Test report number: 1907058
Dated: 21/08/2019

ULR- TC557419000000395F

SUMMARY OF TEST REPORT

(Number of pages in test report: page no. 01 to 112)
TEST FORMAT AS PER IS 13252 (Part 1): 2010 + A1: 2013+ A2: 2015 / IEC 60950-1: 2005 + A1: 2009 + A2: 2013

1. **Name of Manufacturer:** GLOBTEK (SUZHOU) CO., LTD
2. **Product:** ITE Power Supply (Power Adaptor for IT Equipment)
3. **Model:** **GTM96180-1848 (Representative model)**, GTM96180-1805 (Series model), GTM96180-1807-1.05 (Series model), GTM96180-1811-3.5 (Series model), GTM96180-1811-2.0 (Series model), GTM96180-1817.9-5.9 (Series model), GTM96180-1817.9-2.9 (Series model), GTM96180-1830-11.0 (Series model), GTM96180-1830-10.0 (Series model), GTM96180-1830-6.0 (Series model)
4. **Model differences provided (if applicable):** Yes
5. **Model differences verified as per MEITY Guidelines for series formulation:** Yes
6. **Test Results:**

PART A : GENERAL

SL. NO.	TEST REQUIREMENT	CLAUSE	VERDICT
1	Components	1.5	P
2	Power Interface	1.6	P
3	Markings and Instructions	1.7	P

PART B : PROTECTION FROM HAZARDS

SL. NO.	TEST REQUIREMENT	CLAUSE	VERDICT
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	N/A
7	Over current for 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 C : WIRING, CONNECTIONS AND PHYSICAL REQUIREMENTS

SL. NO.	TEST REQUIREMENT	CLAUSE	VERDICT
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

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4	Disconnection from the mains supply	3.4	P
5	Interconnection of equipment	3.5	P
6.	Stability	4.1	N/A
7	Mechanical strength	4.2	P
8	Design and construction	4.3	P
9	Protection against hazardous moving parts	4.4	N/A
10	Thermal requirements	4.5	P
11	Openings in enclosures	4.6	N/A
12	Resistance to fire	4.7	P

PART D : ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS

SL. NO.	TEST REQUIREMENT	CLAUSE	VERDICT
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 E: CONNECTION TO TELECOM AND CABLED DISTRIBUTION SYSTEM

SL. NO.	TEST REQUIREMENT	CLAUSE	VERDICT
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 over voltages on telecommunication networks	6.2	N/A
3	Protection of the telecommunication wiring system from overheating	6.3	N/A
4	Connection to cable distribution systems - 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 over voltages on the cable distribution system	7.3	N/A
7	Insulation between primary circuits and cable distribution systems	7.4	N/A

General Information:

1. The conformity certificates of critical components are verified to ensure complete testing of apparatus 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:

1) Sample meets all relevant requirements of IS 13252 (Part 1): 2010 + A1: 2013+ A2: 2015 / IEC 60950-1: 2005 + A1: 2009 + A2: 2013

Yes ☒ No ☐

I, hereby, undertake that the verdict stated in the test reports for all the tests matches with the test results. The sample meets all relevant requirements of IS 13252 (Part 1): 2010 + A1: 2013+ A2: 2015 / IEC 60950-1: 2005 + A1: 2009 + A2: 2013. *If any deviation is found, suitable punitive action may be taken by BIS.*

(Signature of Authorised person with Stamp)

ULR- TC557419000000395F

Test Report No.: 1907058	Page 1 of 112
	Issue Date: 21/08/2019

Manufacturer:	**GLOBTEK (SUZHOU) CO., LTD** NO.76 JINLING EAST ROAD, SUZHOU INDISTRIAL PARK, CHINA	
Test item:	**ITE Power Supply (Power Adaptor for IT Equipment)**	
Identification:	**GTM96180-1848 (Representative model)** GTM96180-1805 (Series model) GTM96180-1807-1.05 (Series model) GTM96180-1811-3.5 (Series model) GTM96180-1811-2.0 (Series model) GTM96180-1817.9-5.9 (Series model) GTM96180-1817.9-2.9 (Series model) GTM96180-1830-11.0 (Series model) GTM96180-1830-10.0 (Series model) GTM96180-1830-6.0 (Series model)	Serial No.: RoHS806128121/16, RoHS806004121/16 (Representative model)
Receipt No.:	1907058	Date of receipt: 24/07/2019
Testing laboratory and its address:	**Nemko India (Test Lab) Pvt. Ltd.** Plot No. 2, Second Floor, DLF Industrial Estate-1, Sector 37 (Near NHPC Metro Station), Faridabad- 121003, Haryana	
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 / ~~failed~~ the test specification(s).	
Other Aspects: - Product meets the requirements of IS 13252 (Part 1): 2010 + A1: 2013 + A2: 2015 / IEC 60950-1: 2005 + A1: 2009 + A2: 2013		
This test report relates to the test sample submitted only		

