1.2.1	Single connection to an a.c. mains supply*	EL 2125-03	Single supply, independently tested	P
5.1.2.2	Redundant multiple connections to an a.c. mains supply*	EL 2125-04	No multiple connections	N/A
5.1.2.3	Simultaneous multiple connections to an a.c. mains supply	EL 2125-05	As above	N/A
5.1.3	Test circuit	EL 2125-06	Test circuit as per figure 5A	P
5.1.4	Application of measuring instrument	EL 2125-07	As per Annex D	P
5.1.5	Test procedure	EL 2125-08	Complies	P
5.1.6	Test measurements		See below	P
	a) r.m.s value of voltage, U2 measured using the instrument as per Fig. D.1 or r.m.s value of current measured using the instrument as per Fig. D.2 Alternatively, peak value of voltage, U2, is measured using the measuring instrument described in Clause D.1	EL 2125-09	See appended table 5.1.6	P
	b) Measured touch current (mA):	EL 2125-10	See appended table 5.1.6	P
	c) Calculated value of TOUCH CURRENT (mA) = U2 / 500	EL 2125-11	See appended table 5.1.6	P
	d) Measured protective conductor current(mA)	EL 2125-12	No protective conductor	N/A
	e) Max. protective conductor current =5% of Input current	EL 2125-13	As above	N/A
5.1.7	Equipment with touch current exceeding 3.5 mA	EL 2125-14	Touch current not exceeded 3.5mA	N/A
5.1.7.1	General	EL 2125-15	As above	N/A

5.1.7.2	Simultaneous multiple connections to the supply	EL 2125-16	No multiple connections	N/A
5.1.8	Touch currents to telecommunication networks and cable distribution systems and from telecommunication networks	EL 2125-17	No TNV circuits	N/A
5.1.8.1	Limitation of the touch current to a telecommunication network or to a cable distribution system	EL 2125-18	As above	N/A
	Supply voltage (V)		As above	N/A
	Measured touch current (mA)		As above	N/A
	Max. allowed touch current (mA)		As above	N/A
5.1.8.2	Summation of touch currents from telecommunication networks	EL 2125-19	As above	N/A
	a) EUT with earthed telecommunication ports :		As above	N/A
	b) EUT whose telecommunication ports have no reference to protective earth		As above	N/A

*- Total number of Requirements to be observed / inspected = 05
Total No of applicable Requirement = 04
No of Requirements for which the sample passed = 04

Total number of tests to be conducted = 15
Total No of applicable Tests = 06
No. of tests for which the sample passed = 06

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Insulating Properties

EL 2126 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
5.2	Electric strength*	EL 2126-00	Complies	P
5.2.1	General*	EL 2126-01	See appended table 5.2	P
5.2.2	Test procedure		Table 5B used See appended table 5.2	P
	a) The test voltages for electric strength for the appropriate grade of insulation [FUNCTIONAL INSULATION if required by 5.3.4 b), BASIC INSULATION, SUPPLEMENTARY INSULATION or REINFORCED INSULATION] are as specified in either: – Table 5B using the PEAK WORKING VOLTAGE (U), as determined in 2.10.2; or – Table 5C using the REQUIRED WITHSTAND VOLTAGE, as determined in G.4.	EL 2126-02	As above	P

*- Total number of Requirements to be observed / inspected = 02
Total No of applicable Requirement = 02
No of Requirements for which the sample passed= 02

Total number of tests to be conducted = 01
Total No of applicable Tests = 01
No. of tests for which the sample passed = 01

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....

(Approving Authority)

Tests relating to Insulating Properties

EL 2127 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
5.3	Abnormal operating and fault conditions	EL 2127-00	Complies	P
5.3.1	Protection against overload and abnormal operation	EL 2127-01	See appended table 5.3	P
5.3.2	Motors	EL 2127-02	No motor used	N/A
5.3.3	Transformers	EL 2127-03	Adequate protection against overload provided See Annex C	P
5.3.4	Functional insulation:	EL 2127-04	Short circuit tests See appended table 5.3	P
5.3.5	Electromechanical components	EL 2127-05	No electromechanical components	N/A
5.3.6	Audio amplifiers in ITE :	EL 2127-06	No Audio Amplifier used	N/A
5.3.7	Simulation of faults	EL 2127-07	See appended table 5.3	P
5.3.8	Unattended equipment	EL 2127-08	No such equipment	N/A
5.3.9	Compliance criteria for abnormal operating and fault conditions*		Complies	P
5.3.9.1	During the tests	EL 2127-09	No fire propagated beyond the equipment, no molten metal was emitted	P
5.3.9.2	After the tests	EL 2127-10	Electric strength tests were passed	P

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed = 00

Total number of tests to be conducted = 11
Total No of applicable Tests = 07
No. of tests for which the sample passed = 07

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to Communicating Connection

EL 2128 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
6.1	Protection of telecommunication network service persons, and users of other equipment connected to the network, from hazards in the equipment	EL 2128-00	No TNV circuits	N/A
6.1.1	Protection from hazardous voltages	EL 2128-01	As above	N/A
6.1.2	Separation of the telecommunication network from earth*		As above	N/A
6.1.2.1	Requirements: - Surge suppressors that bridge the insulation shall have a minimum rated operating voltage U_{op} of $U_{op} = U_{peak} + \Delta U_{sp} + \Delta U_{sa}$ Where U_{peak} is 360V or 180V ΔU_{sp} is the maximum increase of the rated operating voltage due to variations in component production(If not specified by the manufacturer, shall be taken as 10% of the rated operating voltage of the component) ΔU_{sa} is the maximum increase of the rated operating voltage due to the component ageing over the expected life of the equipment(If not specified by the manufacturer, shall be taken as 10% of the rated operating voltage of the component) -Insulation is subjected to electric strength test according to 5.2.2. The a.c test voltage is 1.5kV or 1.0kV - Components bridging the insulation that are left in place during electric strength testing shall not be damaged. There shall be no breakdown of insulation during electric strength testing.	EL 2128-02	As above	N/A

SGS INDIA PVT. LIMITED BANGALORE

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
6.1.2.2	Exclusions	EL 2128-03	As above	N/A

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 04
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

SGS INDIA PVT. LIMITED BANGALORE

Tests relating to Communicating Connection

EL 2129 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
6.2	Protection of equipment users from overvoltages on telecommunication networks*	EL 2129-00	No TNV circuits	N/A
6.2.1	Separation requirements	EL 2129-01	As above	N/A
6.2.2	Electric strength test procedure	EL 2129-02	As above	N/A
6.2.2.1	Impulse test	EL 2129-03	As above	N/A
6.2.2.2	Steady-state test	EL 2129-04	As above	N/A
6.2.2.3	Compliance criteria	EL 2129-05	As above	N/A

*- Total number of Requirements to be observed / inspected = 01
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 05
Total No of applicable Tests = 00
No. of tests for which the sample passed = 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to Communicating Connection

EL 2130 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
6.3	Protection of the telecommunication wiring system from overheating	EL 2130-00	No TNV circuits	N/A
	a)If current limiting is due to the inherent impedance of the power source, the output current into any resistive load, including a short-circuit, is measured. The current limit shall not be exceeded after 60 s of test. Max. output current (A) :	EL 2130-01	As above	N/A
	b) If current limiting is provided by an overcurrent protective device having a specified time/current characteristic: – the time/current characteristic shall show that a current equal to 110 % of the current limit will be interrupted within 60 min; and	EL 2130-02	As above	N/A
	c) the output current into any resistive load, including a short-circuit, with the overcurrent protective device bypassed, measured after 60 s of test, shall not exceed 1 000/U, where U is the output voltage measured in accordance with 1.4.5 with all load circuits disconnected.	EL 2130-03	As above	N/A

SGS INDIA PVT. LIMITED BANGALORE

	d) If current limiting is provided by an overcurrent protective device that does not have a specified time/current characteristic: – the output current into any resistive load, including a short-circuit, shall not exceed the current limit after 60 s of test; and – the output current into any resistive load, including a short-circuit, with the overcurrent protective device bypassed, measured after 60 s of test, shall not exceed 1 000/U, where U is the output voltage measured in accordance with 1.4.5 with all load circuits disconnected.	EL 2130-04	As above	N/A

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 05
Total No of applicable Tests = 00
No. of tests for which the sample passed = 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

SGS INDIA PVT. LIMITED BANGALORE

Tests relating to Connection to cable distribution system

EL 2131 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
7	Connection to cable distribution systems*	EL 2131-00	Not connected to cable distribution system	N/A
7.1	General requirements*	EL 2131-01	As above	N/A
7.2	Protection of cable distribution system service persons, and users of other equipment connected to the system, from hazardous voltages in the equipment	EL 2131-02	As above	N/A
7.3	Protection of equipment users from overvoltages on the cable distribution system	EL 2131-03	As above	N/A
7.4	Insulation between primary circuits and cable distribution systems	EL 2131-04	As above	N/A
7.4.1	General	EL 2131-05	As above	N/A
7.4.2	Voltage surge test	EL 2131-06	As above	N/A
7.4.3	Impulse test	EL 2131-07	As above	N/A

*- Total number of Requirements to be observed / inspected = 02
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 06
Total No of applicable Tests = 00
No. of tests for which the sample passed = 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Fire Safety

EL 2132 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
A	ANNEX A, TESTS FOR RESISTANCE TO HEAT AND FIRE	EL 2132-00	Approved components/ parts are used and flammability data is inspected and evaluated See appended table 1.5.1	N/A
A.1	Flammability test for fire enclosures of movable equipment having a total mass exceeding 18 kg, and of stationary equipment (see 4.7.3.2)	EL 2132-01	As above	N/A
A.1.1	Samples:	EL 2132-02	As above	N/A
	Wall thickness (mm):		As above	N/A
A.1.2	Conditioning of samples; temperature (°C) :	EL 2132-03	As above	N/A
A.1.3	Mounting of samples :	EL 2132-04	As above	N/A
A.1.4	Test flame (see IEC 60695-11-3)	EL 2132-05	As above	N/A
	Flame A, B, C or D :		As above	N/A
A.1.5	Test procedure	EL 2132-06	As above	N/A
A.1.6	Compliance criteria	EL 2132-07	As above	N/A
	Sample 1 burning time (s):		As above	N/A
	Sample 2 burning time (s):		As above	N/A
	Sample 3 burning time (s):		As above	N/A
A.2	Flammability test for fire enclosures of movable equipment having a total mass not exceeding 18 kg, and for material and components located inside fire enclosures (see 4.7.3.2 and 4.7.3.4)	EL 2132-08	As above	N/A
A.2.1	Samples, material:	EL 2132-09	As above	N/A
	Wall thickness (mm):		As above	N/A
A.2.2	Conditioning of samples; temperature (°C) :	EL 2132-10	As above	N/A
A.2.3	Mounting of samples :	EL 2132-11	As above	N/A
A.2.4	Test flame (see IEC 60695-11-4)	EL 2132-12	As above	N/A
	Flame A, B or C :		As above	N/A
A.2.5	Test procedure	EL 2132-13	As above	N/A