Tested by:	**Approved by / Authorized Signatory:**	**Issued by:**
(Swapnil A. Shende/ Testing Engineer)	(Aditya R. Meshram/ Technical Manager)	(Lalit Sharma / Project Engineer)
Dated: 21/08/2019	Dated: 21/08/2019	Dated: 21/08/2019

NEMKO INDIA (TEST LAB) PRIVATE LIMITED

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. ..... :	**1907058**
Date of issue ..... :	21/08/2019
Total number of pages..... :	112
Testing Laboratory ..... :	**Nemko India (Test Lab) Pvt. Ltd.**
Address ..... :	Plot No. 2, Second Floor, DLF Industrial Estate-1, Sector 37 (Near NHPC Metro Station), Faridabad- 121003, Haryana
Manufacturer's name ..... :	**GLOBTEK (SUZHOU) CO., LTD**
Address ..... :	NO.76 JINLING EAST ROAD, SUZHOU INDISTRIAL 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 Adaptor for IT Equipment)**
Trade Mark ..... :	GlobTek, Inc.
Model/Type reference ..... :	**GTM96180-1848 (Representative model)**, GTM96180-1805 (Series model), GTM96180-1807-1.05 (Series model), GTM96180-1811-3.5 (Series model), GTM96180-1811-2.0 (Series model), GTM96180-1817.9-5.9 (Series model), GTM96180-1817.9-2.9 (Series model), GTM96180-1830-11.0 (Series model), GTM96180-1830-10.0 (Series model), GTM96180-1830-6.0 (Series model)
Ratings ..... :	INPUT:100-240V~,50-60Hz, 0.6A OUTPUT:48V ⎓ 0.375A,18W
Other Documents submitted..... :	Please refer to Table – List of Attachments at Page No. 10

Tested by:	Approved by / Authorized Signatory:	Issued by:
(Swapnil A. Shende/ Testing Engineer)	(Aditya R. Meshram/ Technical Manager)	(Lalit Sharma / Project Engineer)
Dated: 21/08/2019	Dated: 21/08/2019	Dated: 21/08/2019

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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	04/06	04/06	13-14
EL 2101	General Requirements	Power interface (Cl.1.6)	05	01/03	01/03	15
EL 2102	Marking Requirements	Marking & instructions (Cl.1.7)	39	04/15	04/15	16-18
EL 2103	Electrical safety	Protection from electric shock and energy hazards (Cl.2.1)	14	05/02	05/02	19-20
EL 2104	Electrical safety	SELV Circuits (Cl.2.2)	04	02/02	02/02	21
EL 2105	Electrical safety	TNV Circuits (Cl.2.3)	12	00/00	N/A	22
EL 2106	Electrical safety	Limited current circuits (Cl.2.4)	04	01/03	01/03	23
EL 2107	Electrical safety	Limited Power sources (Cl.2.5)	07	02/01	02/01	24
EL 2108	Electrical safety	Provisions for earthing and bonding (Cl.2.6)	19	00/00	N/A	25-26
EL 2109	Electrical safety	Overcurrent and earth fault protection in primary circuits (Cl.2.7)	07	03/01	03/01	27
EL 2110	Electrical safety	Safety Interlocks (Cl.2.8)	13	00/00	N/A	28
EL 2111	Electrical safety	Electrical Insulation (Cl.2.9)	05	01/04	01/04	29
EL 2112	Electrical safety	Clearances, Creepage distances and distances through insulation (Cl.2.10)	63	19/06	19/06	30-33
EL 2113	Wiring	Wiring, connections and supply (Cl.3)	11	03/03	03/03	34
EL 2114	Wiring	Connection to a main supply (Cl.3.2)	14	00/02	(N/A)/02	35-36
EL 2115	Wiring	Wiring terminals for connection of external conductors (Cl.3.3)	09	00/00	N/A	37
EL 2116	Wiring	Disconnection for the main supply (Cl.3.4)	12	01/03	01/03	38
EL 2117	Wiring	Interconnection of equipment (Cl.3.5)	05	01/03	01/03	39

EL 2118	Mechanical properties	Stability (Cl.4.0), 4.1	05	00/00	N/A	40
EL 2119	Mechanical properties	Mechanical strength (Cl.4.2)	13	06/00	06/(N/A)	41
EL 2120	Mechanical properties	Design and construction (Cl.4.3)	25	05/03	05/03	42-43
EL 2121	Mechanical properties	Protection against hazardous moving parts (Cl.4.4)	14	00/00	N/A	44
EL 2122	Thermal Properties	Thermal requirements (Cl.4.5)	06	03/03	03/03	45
EL 2123	Mechanical properties	Openings in Enclosures (Cl.4.6)	18	00/00	N/A	46-47
EL 2124	Fire Safety	Resistance to fire (Cl.4.7)	25	04/05	04/05	48-52
EL 2125	Insulating properties	Electrical requirements and simulated abnormal conditions(Cl.5),5.1	20	06/02	06/02	53-54
EL 2126	Insulating properties	Electric Strength (Cl.5.2)	03	01/02	01/02	55
EL 2127	Insulating properties	Abnormal operating and fault conditions (Cl.5.3)	11	07/00	07/(N/A)	56
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	N/A	57-58
EL 2129	Communicating connection	Protection of equipment users from overvoltages on telecommunication networks (Cl.6.2)	06	00/00	N/A	59
EL 2130	Communicating connection	Protection of the telecommunication wiring system from overheating (Cl.6.3)	05	00/00	N/A	60-61
EL 2131	Connection to cable distribution systems	Connection to cable distribution systems (Cl.7)	08	00/00	N/A	62
EL 2132	Fire safety	Tests for resistance to heat and fire (Annex A)	20	08/00	08/(N/A)	63-64

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EL 2133	Insulating properties	Motor tests under abnormal conditions (Annex B)	19	00/00	N/A	65-66
EL 2134	Electrical Safety	Transformers (Annex C)	03	02/01	02/01	67
EL 2135	Insulating properties	Measuring Instruments For Touch-Current Tests (Annex D)	03	02/00	02/(N/A)	68
EL 2136	Thermal Properties	Temperature Rise Of A Winding(Annex E)	01	00/00	N/A	69
EL 2137	Electrical safety	Measurement Of Clearances And Creepage Distances(Annex F)	01	01/00	01/(N/A)	70
EL 2138	Electrical safety	Alternative Method For Determining Minimum Clearances(Annex G)	17	00/00	N/A	71-72
EL 2139	Radiation Safety	Ionizing Radiation(Annex H)	01	00/00	N/A	73
EL 2140	Electrical Safety	Table of electrochemical potentials (Annex J)	01	00/00	N/A	74
EL 2141	General Requirements	Thermal controls (Annex K)	07	00/00	N/A	75
EL 2142	General Requirements	Normal load conditions for some types of electrical business equipment (Annex L)	08	00/02	(N/A) /02	76
EL 2143	Electrical Safety	Criteria for telephone ringing signals (Annex M)	13	00/00	N/A	77
EL 2144	Electrical safety	Impulse Test Generators(Annex N)	03	00/00	N/A	78
EL 2145	General Requirements	Normative References(Annex P)	01	00/01	(N/A) /01	79
EL 2146	General Requirements	Voltage dependent resistors (VDRs) (Annex Q)	03	03/00	03/(N/A)	80-81
EL 2147	General Requirements	Examples Of Requirements For Quality Control Programmes(Annex R)	03	00/00	N/A	82
EL 2148	General Requirements	Procedure For Impulse Testing (Annex S)	04	00/00	N/A	83
EL 2149	Protection against Ingress of water	Guidance On Protection Against Ingress Of Water	01	00/01	(N/A)/ 01	84