SGS INDIA PVT. LIMITED SGS BANGALORE

Tests relating to Fire Safety

EL 2132 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
A.2.6	Compliance criteria	EL 2132-14	As above	N/A
	Sample 1 burning time (s):		As above	N/A
	Sample 2 burning time (s):		As above	N/A
	Sample 3 burning time (s):		As above	N/A
A.2.7	Alternative test acc. to IEC 60695-11-5, cl. 5 and 9	EL 2132-15	As above	N/A
	Sample 1 burning time (s):		As above	N/A
	Sample 2 burning time (s):		As above	N/A
	Sample 3 burning time (s):		As above	N/A
A.3	Hot flaming oil test (see 4.6.2)	EL 2132-16	As above	N/A
A.3.1	Mounting of samples	EL 2132-17	As above	N/A
A.3.2	Test procedure	EL 2132-18	As above	N/A
A.3.3	Compliance criterion	EL 2132-19	As above	N/A

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 20
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to Insulating Properties

EL 2133 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
B	ANNEX B, MOTOR TESTS UNDER ABNORMAL CONDITIONS (see 4.7.2.2 and 5.3.2)	EL 2133-00	No motor used	N/A
B.1	General requirements	EL 2133-01	As above	N/A
	Position :		As above	N/A
	Manufacturer :		As above	N/A
	Type :		As above	N/A
	Rated values :		As above	N/A
B.2	Test conditions	EL 2133-02	As above	N/A
B.3	Maximum temperatures	EL 2133-03	As above	N/A
B.4	Running overload test	EL 2133-04	As above	N/A
B.5	Locked-rotor overload test	EL 2133-05	As above	N/A
	Test duration (days):		As above	N/A
	Electric strength test: test voltage (V) :		As above	N/A
B.6	Running overload test for d.c. motors in secondary circuits	EL 2133-06	As above	N/A
B.6.1	General	EL 2133-07	As above	N/A
B.6.2	Test procedure	EL 2133-08	As above	N/A
B.6.3	Alternative test procedure	EL 2133-09	As above	N/A
B.6.4	Electric strength test; test voltage (V):	EL 2133-10	As above	N/A
B.7	Locked-rotor overload test for d.c. motors in secondary circuits	EL 2133-11	As above	N/A
B.7.1	General	EL 2133-12	As above	N/A
B.7.2	Test procedure	EL 2133-13	As above	N/A
B.7.3	Alternative test procedure	EL 2133-14	As above	N/A
B.7.4	Electric strength test; test voltage (V) :	EL 2133-15	As above	N/A
B.8	Test for motors with capacitors	EL 2133-16	As above	N/A
B.9	Test for three-phase motors	EL 2133-17	As above	N/A
B.10	Test for series motors	EL 2133-18	As above	N/A
	Operating voltage (V) :		As above	N/A

SGS INDIA PVT. LIMITED SGS BANGALORE

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 19
Total No of applicable Tests = 00
No. of tests for which the sample passed = 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2134 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
C	ANNEX C, TRANSFORMERS (see 1.5.4 and 5.3.3)*	EL 2134-00	Complies	P
	Position :		Pri – Sec transformer T1	P
	Manufacturer :		See appended table 1.5.1	P
	Type :		See appended table 1.5.1	P
	Rated values :		See appended table 1.5.1	P
	Method of protection:		Inherent protection	P
C.1	Overload test	EL 2134-01	See appended table 5.3	P
C.2	Insulation	EL 2134-02	See appended table C.2	P
	Protection from displacement of windings:		Adequate construction See appended table 2.10.3 and 2.10.4	P

*- Total number of Requirements to be observed / inspected = 01
Total No of applicable Requirement = 01
No of Requirements for which the sample passed= 01

Total number of tests to be conducted = 02
Total No of applicable Tests = 02
No. of tests for which the sample passed= 02

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Insulating Properties

EL 2135 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
D	ANNEX D, MEASURING INSTRUMENTS FOR TOUCH-CURRENT TESTS (see 5.1.4)	EL 2135-00	See below	P
D.1	Measuring instrument	EL 2135-01	Figure D.1 used	P
D.2	Alternative measuring instrument	EL 2135-02	Not used	N/A

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 03
Total No of applicable Tests = 02
No. of tests for which the sample passed= 02

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Thermal Properties

EL 2136– V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
E	ANNEX E, TEMPERATURE RISE OF A WINDING (see 1.4.13)	EL2136-00	winding resistance method not used	N/A

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 01
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED SGS BANGALORE

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2137 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
F	ANNEX F, MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES (see 2.10 and Annex G)	EL2137-00	Complies	P

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 01
Total No of applicable Tests = 01
No. of tests for which the sample passed= 01

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PRIVATE LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to Electrical safety

EL 2138 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
G	ANNEX G, ALTERNATIVE METHOD FOR DETERMINING MINIMUM CLEARANCES	EL 2138-00	Alternate method not used	N/A
G.1	Clearances	EL 2138-01	As above	N/A
G.1.1	General	EL 2138-02	As above	N/A
G.1.2	Summary of the procedure for determining minimum clearances	EL 2138-03	As above	N/A
G.2	Determination of mains transient voltage (V)	EL 2138-04	As above	N/A
G.2.1	AC Mains supply	EL 2138-05	As above	N/A
G.2.2	Earthed d.c. mains supplies	EL 2138-06	As above	N/A
G.2.3	Unearthed d.c. mains supplies	EL 2138-07	As above	N/A
G.2.4	Battery operation	EL 2138-08	As above	N/A
G.3	Determination of telecommunication network transient voltage (V)	EL 2138-09	As above	N/A
G.4	Determination of required withstand voltage (V)	EL 2138-10	As above	N/A
G.4.1	Mains transients and internal repetitive peaks	EL 2138-11	As above	N/A
G.4.2	Transients from telecommunication networks:	EL 2138-12	As above	N/A
G.4.3	Combination of transients	EL 2138-13	As above	N/A
G.4.4	Transients from cable distribution systems	EL 2138-14	As above	N/A
G.5	Measurement of transient voltages (V)	EL 2138-15	As above	N/A
	a) Transients from a mains supply		As above	N/A
	For an a.c. mains supply		As above	N/A
	For a d.c. mains supply		As above	N/A
	b) Transients from a telecommunication network		As above	N/A
G.6	Determination of minimum clearances	EL 2138-16	As above	N/A

SGS INDIA PVT. LIMITED BANGALORE

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 17
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to Radiation Safety

EL 2139 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
H	ANNEX H, IONIZING RADIATION (see 4.3.13)	EL 2139-00	No such radiation	N/A

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 01
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2140 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
J	ANNEX J, TABLE OF ELECTROCHEMICAL POTENTIALS (see 2.6.5.6)*	EL 2140-00	No relevant parts present	N/A
	Metal(s) used :		As above	N/A

*- Total number of Requirements to be observed / inspected = 01
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 00
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to General Requirement

EL 2141 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
K	ANNEX K, THERMAL CONTROLS (see 1.5.3 and 5.3.8)*	EL 2141-00	No thermal controls used	N/A
K.1	Making and breaking capacity	EL 2141-01	As above	N/A
K.2	Thermostat reliability; operating voltage (V) :	EL 2141-02	As above	N/A
K.3	Thermostat endurance test; operating voltage (V) :	EL 2141-03	As above	N/A
K.4	Temperature limiter endurance; operating voltage (V) :	EL 2141-04	As above	N/A
K.5	Thermal cut-out reliability	EL 2141-05	As above	N/A
K.6	Stability of operation	EL 2141-06	As above	N/A

*- Total number of Requirements to be observed / inspected = 01
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 06
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to General Requirement

EL 2142 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
L	ANNEX L, NORMAL LOAD CONDITIONS FOR SOME TYPES OF ELECTRICAL BUSINESS EQUIPMENT (see 1.2.2.1 and 4.5.2)*	EL 2142-00	Complies	P
L.1	Typewriters*	EL 2142-01	Not typewriters	N/A
L.2	Adding machines and cash registers*	EL 2142-02	Not adding machines and cash register	N/A
L.3	Erasers*	EL 2142-03	Not an eraser	N/A
L.4	Pencil sharpeners*	EL 2142-04	Not pencil sharpeners	N/A
L.5	Duplicators and copy machines*	EL 2142-05	Not a duplicators and copy machines	N/A
L.6	Motor-operated files*	EL 2142-06	Not motor-operated files	N/A
L.7	Other business equipment*	EL 2142-07	Maximum normal load of operation	P

*- Total number of Requirements to be observed / inspected = 08
Total No of applicable Requirement = 02
No of Requirements for which the sample passed= 02

Total number of tests to be conducted = 00
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2143 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
M	ANNEX M, CRITERIA FOR TELEPHONE RINGING SIGNALS (see 2.3.1)	EL 2143-00	Does not generate telephone ringing signals	N/A
M.1	Introduction*	EL 2143-01	As above	N/A
M.2	Method A	EL 2143-02	As above	N/A
M.3	Method B	EL 2143-03	As above	N/A
M.3.1	Ringing signal	EL 2143-04	As above	N/A
M.3.1.1	Frequency (Hz)	EL 2143-05	As above	N/A
M.3.1.2	Voltage (V)	EL 2143-06	As above	N/A
M.3.1.3	Cadence; time (s), voltage (V) ...	EL 2143-07	As above	N/A
M.3.1.4	Single fault current (mA)	EL 2143-08	As above	N/A
M.3.2	Tripping device and monitoring voltage	EL 2143-09	As above	N/A
M.3.2.1	Conditions for use of a tripping device or a monitoring voltage	EL 2143-10	As above	N/A
M.3.2.2	Tripping device	EL 2143-11	As above	N/A
M.3.2.3	Monitoring voltage (V)	EL 2143-12	As above	N/A

*- Total number of Requirements to be observed / inspected = 01
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 12
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to Electrical safety