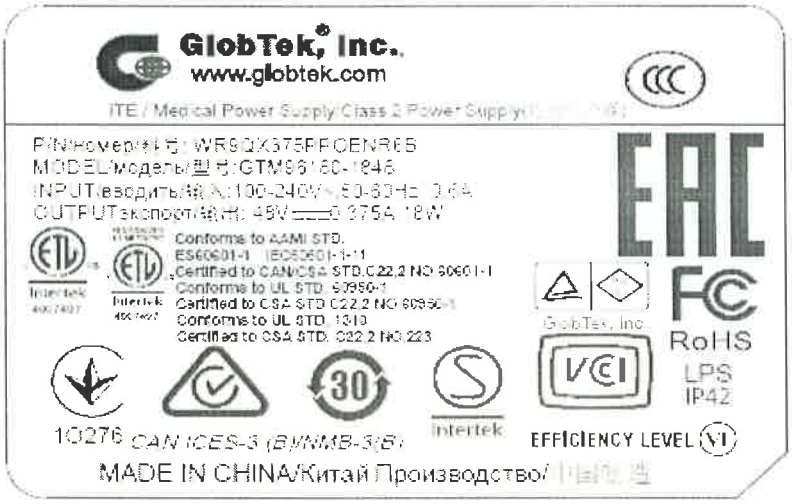
		(Annex T)				
EL 2150	Wiring	Insulated Winding Wires For Use Without Interleaved Insulation (Annex U)	17	00/00	N/A	85-86
EL 2151	Electrical Safety	Ac Power Distribution Systems(Annex V)	05	01/02	01/02	87
EL 2152	Electrical Safety	Summation Of Touch Currents (Annex W)	08	00/00	N/A	88
EL 2153	Electrical Safety	Maximum Heating Effect In Transformer Tests(Annex X)	03	00/03	(N/A)/03	89
EL 2154	Radiation safety	Ultraviolet light conditioning test (Annex Y)	05	00/00	N/A	90
EL 2155	Electrical Safety	Overvoltage Categories (Annex Z)	01	00/01	(N/A)/ 01	91
EL 2156	Mechanical properties	Mandrel Test(Annex AA)	01	00/00	N/A	92
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	N/A	93
EL 2159	Mechanical properties	Requirements For The Mounting Means Of Rack-Mounted Equipment (Annex DD)	04	00/00	N/A	94
EL 2160	Electrical Safety	Household And Home/Office Document/Media Shredders (Annex EE)	06	00/00	N/A	95

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

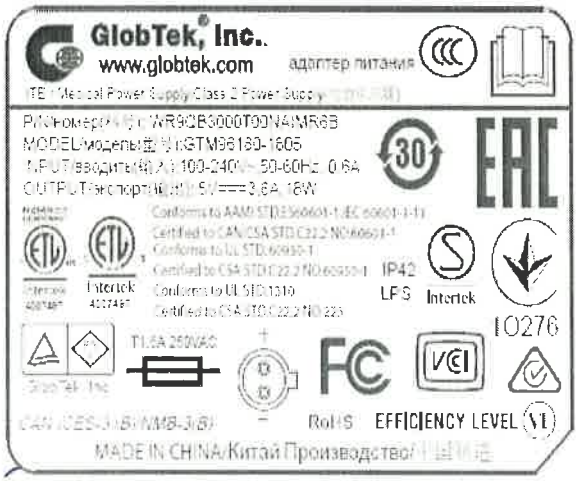
.....

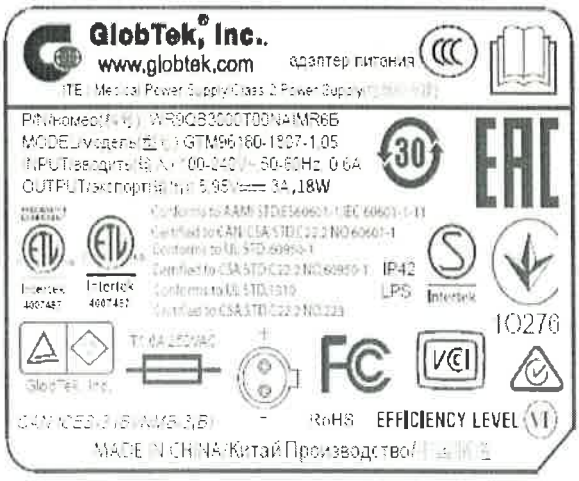
(Approving Authority)

Copy of marking plate: GTM96180-1848 (Representative model)

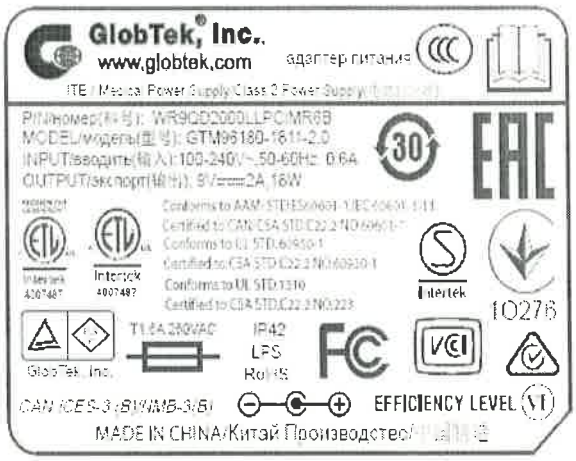


Copy of marking plate: (Series models)