EL 2144 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
N	ANNEX N, IMPULSE TEST GENERATORS (see 1.5.7.2, 1.5.7.3, 2.10.3.9, 6.2.2.1, 7.3.2, 7.4.3 and Clause G.5)	EL 2144-00	No TNV circuits	N/A
N.1	ITU-T impulse test generators	EL 2144-01	As above	N/A
N.2	IEC 60065 impulse test generator	EL 2144-02	As above	N/A

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 03
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to General Requirements **EL 2145– V1.4**

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
P	ANNEX P, NORMATIVE REFERENCES	EL 2145-00	Complies	P

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 01
Total No of applicable Tests = 01
No. of tests for which the sample passed= 01

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to General Requirements

EL 2146 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
Q	ANNEX Q, Voltage dependent resistors (VDRs) (see 1.5.9.1)	EL 2146-00	VDR's not used	N/A
	A VDR shall comply with iec 61051-2, whether a fire enclosure is provided or not, taking into account all of the following:		As above	N/A
	a) Preferred climatic categories Lower category temperature: -10°C Upper category temperature: +85°C Duration of damp Test, steady state test:21 days		As above	N/A
	b) Maximum continuous voltage: Atleast 1,25 times the rated voltage of the equipment or Atleast 1,25 times the upper voltage of the rated voltage range		As above	N/A
	c) Combination pulse :	EL 2146-01	As above	N/A
	d) Body of the VDR shall comply with Needle flame test according to IEC 60695-11-5 with the following test severities: duration of application of the test flame: 10 s after flame time: 5s [This test is not required if VDR complies with V-1 CLASS MATERIAL]	EL 2146-02	As above	N/A

*- Total number of Requirements to be observed / inspected = 00

Total No of applicable Requirement = 00

No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 03

Total No of applicable Tests = 00

No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....

(Approving Authority)

EL 2147– V1.4

Tests relating to General Requirement

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
R	ANNEX R, EXAMPLES OF REQUIREMENTS FOR QUALITY CONTROL PROGRAMMES*	EL 2147-00	No coated printed boards used	N/A
R.1	Minimum separation distances for unpopulated coated printed boards (see 2.10.6.2)*	EL 2147-01	As above	N/A
R.2	Reduced clearances (see 2.10.3)*	EL 2147-02	As above	N/A

*- Total number of Requirements to be observed / inspected = 03
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 00
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to General Requirement

EL 2148 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
S	ANNEX S, PROCEDURE FOR IMPULSE TESTING (see 6.2.2.3)*	EL 2148-00	No surge suppressor used	N/A
S.1	Test equipment*	EL 2148-01	As above	N/A
S.2	Test procedure*	EL 2148-02	As above	N/A
S.3	Examples of waveforms during impulse testing*	EL 2148-03	As above	N/A

*- Total number of Requirements to be observed / inspected = 04
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 00
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

EL 2149 – V1.4

Tests relating to Protection against Ingress of water

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
T	ANNEX T, GUIDANCE ON PROTECTION AGAINST INGRESS OF WATER (see 1.1.2)*	EL 2149-00	Not intended for outdoor used	N/A

*- Total number of Requirements to be observed / inspected = 01
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 00
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Wiring

EL 2150 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
U	ANNEX U, INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION (see 2.10.5.4)	EL2150-00	Approved triple Insulated wire used	N/A
U.1	GENERAL	EL2150-01	As above	N/A
U.2	TYPE TESTS	EL2150-02	As above	N/A
U.2.1	GENERAL	EL2150-03	As above	N/A
U.2.2	ELECTRIC STRENGTH	EL2150-04	As above	N/A
U.2.2.1	SOLID ROUND WINDING WIRE AND STRANDED WINDING WIRES	EL2150-05	As above	N/A
U.2.2.1.1	WIRES WITH NOMINAL CONDUCTOR DIAMETER UPTO AND INCLUDING 0.100MM	EL2150-06	As above	N/A
U.2.2.1.2	WIRES WITH NOMINAL CONDUCTOR DIAMETER OVER 0.100MM AND INCLUDING 2.500MM	EL2150-07	As above	N/A
U.2.2.1.3	WIRES WITH NOMINAL CONDUCTOR DIAMETER OVER 2.500MM	EL2150-08	As above	N/A
U.2.2.2	SQUARE OR RECTANGULAR WIRES	EL2150-09	As above	N/A
U.2.3	FLEXIBILITY AND ADHERENCE	EL2150-10	As above	N/A
U.2.4	HEAT SHOCK	EL2150-11	As above	N/A
U.2.5	RETENTION OF ELECTRIC STRENGTH AFTER BENDING	EL2150-12	As above	N/A
U.3	TESTING DURING MANUFACTURING	EL2150-13	As above	N/A
U.3.1	GENERAL	EL2150-14	As above	N/A
U.3.2	ROUTINE TESTS	EL2150-15	As above	N/A
U.3.3	SAMPLING TEST	EL2150-16	As above	N/A

SGS INDIA PVT. LIMITED BANGALORE

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 17
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00
Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2151 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
V	ANNEX V, AC POWER DISTRIBUTION SYSTEMS (see 1.6.1) *	EL 2151-00	Complies	P
V.1	Introduction*	EL 2151-01	See below	P
V.2	TN power distribution systems	EL 2151-02	Considered	P
V.3	TT Power Distribution systems	EL 2151-03	TN power distribution systems	N/A
V.4	IT Power Distribution systems	EL 2151-04	TN power distribution systems	N/A

*- Total number of Requirements to be observed / inspected = 02
Total No of applicable Requirement = 02
No of Requirements for which the sample passed= 02

Total number of tests to be conducted = 03
Total No of applicable Tests = 01
No. of tests for which the sample passed= 01

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

Vijaysha

.....

(Approving Authority)

SGS INDIA PVT. LIMITED BANGALORE

Tests relating to Electrical Safety

EL 2152 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
W	ANNEX W, SUMMATION OF TOUCH CURRENTS *	EL 2152-00	See below	N/A
W.1	Touch current from electronic circuits*	EL 2152-01	No floating circuits	N/A
W.1.1	Floating circuits*	EL 2152-02	As above	N/A
W.1.2	Earthed circuits*	EL 2152-03	No such circuits	N/A
W.2	Interconnection of several equipments*	EL 2152-04	No interconnection circuits	N/A
W.2.1	Isolation*	EL 2152-05	As above	N/A
W.2.2	Common return, isolated from earth*	EL 2152-06	As above	N/A
W.2.3	Common return, connected to protective earth*	EL 2152-07	As above	N/A

*- Total number of Requirements to be observed / inspected = 08
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 00
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

EL 2153– V1.4

Tests relating to Electrical Safety

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
X	ANNEX X, MAXIMUM HEATING EFFECT IN TRANSFORMER TESTS (see clause C.1)*	EL 2153-00	See clause C.1	N/A
X.1	Determination of maximum input current*	EL 2153-01	As above	N/A
X.2	Overload test procedure*	EL 2153-02	As above	N/A

*- Total number of Requirements to be observed / inspected = 03
Total No of applicable Requirement = 03
No of Requirements for which the sample passed= 03

Total number of tests to be conducted = 00
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Radiation Safety

EL 2154– V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
Y	ANNEX Y, ULTRAVIOLET LIGHT CONDITIONING TEST (see 4.3.13.3)	EL 2154-00	Not used	N/A
Y.1	Test apparatus	EL 2154-01	As above	N/A
Y.2	Mounting of test samples	EL 2154-02	As above	N/A
Y.3	Carbon-arc light-exposure apparatus	EL 2154-03	As above	N/A
Y.4	Xenon-arc light exposure apparatus	EL 2154-04	As above	N/A

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 05
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

EL 2155– V1.4

Tests relating to Electrical Safety

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
Z	ANNEX Z, OVERVOLTAGE CATEGORIES (see 2.10.3.2 and Clause G.2)*	EL 2155-00	Complies	P

*- Total number of Requirements to be observed / inspected = 01
Total No of applicable Requirement = 01
No of Requirements for which the sample passed= 01

Total number of tests to be conducted = 00
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Mechanical Properties

EL 2156 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
AA	ANNEX AA, MANDREL TEST (see 2.10.5.8)	EL 2156-00	No such material used	N/A

*- Total number of Requirements to be observed / inspected = 00
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 01
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Electrical Safety

EL 2158 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
CC	Evaluation of integrated circuit (IC) current limiters*	EL 2158-00	No integrated circuit (IC) current limiters used	N/A
CC.1	Integrated circuit (IC) current limiters*	EL 2158-01	As above	N/A
CC.2	Test program 1	EL 2158-02	As above	N/A
CC.3	Test program 2	EL 2158-03	As above	N/A
CC.4	Test program 3	EL 2158-04	As above	N/A
CC.5	Compliance	EL 2158-05	As above	N/A

*- Total number of Requirements to be observed / inspected = 02
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 04
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Mechanical Properties

EL 2159 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
DD	Requirements for the mounting means of rack-mounted equipment*	EL 2159-00	Not Rack- mounting equipment	N/A
DD.1	General		As above	N/A
DD.2	Mechanical strength test, variable N……..:	EL 2159-01	As above	N/A
DD.3	Mechanical strength test, 250N, including end stops……..:	EL 2159-02	As above	N/A
DD.4	Compliance*……..:	EL 2159-03	As above	N/A

*- Total number of Requirements to be observed / inspected = 02
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 02
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

.....
(Approving Authority)

Tests relating to Mechanical Properties

EL 2160 – V1.4

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
EE	ANNEX EE, Household and home/office document/media shredders	EL 2160-00	Not a Household and home/office document/media shredders	N/A
EE.1	General		As above	N/A
EE.2	Markings and instructions*	EL 2160-01	As above	N/A
	Use of markings or symbols*.....:		As above	N/A
	Information of user instructions, maintenance and/or servicing instructions*.....:		As above	N/A
EE.3	Inadvertent reactivation test.....:	EL 2160-02	As above	N/A
EE.4	Disconnection of power to hazardous moving parts*	EL 2160-03	As above	N/A
	Use of markings or symbols*.....:		As above	N/A
EE.5	Protection against hazardous moving parts		As above	N/A
	Test with test finger (Figure 2A) .....:	EL 2160-04	As above	N/A
	Test with wedge probe (Figure EE1 and EE2) .....:	EL 2160-05	As above	N/A

*- Total number of Requirements to be observed / inspected = 02
Total No of applicable Requirement = 00
No of Requirements for which the sample passed= 00

Total number of tests to be conducted = 04
Total No of applicable Tests = 00
No. of tests for which the sample passed= 00

Certificate: It is certified that the above tests were performed and found to be passing in the requirement tested.

SGS INDIA PVT. LIMITED BANGALORE

.....
(Approving Authority)

1.5.1	TABLE: List of components				P
Object/part no.	Manufacturer/ trademark	Type/model	Technical data	Standard	Mark(s) of conformity
Appliance inlet	Zhejiang LECI Electronics Co., Ltd.	DB-14	10A, 250Vac	IEC/EN 60320-1	VDE 40032137
Alternate for Appliance inlet	Rich Bay Co., Ltd.	R-301SN	10A, 250Vac	IEC/EN 60320-1	VDE 40030228
Alternate for Appliance inlet	Sun Fair Electric Wire & Cable (HK)Co. Ltd.	S-03	10A, 250Vac	IEC/EN 60320-1	VDE 40034447
Alternate for Appliance inlet	TECX-UNIONS Technology Corporation	TU-301-S, TU-301-SP	10A, 250Vac	IEC/EN 60320-1	ENEC 00647
Alternate for Appliance inlet	Rong Feng Industrial Co., Ltd.	SS-120	10A, 250Vac	IEC/EN 60320-1	VDE 40028101
Alternate for Appliance inlet	Inalways Corporation	0711 series	10A, 250Vac	IEC/EN 60320-1	ENEC 2010084
Alternate for Appliance inlet	Zhe Jiang Bei Er jia	ST-A01-003J	10A, 250Vac	IEC/EN 60320-1	VDE 40013388
Adapter Enclosure	SABIC Innovative Plastics B V	SE1X(GG)(f1) 945	Min. V-1, min. 1,5 mm thickness, 105 °C	UL 94 (Flammable test equivalent to IEC 60695-11-10)	UL E45329
Alternate for Adapter Enclosure	TEIJIN CHEMICALS LTD	LN-1250P, LN-1250G	Min. V-0 , min.1.5 mm thickness, 115°C	UL 94 (Flammable test equivalent to IEC 60695-11-10)	UL E50075
Alternate for Adapter Enclosure	SABIC INNOVATIVE PLASTICS B V	940	Min. V-1, min.1.5 mm thickness, 120°C	UL 94 (Flammable test equivalent to IEC 60695-11-10)	UL E45329
Mains/SMPS transformer (T1)	ENG GlobTek BOAM Haopuwei	XF00941 (5-7.5V),	Class B	IS 13252 (Part 1):2010+ A1:2013+ A2:2015	Tested with appliance
Bobbin	CHANG CHUN PLASTICS CO LTD	T375J T375HF	V-0, 150°C, thickness 0.45 mm min.	UL 94 UL 746 A/B/C/D (Flammable test equivalent to IEC 60695-11-10)	UL E59481

Alternate for Bobbin	SUMITOMO BAKELITE CO LTD	PM-9820	V-0, 150°C, thickness 0.45 mm min.	UL 94 UL 746 A/B/C/D (Flammable test equivalent to IEC 60695-11-10)	UL E41429
Alternate for Bobbin	HITACHI CHEMICAL CO LTD	CP-J-8800	V-0, 150°C, thickness 0.45 mm min.	UL 94 UL 746 A/B/C/D (Flammable test equivalent to IEC 60695-11-10)	UL E42956
Insulation tape	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1(b) 1350T-1 44	Min.130°C	UL 510 (Insulation classified equivalent to IEC 60085)	UL E17385
Alternate for Insulation tape	BONDTEC PACIFIC CO LTD	370S(b)	Min.130°C	UL 510 (Insulation classified equivalent to IEC 60085)	UL E175868
Alternate for Insulation tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ*(b) CT*(c)(g) CT(b)(g)	Min.130°C	UL 510 (Insulation classified equivalent to IEC 60085)	UL E165111
Alternate for Insulation tape	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A(b)	Min.130°C	UL 510 (Insulation classified equivalent to IEC 60085)	UL E246950
Alternate for Insulation tape	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX(a)(b)	Min.130°C	UL 510 (Insulation classified equivalent to IEC 60085)	UL E246820
Triple Insulated Wire	Great Leoflon Industrial Co., Ltd.	TRW (B) Serie(s)	Class B, reinforced insulation	IEC 60950-1 UL 2353	VDE 136581 UL E211989
Alternate for Triple Insulated Wire	COSMOLINK CO. Ltd.	TIW-M Serie(s)	Class B, reinforced insulation	IEC 60950-1 UL 2353	VDE 138053 UL E213764
Alternate for Triple Insulated Wire	Furukawa Electric Co., Ltd.	TEX-E	Class B, reinforced insulation	IEC 60950-1 UL 2353	VDE 006735 UL E206440
Alternate for Triple Insulated Wire	SHENZHEN JIUDING NEW MATERIAL CO LTD	DTIW-B	Class B	IEC 60950-1 UL 2353	VDE 40037495 UL E357999

Inductor (LF1)	ENG GlobTek BOAM Haopuwei	NF00030	Class B	IS 13252 (Part 1):2010+ A1:2013+ A2:2015	Tested with appliance
Y capacitors (CY1, CY2) (optional)	Walsin Technology Corp	AH	Min.250V, Min.125°C, Y1, CY1=Max.2200 pF,CY2= Max.100pF	IEC 60384-14 EN 60384-14: 2005, UL 60384-14	VDE 40001804 UL E146544
Alternate for Y capacitors (CY1, CY2)	Success Electronics Co Ltd	SE SB	Min.250V, Min.125oC, Y1, CY1=Max.2200 pF,CY2= Max.100pF	IEC 60384-14 EN 60384-14: 2005, UL 60384-14	VDE 40037221 VDE 40037211
Alternate for Y capacitors (CY1, CY2)	TDK-EPC Corporation	CD	Min.250V, Min.125oC, Y1, CY1=Max.2200 pF, CY2=Max. 100pF	IEC 60384-14 EN 60384-14: 2005, UL 60384-14	VDE 40029780 UL E37861
Alternate for Y capacitors (CY1, CY2)	Haohua Electronic Co	CT 7	Min.250V, Min.125oC, Y1, CY1=Max.2200 pF,CY2= Max.100pF	IEC 60384-14 EN 60384-14: 2005, UL 60384-14	VDE 40003902 UL E233106
Alternate for Y capacitors (CY1, CY2)	Xiangtai Electronics (Shenzhen) Co Ltd	YO-series	Min.250V, Min.125oC, Y1, CY1=Max.2200 pF,CY2= Max.100pF	IEC 60384-14 EN 60384-14: 2005, UL 60384-14	VDE 40036880 UL E319473
Photo Coupler (PC1)	Everlight Electronics Co., Ltd.	EL817	Dti=0.5mm Int. , dcr=6.0mm EXT.dcr=7.7mm ,thermal cycling test,110°C	IEC/EN 60747-5-2	VDE 132249
Alternate for Photo Coupler (PC1)	COSMO Electronics Corporation	K1010, KP1010	Dti=0.6mm Int. , Dcr = 4.0mm, Ext.dcr=5.0mm, thermal cycling test,115°C	IEC/EN 60747-5-2	VDE 101347
Alternate for Photo Coupler (PC1)	Lite-On Technology Corporation	LTV-817	Dti=0.8mm, EXT.dcr=7.8mm thermal cycling test,100°C	IEC/EN 60747-5-2	VDE 40015248

SGS INDIA PVT. LIMITED BANGALORE

Alternate for Photo Coupler (PC1)	Fairchild Semiconductor Pte Ltd	H11A817B, FOD817B	Insulation voltage: 850V, Transient overvoltage: 6000V; CTI175; Int. Cr/ Ext. Cr: ≥7.0/ 7.0 mm; 30/110/21	IEC/EN 60747-5-2	VDE 40026857
Alternate for Photo Coupler (PC1)	Sharp Corporation Electronic Components and Devices Group	PC817	Insulation voltage: 890V; Transient overvoltage: 9000V Int. Cr/ Ext. Cr: 7.62/ 7.62 mm; 30/100/21	IEC/EN 60747-5-2	VDE 40008087
Alternate for Photo Coupler (PC1)	Bright Led Electronics Corp.	BPC-817 (A; B; C; D; L), BPC-817 M, BPC-817 S	Dti=0.4mm, EXT.dcr=7.0mm thermal cycling test,100°C	IEC/EN 60747-5-2	VDE 40007240
Alternate for Photo Coupler (PC1)	Renesas Electronics Corporation	PS2561-1	Dti=0.4mm, EXT.dcr=7.0mm ,thermal cycling test,100°C	IEC/EN 60747-5-2	VDE 40008862
X capacitor (CX1) (optional)	Tenta Electric Industrial Co. Ltd.	MEX	Max 0.22µF, Min.250V,100°C ,X1 or X2	IEC/EN 60384-14	VDE 119119
Alternate for X capacitor (CX1)	Joey Electronics (Dong Guan) Co., Ltd.	MPX	Max 0.22µF, Min.250V,100°C ,X1 or X2	IEC/EN 60384-14	VDE 40032481
Alternate for X capacitor (CX1)	Ultra Tech Xiphi Enterprise Co. Ltd.	HQX	Max 0.22µF, Min.250V,100°C ,X1 or X2	IEC/EN 60384-14	VDE 40015608
Alternate for X capacitor (CX1)	Xiangtai Electronic (Shenzhen) Co., Ltd.	MKP/MPX	Max 0.22µF, Min.250V,100°C ,X1 or X2	IEC/EN 60384-14	VDE 40036065
Alternate for X capacitor (CX1)	Carli Electronics Co., Ltd.	MPX	Max 0.22µF, Min.250V,100°C ,X1 or X2	IEC/EN 60384-14	VDE 40008520
Alternate for X capacitor (CX1)	Dain Electronics Co., Ltd.	MEX, MPX, NPX	Max 0.22µF, Min.250V,100°C ,X1 or X2	IEC/EN 60384-14	VDE 40018798
PCB	WALEX ELECTRONIC (WUXI) CO LTD	T2, T2A T2B T4	Min. 1,6 mm thickness, min. V-0, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E154355