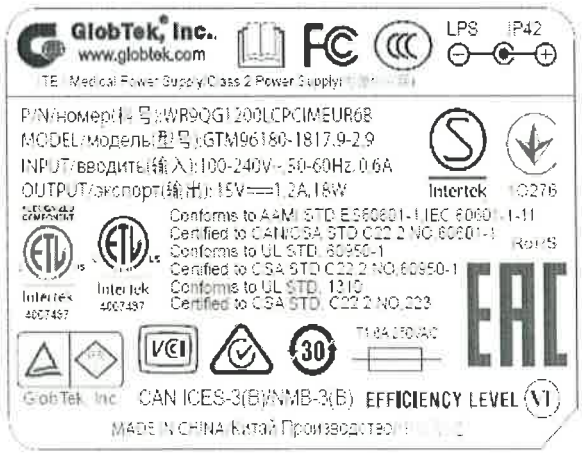


RoHS113004341/16



RoHS80602121/16

RoHS803204121/16



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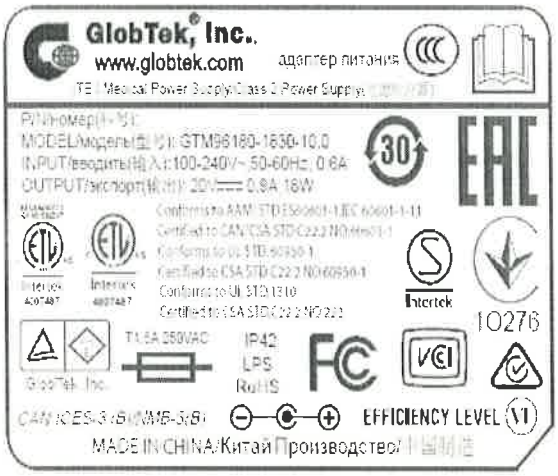
RoHS806004111/16



RoHS826004121/16

RoHS126304121/16

Table – List of Attachments

Attachment No.	Attachment Description	No. of pages in Attachment
Attachment – 1	Photo Documents	02 (Page no: 111-112)

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 ..... : As below

Date of receipt of test item ..... : 24/07/2019

Date(s) of performance of tests ..... : 24/07/2019 to 20/08/2019

Laboratory conditions ..... : As below

Ambient Temperature ..... : 25±10°C

Ambient Humidity ..... : 40 to 75 % RH

Test item particulars ..... :	**ITE Power Supply (Power Adaptor for IT Equipment)**
Equipment mobility ..... :	☒ movable ☐ hand-held ☐ transportable ☐ stationary ☐ for building-in ☒ direct plug-in
Connection to the mains ..... :	☒ pluggable equipment [V] 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 ..... :	IP42
Altitude during operation (m) ..... :	upto 2000m
Altitude of test laboratory (m) ..... :	< 1000
Mass of equipment (kg) ..... :	0.146 kg

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

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General product information:

1) Application details / Description of the product:

The equipment is an **ITE Power Supply (Power Adaptor for IT Equipment)** is Class II equipment intended for general office environment. The EUT is direct plug-in power adapter with interchangeable plug portion in which protective earth pin is dummy & EUT is completely covered by certified plastic enclosure.

Model Name	output voltage (V)	output current (A)	output power (W)
GTM96180-1848	48	0.375	18
GTM96180-1805	5	3.6	18
GTM96180-1807-1.05	5.95	3	18
GTM96180-1811-3.5	7.5	2.4	18
GTM96180-1811-2.0	9	2	18
GTM96180-1817.9-5.9	12	1.5	18
GTM96180-1817.9-2.9	15	1.2	18
GTM96180-1830-11.0	19	0.94	18
GTM96180-1830-10.0	20	0.9	18
GTM96180-1830-6.0	24	0.75	18

Each standard rated output voltage designation correspondence 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).

Max. specified ambient temperature (°C)..... :	40°C
Laser classification..... :	N/A

2) Differences between the models: See below

Model no.	Trademarks	Similarities	Differences
GTM96180-1848 (Representative model) GTM96180-1805 (Series model) GTM96180-1807-1.05 (Series model) GTM96180-1811-3.5 (Series model) GTM96180-1811-2.0 (Series model) GTM96180-1817.9-5.9 (Series model) GTM96180-1817.9-2.9 (Series model) GTM96180-1830-11.0 (Series model) GTM96180-1830-10.0 (Series model) GTM96180-1830-6.0 (Series model)	GlobTek, Inc.	• Same rated input voltage • Same class of construction • Same mains PCB design layout and transformer	Model number, Output Voltage and output current. Output voltage varies from base model by number of turns in secondary winding of transformer, which is not a safety relevant.

Model No. tested with-in the family series: All the test in this report are conducted on model: GTM96180-1848 **(Representative Model)** as a worst case declared by manufacturer.