Alternate for PCB	YUANMAN PRINTED CIRCUIT CO LTD	1V0	Min. 1,6 mm thickness, min. V-0, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E74757
Alternate for PCB	SUZHOU XINKE ELECTRONICS CO LTD	XK-2,XK1	Min. 1,6 mm thickness, min. V-0, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E231590
Alternate for PCB	GUANGDON HE TONG ELECTRONICS CO LTD	CEM1 2V0 FR4	Min. 1,6 mm thickness, min. V-0, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E243157
Alternate for PCB	KUNSHAN HARRY ELECTRONIC TECHNOLOGY CO., LTD	HS-S	Min. 1,6 mm thickness, min. V-0, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E229877
Alternate for PCB	CHEERFUL ELECTRONIC	02 03 03A	Min. 1,6 mm thickness, min. V-0, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E199724
Alternate for PCB	JIANGSU DIFEIDA ELECTRONICS CO LTD	DFD-1	Min. 1,6 mm thickness, min. V-0, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E213009
Alternate for PCB	DONGGUAN DAYSUN ELECTRONIC CO LTD	DS2	Min. 1,6 mm thickness, min. V-0, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E251754
Alternate for PCB	SUZHOU CITY YILIHUA ELECTRONICS CO LTD	YLH-1	Min. 1,6 mm thickness, min. V-0, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E251781
Alternate for PCB	DAFENG AREX ELECTRONICS TECHNOLOGY CO LTD	02V0 04V0	Min. 1,6 mm thickness, min. V-0, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E186016
Alternate for PCB	BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	DKV0-3A DGV0-3A	Min. 1,6 mm thickness, min. V-0, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E177671
Alternate for PCB	KUOTIANG ENT LTD	C-2 C-2A	Min. V-0, min 1.6 mm thickness, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E227299
Alternate for PCB	PACIFIC WIN INDUSTRIAL LTD	PW-02 PW-03	Min. V-0, min 1.6 mm thickness, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E228070

Alternate for PCB	SHENZHEN TONGCHUANG XIN ELECTRONICS CO LTD	TCX	Min. 1,6 mm thickness, min. V-0, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E250336
Alternate for PCB	SHUANG MING INDUSTRY CO LTD	T005V0	Min. 1,6 mm thickness, min. V-0, 130°C	UL 796 (Flammable test equivalent to IEC 60695-11-10)	UL E78017
Fuse (F1)	Conquer Electronics Co., Ltd.	MST series	T1A, 250V	IEC/EN 60127-1 IEC/EN 60127-3	VDE 40017118
Alternate for Fuse (F1)	Ever Island Electric Co., Ltd. And Walter Electric	2010 Serie(s)	T1A, 250V	IEC/EN 60127-1 IEC/EN 60127-3	VDE 40018781
Alternate for Fuse (F1)	Bel Fuse Ltd.	RST-Serie(s)	T1A, 250V	IEC/EN 60127-1 IEC/EN 60127-3	VDE 40011144
Alternate for Fuse (F1)	Cooper Bussmann LLC	SS-5	T1A, 250V	IEC/EN 60127-1 IEC/EN 60127-3	VDE 40015513
Alternate for Fuse (F1)	Dongguan Better	932	T1A, 250V	IEC/EN 60127-1 IEC/EN 60127-3	VDE 40033369
Supplementary information:					

1.6.2	TABLE: Electrical data (in normal conditions) Model: GT-46181-1805-T3					P
U (V)	I (A)	Irated (A)	P (W)	Fuse #	Ifuse (A)	Condition/status
90	0.4	--	23.1	F1	0.4	Maximum normal load
100	0.4	0.5	22.6	F1	0.4	Maximum normal load
240	0.2	0.5	22.4	F1	0.2	Maximum normal load
254.4	0.2	--	22.4	F1	0.2	Maximum normal load
Supplementary information: Test performed at 50Hz						

1.6.2	TABLE: Electrical data (in normal conditions) Model: GT-46181-1815-T3					P
U (V)	I (A)	Irated (A)	P (W)	Fuse #	Ifuse (A)	Condition/status
90	0.3	--	18.8	F1	0.3	Maximum normal load
100	0.3	0.5	18.6	F1	0.3	Maximum normal load
240	0.1	0.5	18.7	F1	0.1	Maximum normal load
254.4	0.1	--	18.8	F1	0.1	Maximum normal load
Supplementary information: Test performed at 50Hz						

SGS INDIA PVT LIMITED BANGALORE

2.1.1.5	TABLE: Energy hazard measurement				P
Voltage (rated) (V)	Current (rated) (A)	Voltage (max.) (V)	Current (max.) (A)	VA (max.) (VA)	
5	3.6	4.74	4.01	19.00	
Supplementary information:					

2.1.1.7	TABLE: Discharge test				P
Condition	τ calculated (s)	τ measured (s)	t u→ 0V (s)	Comments	
Appliance inlet terminals	--	--	--	Voltage after 1 sec is 9.50V Vo=342.2, 37% of Vo=126.61	
Supplementary information: Tested at 240V AC, 50Hz					

2.2.2	TABLE: SELV measurement (under normal conditions)			P
Transformer	Location	Voltage (max.) (V)		Voltage Limitation Component
		V peak	V d.c.	
T1	Transformer secondary Pin 6-7	22.8	--	--
Supplementary information: Tested at 264V AC, 50Hz ferquency.				

2.2.3	TABLE: SELV measurement (under fault conditions)		P
Location	Voltage (max.) (V)	Comments	
Transformer T1 secondary Pin 6-7	0.0	Diode D8 Short	
Supplementary information: Tested at 254.4V AC, 50Hz ferquency.			

2.4.2	TABLE: Limited current circuit measurement					P
Location	Voltage (V)	Current (mA)	Freq. (kHz)	Limit (mA)	Comments	
Capacitor CY1 Sec. to Earth	254.4	0.4	0.05	0.7	--	
Supplementary information: Tested at 254.4V AC, 50Hz ferquency.						

2.5	TABLE: Limited power source measurement		P
	Limits	Measured	Verdict
According to Table 2B/2C (normal condition): Output			
current (in A)	8	4.01	P
apparent power (in VA)	100	19.00	P
According to Table 2B/2C (single fault condition): Output; D8 Short			

current (in A)	8	0	P
apparent power (in VA)	100	0	P
Supplementary information: Tested at 254.4V AC, 50Hz ferquency.			

2.6.3.4	TABLE: Resistance of earthing measurement		P
Location	Resistance measured (mΩ)	Comments	
Between earthing pin of inlet to earthing wire near PCB	40	Voltage drop: 1.48V; Applied current: 32A	
Supplementary information:			

<OR>

2.6.3.4	TABLE: Resistance of earthing measurement		N/A
Location	Voltage drop (V)	Comments	
--	--	--	
Supplementary information:			

2.10.2	Table: Working voltage measurement		P
Location	RMS voltage (V)	Peak voltage (V)	Comments
Line to Neutral	242	348	--
Across CY1 capacitor	177	352	--
Across CX1 capacitor	242	344	--
Transformer T1 Pin (1,6)	**322**	**480**	Highest peak and RMS voltage
Transformer T1 Pin (1,7)	320	464	--
Transformer T1 Pin (2,6)	261	400	--
Transformer T1 Pin (2,7)	257	356	--
Transformer T1 Pin (3,6)	176	392	--
Transformer T1 Pin (3,7)	180	424	--
Transformer T1 Pin (4,6)	176	352	--
Transformer T1 Pin (4,7)	176	348	--
Across PC1 Pin (1-3)	179	352	--
Across PC1 Pin (1-4)	181	356	--
Across PC1 Pin (2-3)	178	352	--
Across PC1 Pin (2-4)	180	356	--
Supplementary information: The unit is tested at 240V AC, 50Hz frequency in normal operating condition			

2.10.3 and 2.10.4	TABLE: Clearance and creepage distance measurements					P
Clearance (cl) and creepage distance (cr) at/of/between:	U peak (V)	U r.m.s. (V)	Required cl (mm)	cl (mm)	Required cr (mm)	cr (mm)
Functional:						
Line to Neutral	348	242	1.5	6.0	2.5	6.0
Reinforced:						
Transformer T1 primary to secondary	480	322	6.4	7.5	8.0	10.5
Across Optocoupler PC1	356	181	4.0	6.5	4.0	6.5
Across CY1	252	177	4.0	7.9	4.0	7.9
Supplementary information:						

2.10.5	TABLE: Distance through insulation measurements				P
Distance through insulation (DTI) at/of:	U peak (V)	U r.m.s. (V)	Test voltage (V)	Required DTI (mm)	DTI (mm)
Basic:					
--	--	--	--	--	--
Supplementary:					
--	--	--	--	--	--
Reinforced:					
Plastic enclosure	340	240	3000	0.4	1.82
Supplementary information:					

4.3.8	TABLE: Batteries									N/A
The tests of 4.3.8 are applicable only when appropriate battery data is not available				No batteries used						--
Is it possible to install the battery in a reverse polarity position?				--						--
	Non-rechargeable batteries			Rechargeable batteries						
	Discharging		Un-intentional charging	Charging		Discharging		Reversed charging		
	Meas. current	Manuf. Specs.		Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	
Max. current during normal condition	--	--	--	--	--	--	--	--	--	

Max. current during fault condition	--	--	--	--	--	--	--	--	--

Test results:	N/A	Verdict
- Chemical leaks	--	--
- Explosion of the battery	--	--
- Emission of flame or expulsion of molten metal	--	--
- Electric strength tests of equipment after completion of tests	--	--
Supplementary information:		

4.5	TABLE: Temperature rise measurements	P

Temperatures were measured according cl. 1.4.5. Test in condition A and B at continuous normal operation as for power input measurements of table 1.6.2 resulted in highest temperature values.
Temperatures are calculated according cl. 1.4.12.3 with regard to the maximum ambient operation temperature of 40 °C (T_{ma}), as specified by the manufacturer.

test voltage(s) (V):		A: 90V AC, 50Hz	B: 254.4V AC, 50Hz
t_{amb1} (°C):	A: 25.0 B:25.2	t_{amb2} (°C):	A:25.0 B: 23.9

Temperature of part/at: (measured with thermocouples)	Measured temperature rise at T_{amb}		Calculated temperature at T_{ma}		Allowed T_{max} (°C)
	A T (°C)	B T (°C)	A T (°C)	B T (°C)	
Capacitor C1	69.2	59.1	84.2	75.2	105
PCB near bridge rectifier	59.1	46.8	74.1	62.9	130
Transformer T1 winding	83.3	73.9	98.3	90.0	110
CY1 capacitor	79.2	67.7	94.2	83.8	125
Capacitor C8	87.6	82.6	102.6	98.7	105
Appliance inlet	44.3	39.0	59.3	55.1	95
PCB near U1	57.1	48.5	72.1	64.6	130
Top enclosure	43.8	38.3	58.8	54.4	95
Bottom enclosure	54.1	44.9	69.1	61.0	95
Side enclosure	46.5	38.3	61.5	54.4	95
Capacitor CX1	42.4	36.5	57.4	52.6	100
Inductor NF1	76.3	53.8	91.3	69.9	110