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	Verification of approvals with due correlation between the components used and the approval certificates submitted (see appended table 1.5.1)	P
1.5.1	General:	EL 2100-01	Refer below	P
	Components shall be complying with IEC 60950-1 or relevant component standard.		(see appended table 1.5.1)	P
	Components and subassemblies approved for IEC 62368-1 can be considered as complying with this standard		No such component presents as per IEC 62368-1	N/A
1.5.2	Evaluation and testing of components	EL 2100-02	Certified components are used in accordance with their ratings, certifications and they comply with applicable parts of the standard. Components which are not Certified are used in accordance with their ratings and they comply with applicable parts of IEC 60950-1 and applicable component standard. Components, for which no relevant IEC-standard exists, have been tested under the conditions occurring in the equipment, using applicable parts of IS 13252(part 1): 2010 +A1:2013+ A2:2015	P
1.5.3	Thermal controls	EL 2100-03	No thermal controls used	N/A
1.5.4	Transformers	EL 2100-04	Transformers used are suitable for their intended application and comply with the relevant requirements of the standard and particularly Annex C	P
1.5.5	Interconnecting cables*	EL 2100-05	Interconnecting Cables comply with relevant requirements of this standard	P
1.5.6	Capacitors bridging insulation *	EL 2100-06	Safety certified X-Capacitor (CX1) & Y-Capacitors (CY1, CY2) capacitor used in the equipment that complies with IEC 60384-14 and both capacitors are connected in series. (see appended table 1.5.1)	P
1.5.7	Resistors bridging insulation	EL 2100-07	See below cl no. 1.5.7.1 to cl no. 1.5.7.3	N/A
1.5.7.1	Resistors bridging functional, basic or supplementary insulation*	EL 2100-08	No such resistors bridging functional, basic or supplementary insulation	N/A

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

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
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 equipment	N/A
1.5.8	Components in equipment for IT power distribution systems*	EL 2100-11	Not evaluated for IT power system	N/A
1.5.9	Surge suppressors	EL 2100-12	See below cl. no. 1.5.9.1 to cl. no. 1.5.9.5	P
1.5.9.1	General*	EL 2100-13	Certified Varistor used (See appended table 1.5.1)	P
1.5.9.2	Protection of VDRs*	EL 2100-14	The varistor is located after fuse and protected by fuse	P
1.5.9.3	Bridging of functional insulation by a VDR*	EL 2100-15	Complies	P
1.5.9.4	Bridging of basic insulation by a VDR*	EL 2100-16	VDR not Bridging basic insulation	N/A
1.5.9.5	Bridging of supplementary, double or reinforced insulation by a VDR*	EL 2100-17	VDR not Bridging supplementary, double or reinforced insulation	N/A

*- 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 = 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/ ~~failing~~ in the requirement tested.

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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	See below cl no. 1.6.1 to cl no. 1.6.4	P
1.6.1	AC power distribution systems*	EL 2101-01	Evaluated for TN power distribution systems	P
1.6.2	Input current	EL 2101-02	The steady state input current of the equipment did not exceed the RATED CURRENT by more than 10% under NORMAL LOAD (See appended table 1.6.2)	P
1.6.3	Voltage limit of hand-held equipment*	EL 2101-03	The equipment is not hand-held	N/A
1.6.4	Neutral conductor *	EL 2101-04	Neutral conductor is insulated from the body throught 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/ ~~failing~~ in the requirement tested.

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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	See below cl no. 1.7.1 to cl no. 1.7.14	P
1.7.1	Power rating and identification markings		The power rating marking is provided and is readily visible in operator access area	P
1.7.1.1	Power rating marking*	EL 2102-01	See below	P
	Rated voltage(s) or voltage ranges(s) (V)*.	EL 2102-02	100-240V~	P
	Multiple mains supply connections*.	EL 2102-03	No multiple mains supply connections	N/A
	Symbol for nature of supply, for d.c. only*:	EL 2102-04	AC supply	N/A
	Rated frequency or rated frequency range (Hz) *:	EL 2102-05	50-60Hz	P
	Rated current (mA or A)*:	EL 2102-06	0.6A	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	Trade-mark: " GlobTek, Inc. "	P
	Model identification or type reference *:	EL 2102-09	GTM96180-1848 (Representative model) (For series models see the copy of marking plate)	P
	Symbol for Class II equipment only*:	EL 2102-10	 Symbol marked	P
	Other markings and symbols*:	EL 2102-11	An additional marking does not give rise to misunderstanding	P
1.7.1.3	Use of graphical symbols*	EL 2102-12	Satisfactory	P
1.7.2	Safety instructions and marking*	EL 2102-13	See below cl. no. 1.7.2.1 to cl. no. 1.7.2.6	P
1.7.2.1	General	EL 2102-14	Operating/ Safety instructions made available to the user	P
1.7.2.2	Disconnect devices*	EL 2102-15	Plug of direct plug-in equipment used as a disconnect device	N/A
1.7.2.3	Overcurrent protective devices*	EL 2102-16	Pluggable type A equipment	N/A
1.7.2.4	IT power distribution systems*	EL 2102-17	Not evaluatated for IT power distribution system	N/A
1.7.2.5	Operator access with a tool*	EL 2102-18	No tools are required	N/A
1.7.2.6	Ozone*	EL 2102-19	The equipment does not produce ozone	N/A
1.7.3	Short duty cycles*	EL 2102-20	The equipment is intended for continous operation	N/A

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

Cl. No.	Test / Requirement name	Test Code	Test result/ observation	Verdict
1.7.4	Supply voltage adjustment*	EL 2102-21	No supply voltage adjustment	N/A
1.7.5	Power outlets on the equipment*	EL 2102-22	No standard power outlets are 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 (F1) is clearly and adequately marked on PCB (T1.6A, 250Vac)	P
1.7.7	Wiring terminals	EL 2102-24	Refer below cl no. 1.7.7.1 to cl no. 1.7.7.3	N/A
1.7.7.1	Protective earthing and bonding terminals*	EL 2102-25	Class II equipment	N/A
1.7.7.2	Terminals for a.c. mains supply conductors*	EL 2102-26	The equipment is not permanently connected or provide with a non-detachable power supply cord	N/A
1.7.7.3	Terminals for d.c. mains supply conductors*	EL 2102-27	The equipment is not supplied from d.c. mains	N/A
1.7.8	Controls and indicators	EL 2102-28	See below cl. 1.7.8.1 to cl. no. 1.7.8.4	P
1.7.8.1	Identification, location and marking *:	EL 2102-29	The function of controls affecting safety is obvious without knowledge of language	P
1.7.8.2	Colours*	EL 2102-30	Colors used for functional indication only. No safety involved	P
1.7.8.3	Symbols according to IEC 60417*:	EL 2102-31	No such symbol Marked	N/A
1.7.8.4	Markings using figures* :	EL 2102-32	No such marking and figures used	N/A
1.7.9	Isolation of multiple power sources*	EL 2102-33	No multiple power sources	N/A
1.7.10	Thermostats and other regulating devices*	EL 2102-34	No thermostats or other regulating devices is adjustable	N/A
1.7.11	Durability	EL 2102-35	Marking is durable and legible after the test and show no curling	P
1.7.12	Removable parts*	EL 2102-36	No removable parts in the EUT	N/A
1.7.13	Replaceable batteries*	EL 2102-37	No battery used	N/A
	Language(s)		See above cl. no. 1.7.13	N/A
1.7.14	Equipment for restricted access locations*	EL 2102-38	Equipment not intended for installation in restricted access locations	N/A

*- Total number of Requirements to be observed / inspected = 35

Total No of applicable Requirement = 15

No of Requirements for which the sample passed = 15

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/~~failing~~ in the requirement tested

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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	See below cl. no. 2.1.1 to cl. no. 2.1.3	P
2.1.1	Protection in operator access areas*	EL 2103-01	See below cl. no. 2.1.1.1 to cl.no. 2.1.1.9	P
2.1.1.1	Access to energized parts	EL 2103-02	There is adequate protection against operator contact with bare parts at ELV or hazardous voltage or parts separated from these with basic or functional insulation only (except protective earth), also after operator detachable parts are removed and doors and covers are opened. No hazardous voltages exceeding 1000V a.c. or 1500V d.c.	P
	Test by inspection:		Operator cannot contact any hazardous parts	P
	Test with test finger (Figure 2A)		No access to hazardous Parts	P
	Test with test pin (Figure 2B):		No such possibility	N/A
	Test with test probe (Figure 2C)		No TNV circuit in the equipment	N/A
2.1.1.2	Battery compartments *	EL 2103-03	No TNV circuit in the equipment	N/A
2.1.1.3	Access to ELV wiring	EL 2103-04	No internal wiring at ELV accessible to the operator	N/A
	Working voltage (Vpeak or Vrms); minimum distance through insulation (mm)		See above cl. no. 2.1.1.3	N/A
2.1.1.4	Access to hazardous voltage circuit wiring	EL 2103-05	No hazardous voltage circuit in Operator access area.	P
2.1.1.5	Energy hazards:	EL 2103-06	No hazardous energy level (See appended table 2.1.1.5)	P
2.1.1.6	Manual controls	EL 2103-07	No such controls	N/A
2.1.1.7	Discharge of capacitors in equipment		See below	p
	Measured voltage (V); time-constant (s):	EL 2103-08	(see appended table 2.1.1.7)	p
2.1.1.8	Energy hazards – d.c. mains supply		Not connected to d.c. mains supply	N/A
	a) Capacitor connected to the d.c. mains supply:	EL 2103-09	See above cl. no. 2.1.1.8	N/A
	b) Internal battery connected to the d.c. mains supply:	EL 2103-10	See above cl. no. 2.1.1.8	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 in the EUT	N/A
2.1.2	Protection in service access areas	EL 2103-12	Unintentional contact with hazardous bare parts during service operation is not likely	P
2.1.3	Protection in restricted access locations	EL 2103-13	Not intended to be installed in a restricted access location	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 = 05