Supplementary information:

Temperatures measured with winding resistance method: Not used

SGS INDIA PVT. LIMITED BANGALORE

temperature T of winding: (winding resistance method)	(V)	R_1 (Ω)	R_2 (Ω)	T (°C)	allowed T_{max} (°C)	insulation class
Supplementary information:						

4.5.5	TABLE: Ball pressure test of thermoplastic parts		P
	Allowed impression diameter (mm) .....:	≤ 2 mm	—
Part		Test temperature (°C)	Impression diameter (mm)
Plastic enclosure		75	0.96
Supplementary information:			

4.6.1, 4.6.2	Table: Enclosure opening measurements		N/A
Location		Size (mm)	Comments
--		--	--
--		--	--
Supplementary information: no openings in enclosure			

4.7	Table: Resistance to fire				P
Part	Manufacturer of material	Type of material	Thickness (mm)	Flammability class	Evidence
Plastic Enclosure	Sabic Innovative Plastics B V	PPE+PS, "Noryl"	1.0	V-1	UL: E45329
Plastic Enclosure	TEIJIN CHEMICALS LTD	Polycarbonate (PC)	2.0	V-0	UL: E50075
Plastic Enclosure	SABIC INNOVATIVE PLASTICS B V	Polycarbonate (PC)	1.5	V-0	UL: E45329
PCB	WALEX ELECTRONIC (WUXI) CO LTD	--	--	V-0	UL: E154355
PCB	YUANMAN PRINTED CIRCUIT CO LTD	--	--	V-0	UL: E74757
PCB	SUZHOU XINKE ELECTRONICS CO LTD	--	--	V-0	UL: E231590
PCB	GUANGDON HE TONG ELECTRONICS CO LTD	--	--	V-0	UL: E243157

SGS INDIA PVT. LIMITED BENGALORE

PCB	KUNSHAN HARRY ELECTRONIC TECHNOLOGY CO., LTD	--	--	V-0	UL: E229877
PCB	CHEERFUL ELECTRONIC	--	--	V-0	UL: E199724
PCB	JIANGSU DIFEIDA ELECTRONICS CO LTD	--	--	V-0	UL: E213009
PCB	DONGGUAN DAYSUN ELECTRONIC CO LTD	--	--	V-0	UL: E251754
PCB	SUZHOU CITY YILIHUA ELECTRONICS CO LTD	--	--	V-0	UL: E251781
PCB	DAFENG AREX ELECTRONICS TECHNOLOGY CO LTD	--	--	V-0	UL: E186016
PCB	BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	--	--	V-0	UL: E177671
PCB	KUOTIANG ENT LTD	--	--	V-0	UL: E227299
PCB	PACIFIC WIN INDUSTRIAL LTD	--	--	V-0	UL: E228070
PCB	SHENZHEN TONGCHUANGXIN ELECTRONICS CO LTD	--	--	V-0	UL: E250336
PCB	SHUANG MING INDUSTRY CO LTD	--	--	V-0	UL: E78017
Supplementary information:					

5.1.6	TABLE: Touch current and protective conductor current measurement					P
	Test voltage (V) ..... :	AC 254.4V AC, 50Hz				—
Measurement location (Terminal A connected to...)	Polarity (normal) [mA]		Polarity (reverse) [mA]		Limit (mA)	Comments
	Switch: ON	Switch: OFF	Switch: ON	Switch: OFF		
Earth terminal ("e" = open)	0.02	0.0	0.02	0.0	3.5	Normal condition with load
Plastic enclosure ("e" = close)	0.003	0.0	0.003	0.0	0.25	Normal condition with load
Supplementary information:						

5.2	TABLE: Electric strength tests, impulse tests and voltage surge tests			P
Test voltage applied between:		Voltage shape (AC, DC, impulse, surge)	Test voltage (V)	Breakdown Yes / No
Functional:				
--		--	--	--
Basic / supplementary:				
Primary to earth		AC	1500	No
Reinforced:				
Primary to plastic enclosure		AC	3000	No
Transformer T1 primary to secondary		AC	3000	No
1 layer insulation tape		AC	3000	No
Supplementary information:				

5.3	TABLE: Fault condition tests		P
	Ambient temperature (°C) .....:	25.1	—
	Power source for EUT: Manufacturer, model/type, output rating .....:	--	—

Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
Output	Overload	90 AC	3 hours	--	--	EUT continuous to work normally, Maximum value of Cut-off current is 3.88A Maximum stabilized current is 3.86A No hazard found. No abnormal temperature rise
Output	Overload	254.4 AC	3 hours	--	--	Maximum value of Cut-off current is 4.10A Maximum stabilized current is 4.01A No hazard found. No abnormal temperature rise
Output	Short	254.4 AC	1 sec	--	--	EUT shutdown immediately, No hazard found, after removal of fault EUT work normally No hazard found. No abnormal temperature rise
BD1 input	Short	254.4 AC	1 sec	--	--	Fuse F1 opened immediately No hazard found. No abnormal temperature rise
BD1 Output	Short	254.4 AC	1 sec	--	--	Fuse F1 opened immediately No hazard found. No abnormal temperature rise

Capacitor C1	Short	254.4 AC	1 sec	--	--	Fuse F1 opened immediately No hazard found. No abnormal temperature rise
Transformer T1 (Pin 6 - 7)	Short	254.4 AC	1 sec	--	--	EUT shutdown immediately, No hazard found, after removal of fault EUT work normally No hazard found. No abnormal temperature rise
Transformer T1 (Pin 1 - 2)	Short	254.4 AC	1 sec	--	--	EUT shutdown immediately, No hazard found, after removal of fault EUT work normally No hazard found. No abnormal temperature rise
Transformer T1 (Pin 3 - 4)	Short	254.4 AC	1 sec	--	--	EUT shutdown immediately, No hazard found, after removal of fault EUT work normally No hazard found. No abnormal temperature rise
Diode D8	Short	254.4 AC	1 sec	--	--	EUT shutdown immediately, No hazard found, after removal of fault EUT work normally No hazard found. No abnormal temperature rise
Diode D5	Short	254.4 AC	1 sec	--	--	EUT shutdown immediately, No hazard found, after removal of fault EUT work normally No hazard found. No abnormal temperature rise
Opto Coupler PC1 (1-2)	Short	254.4 AC	1 sec	--	--	EUT shutdown immediately, No hazard found, after removal of fault EUT work normally No hazard found. No abnormal temperature rise
Opto Coupler PC1 (3-4)	Short	254.4 AC	1 sec	--	--	EUT shutdown immediately, No hazard found, after removal of fault EUT work normally No hazard found. No abnormal temperature rise
Supplementary information:						

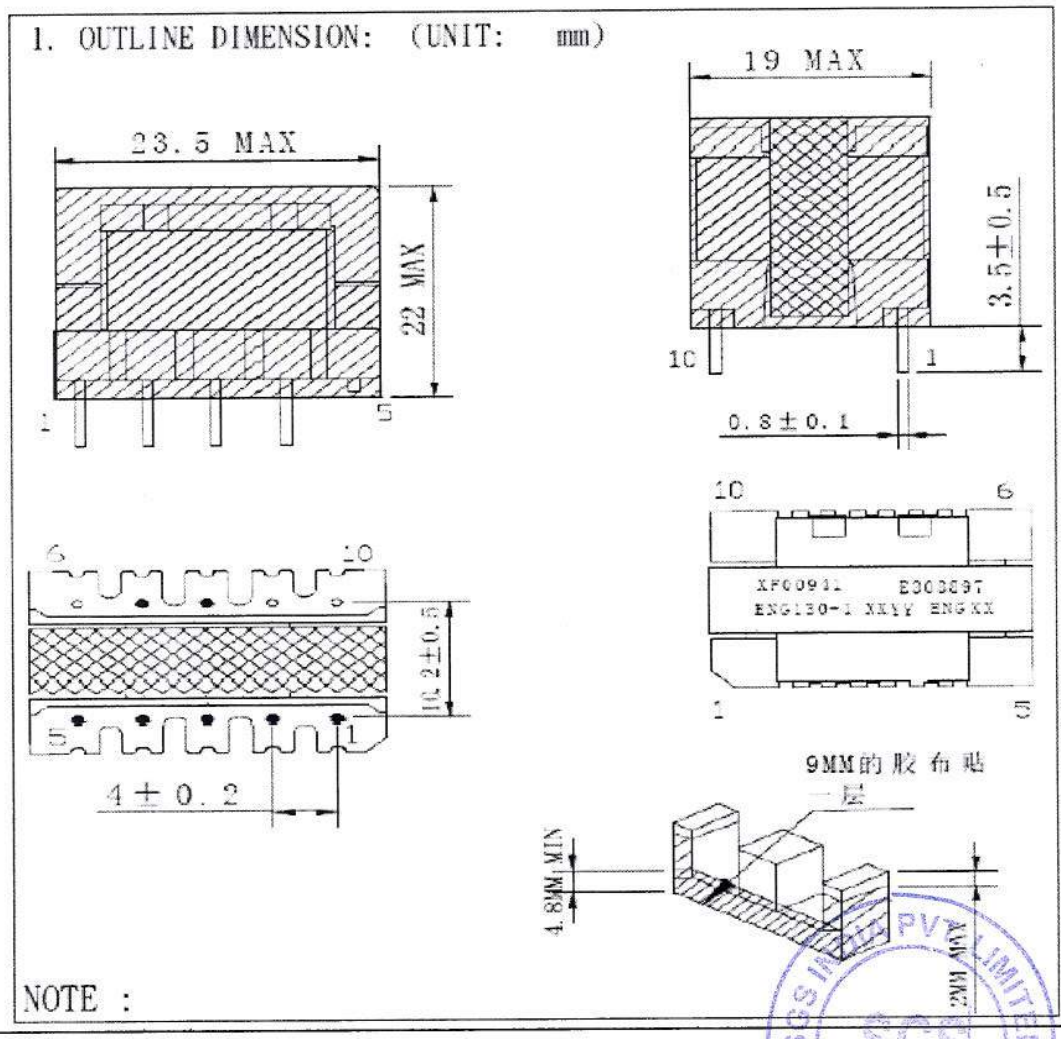
C.2	TABLE: Insulation of transformers			P
	Transformer part name ..... :	XF00941		—
	Manufacturer ..... :	ENG GlobTek BOAM Haopuwei		—
	Type ..... :	Class B		—

Clearance (cl) and creepage distance (cr) at/of/between:	U peak (V)	U r.m.s. (V)	Required cl (mm)	cl (mm)	Required cr (mm)	cr (mm)
Primary/input winding and secondary/output winding (internal)	480	322	Triple Insulate Wire			
Secondary/output winding and core (internal)			Triple Insulate Wire			

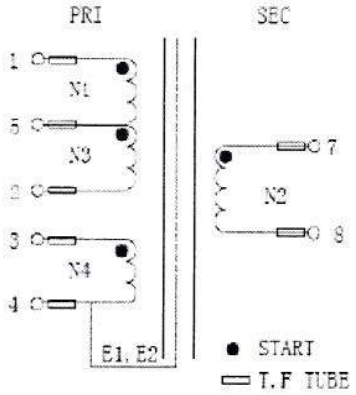
Primary/input part and secondary/output winding (external)			6.4	7.5	8.0	10.5
Secondary/output part and core (external)			6.4	7.5	8.0	10.5

Description of design:	
(a) Bobbin	
Primary/input pins.....:	1-5, 5-2, 3-4
Secondary/output pins.....:	7-6
Material (manufacturer, type, ratings) .....:	Chang Chun Plastics Co Ltd. , T375J, V-0, 150 °C
Thickness (mm).....:	0.45
(b) General	

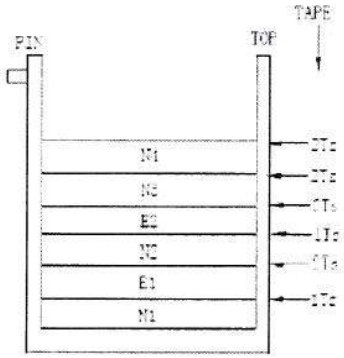
Please insert here a description of the transformer design describing:



SCHEMATIC:



WINDING CONSTRUCTION:



4. WINDING TABLE

WINDING	MARGIN TAPE PIN/TOP	START	FINISH	WIRE SIZE	TURNS	TAPE	T.F TUBE START	T.F TUBE FINISH	NOTES
N1	0/0	1	5	Φ0.18*2P	60Ts	1Ts	✓	✓	
E1	0/0	4	CU	0.025T*7W	0.9Ts	2Ts	✓		
N2	0/0	7	8	Φ0.4*1P TRIW(B)	6Ts	1Ts	✓	✓	
E2	0/0	4	CU	0.025T*7W	0.9Ts	2Ts	✓		
N3	0/0	6	2	Φ0.18*2P	30Ts	2Ts	✓	✓	
N4	0/0	3	4	Φ0.18*1P	17Ts	2Ts	✓	✓	

Supplementary information:

**********End of Report**********

ATTACHMENT 01

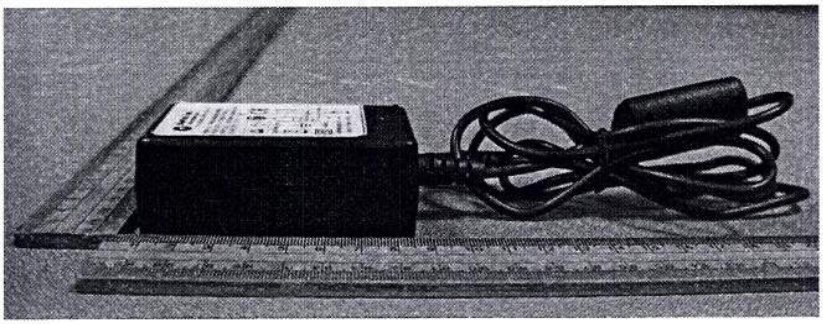
Photo Documentation

Type of Equipment, Model : ITE POWER SUPPLY, GT-46181-1805-T3

Details of : ITE POWER SUPPLY, GT-46181-1805-T3

View:

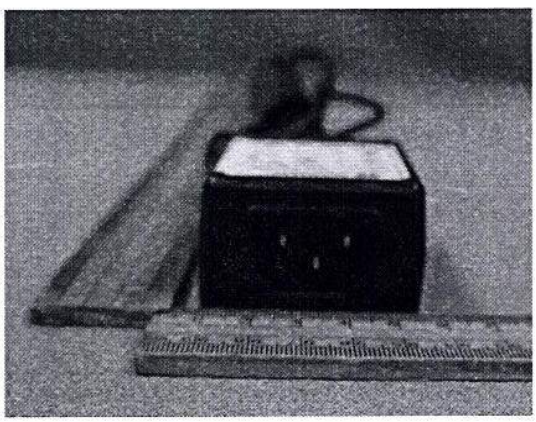
- ☒ GENERAL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☒ LEFT
- ☐ TOP
- ☐ BOTTOM



Details of : ITE POWER SUPPLY, GT-46181-1805-T3

View:

- ☒ GENERAL
- ☐ FRONT
- ☒ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



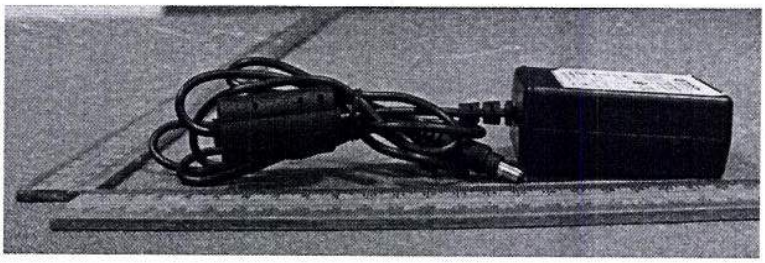
SGS INDIA PVT. LIMITED BANGALORE

ATTACHMENT 01

Details of : ITE POWER SUPPLY, GT-46181-1805-T3

View:

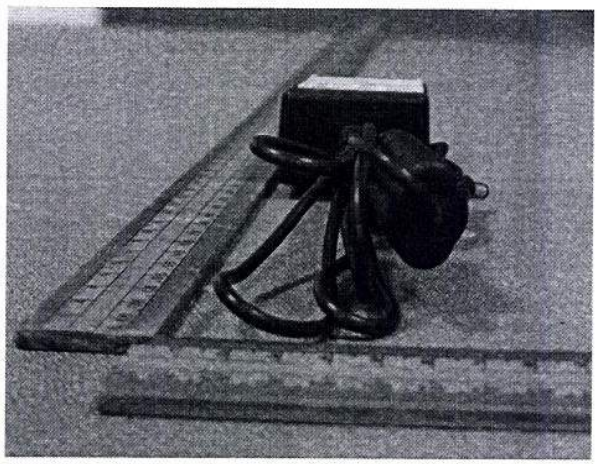
- ☒ GENERAL
- ☐ FRONT
- ☐ REAR
- ☒ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



Details of : ITE POWER SUPPLY, GT-46181-1805-T3

View:

- ☒ GENERAL
- ☒ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



SGS INDIA PVT. LIMITED SGS BANGALORE

ATTACHMENT 01

Details of : ITE POWER SUPPLY, GT-46181-1805-T3

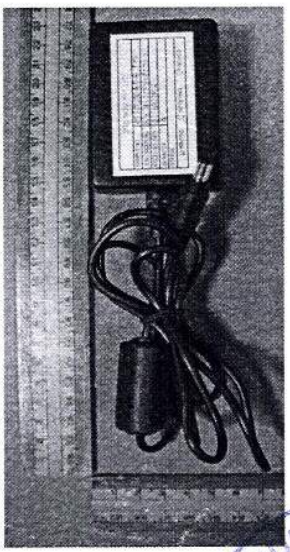
View:

- ☒ GENERAL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☒ TOP
- ☐ BOTTOM

Details of : ITE POWER SUPPLY, GT-46181-1805-T3

View:

- ☒ GENERAL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☒ BOTTOM



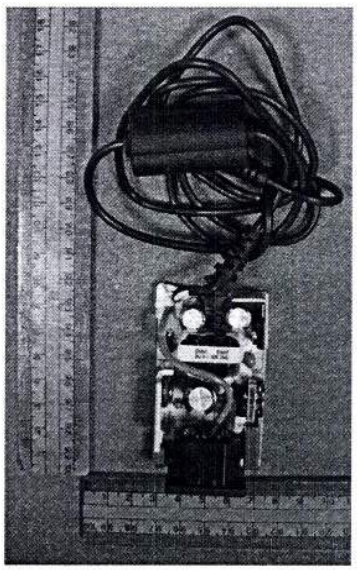
SGS INDIA PVT. LIMITED BANGALORE

ATTACHMENT 01

Details of : ITE POWER SUPPLY, GT-46181-1805-T3,PCB

View:

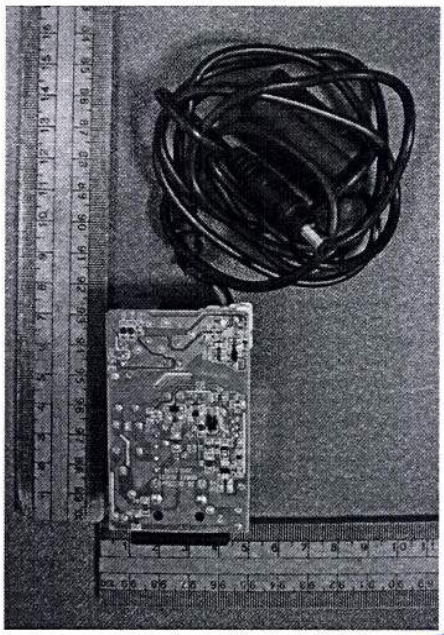
- ☒ GENERAL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☒ TOP
- ☐ BOTTOM



Details of : ITE POWER SUPPLY, GT-46181-1805-T3,PCB

View:

- ☒ GENERAL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☒ BOTTOM



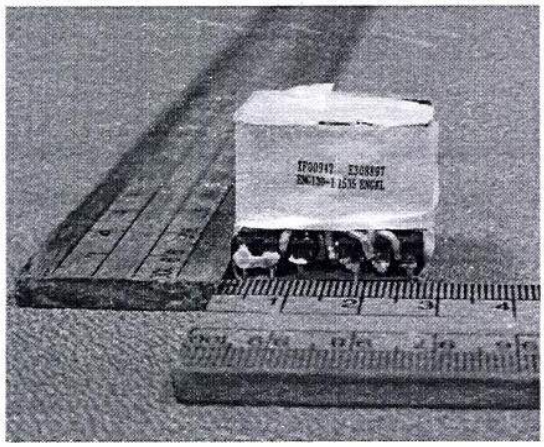
SGS INDIA PVT. LIMITED BANGALORE

ATTACHMENT 01

Details of : ITE POWER SUPPLY, GT-46181-1805-T3, TRANSFORMER T1

View:

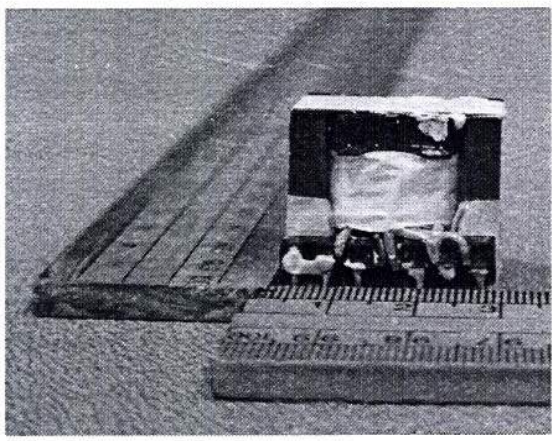
- ☒ GENERAL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



Details of : ITE POWER SUPPLY, GT-46181-1805-T3, TRANSFORMER T1

View:

- ☒ GENERAL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



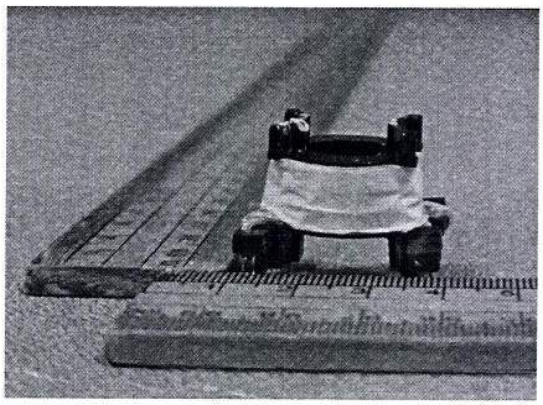
SGS INDIA PVT. LIMITED BANGALORE

ATTACHMENT 01

Details of : ITE POWER SUPPLY, GT-46181-1805-T3, TRANSFORMER T1

View:

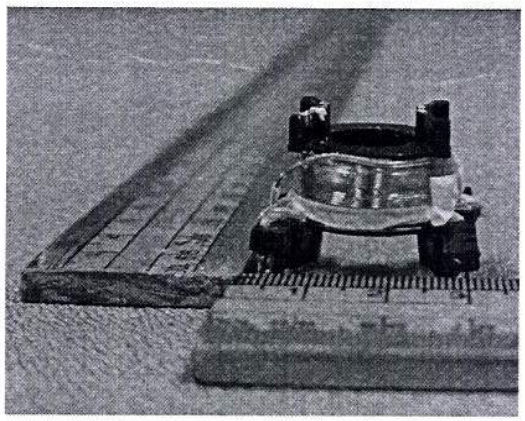
- ☒ GENERAL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



Details of : ITE POWER SUPPLY, GT-46181-1805-T3, TRANSFORMER T1

View:

- ☒ GENERAL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



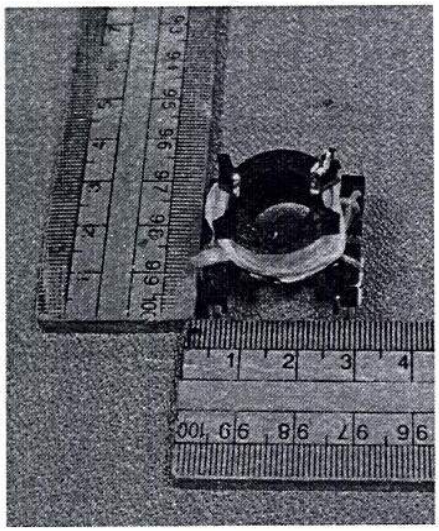
SGS INDIA PVT. LIMITED SGS BANGALORE

ATTACHMENT 01

Details of : ITE POWER SUPPLY, GT-46181-1805-T3, TRANSFORMER T1

View:

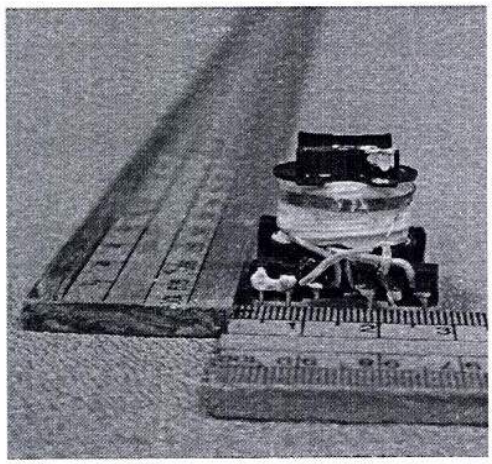
- ☒ GENERL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



Details of : ITE POWER SUPPLY, GT-46181-1805-T3, TRANSFORMER T1

View:

- ☒ GENERL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



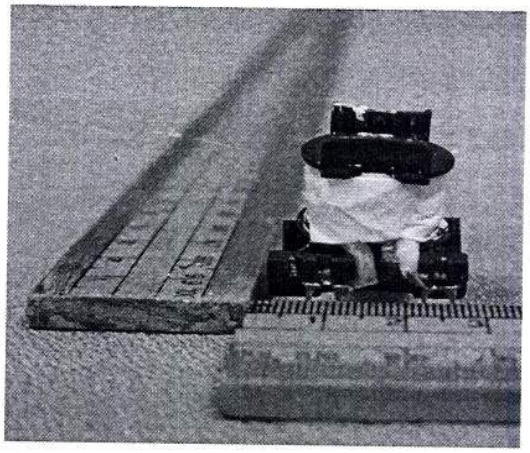
SGS INDIA PVT. LIMITED BANGALORE

ATTACHMENT 01

Details of : ITE POWER SUPPLY, GT-46181-1805-T3, TRANSFORMER T1

View:

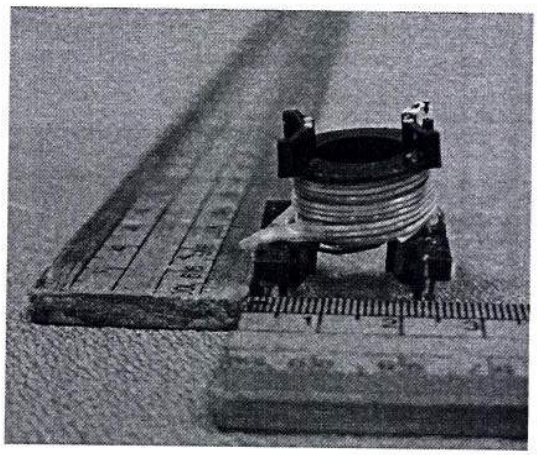
- ☒ GENERAL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



Details of : ITE POWER SUPPLY, GT-46181-1805-T3, TRANSFORMER T1

View:

- ☒ GENERAL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



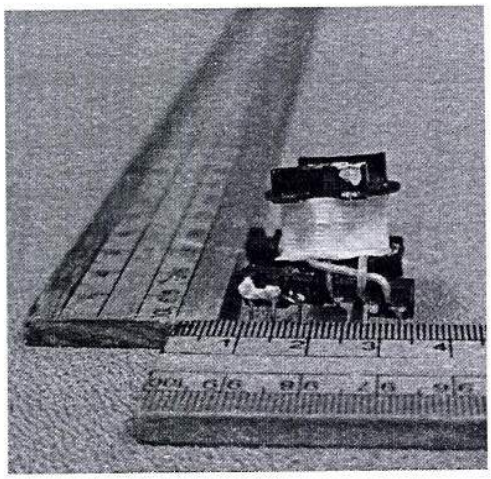
SGS INDIA PVT. LIMITED BANGALORE

ATTACHMENT 01

Details of : ITE POWER SUPPLY, GT-46181-1805-T3, TRANSFORMER T1

View:

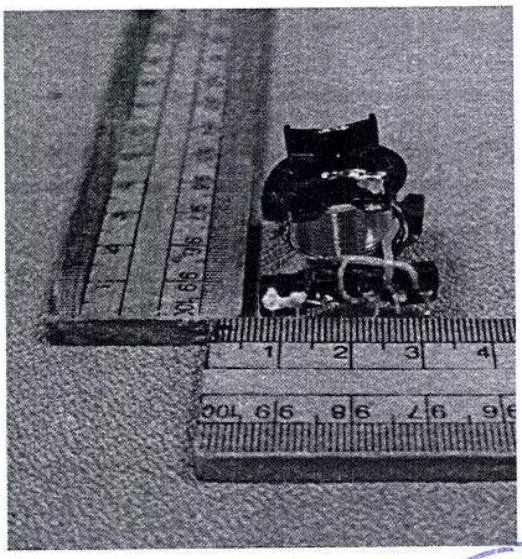
- ☒ GENERL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



Details of : ITE POWER SUPPLY, GT-46181-1805-T3, TRANSFORMER T1

View:

- ☒ GENERL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



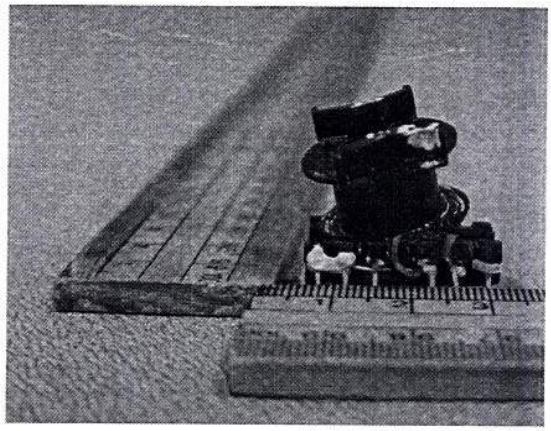
SGS INDIA PVT. LIMITED * BANGALORE

ATTACHMENT 01

Details of : ITE POWER SUPPLY, GT-46181-1805-T3, TRANSFORMER T1

View:

- ☒ GENERAL
- ☐ FRONT
- ☐ REAR
- ☐ RIGHT
- ☐ LEFT
- ☐ TOP
- ☐ BOTTOM



--- End of Attachment-01---

SGS INDIA PVT. LIMITED BANGALORE