No. of tests for which the sample passed = 05

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

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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	See below cl. no. 2.2.2 to cl. no. 2.2.4	P
2.2.2	Voltages under normal conditions	EL 2104-01	SELV within limit under normal conditions (See appended table 2.2.2)	P
2.2.3	Voltages under fault conditions	EL 2104-02	SELV within limit 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 are only connected to 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/~~failing~~ in the requirement tested.

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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 in the EUT	N/A
2.3.1	Type of TNV circuits: TNV-1 / TNV-2 / TNV-3	EL 2105-01	See above cl.no.2.3	N/A
	a) Limits of TNV-1:	EL 2105-02	See above cl.no.2.3	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	See above cl.no.2.3	N/A
2.3.2	Separation from other circuits and from accessible parts*	EL 2105-04	See above cl.no.2.3	N/A
2.3.2.1	General Requirements	EL 2105-05	See above cl.no.2.3	N/A
2.3.2.2	Protection by basic insulation	EL 2105-06	See above cl.no.2.3	N/A
2.3.2.3	Protection by earthing	EL 2105-07	See above cl.no.2.3	N/A
2.3.2.4	Protection by other constructions:	EL 2105-08	See above cl.no.2.3	N/A
2.3.3	Separation from hazardous voltages	EL 2105-09	See above cl.no.2.3	N/A
2.3.4	Connection of TNV circuits to other circuits	EL 2105-10	See above cl.no.2.3	N/A
2.3.5	Test for operating voltages generated externally	EL 2105-11	See above cl.no.2.3	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 = N/A

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

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

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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	See below cl. no. 2.4.1 to cl. no. 2.4.3	P
2.4.1	General requirements *	EL 2106-01	(see appended table 2.4.2)	P
2.4.2	Limit values	EL 2106-02	(see appended table 2.4.2)	P
2.4.3	Connection of limited current circuits to other circuits*	EL 2106-03	SELV–SELV connection only	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/~~failing~~ in the requirement tested.

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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	No inherently limited output	N/A
	b) Impedance limited output	EL 2107-02	No impedance limited output	N/A
	c) Regulating network limited output under normal operating and single fault condition Use of integrated circuit (IC) current limiters	EL 2107-03	Regulating network limits the output in-compliance with table 2B both under normal operating and single fault condition (See appended table 2.5) & No integrated circuit (IC) current limiters used	P
	d) Overcurrent protective device limited output	EL 2107-04	No Overcurrent protective device	N/A
	Max. output voltage (V), Max. output current (A), Max. apparent power (VA)	EL 2107-05	(See appended table 2.5)	P
	Current rating of overcurrent protective device (A)	EL 2107-06	See above cl.no 2.5d)	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/~~failing~~ in the requirement tested.

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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	Class II equipment, No Provisions for earthing and bonding	N/A
2.6.1	Protective earthing	EL 2108-01	See above cl. no. 2.6	N/A
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	See above cl. no. 2.6	N/A
	Use of symbol for functional earthing: *	EL 2108-03	See above cl. no. 2.6	N/A
2.6.3	Protective earthing and protective bonding conductors*	EL 2108-04	See above cl. no. 2.6	N/A
2.6.3.2	Size of protective earthing conductors	EL 2108-05	See above cl. no. 2.6	N/A
	Rated current (A), cross-sectional area (mm2),		See above cl. no. 2.6	N/A
2.6.3.3	Size of protective bonding conductors	EL 2108-06	See above cl. no. 2.6	N/A
	Protective current Rating (A), cross-sectional area (mm2)		See above cl. no. 2.6	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	See above cl. no. 2.6	N/A
2.6.3.5	Colour of insulation*:	EL 2108-08	See above cl. no. 2.6	N/A
2.6.4	Terminals		See above cl. no. 2.6	N/A
2.6.4.2	Protective earthing and bonding terminals : Rated current(A), Type, Nominal thread diameter (mm)	EL 2108-09	See above cl. no. 2.6	N/A
2.6.4.3	Separation of the protective earthing conductor from protective bonding conductors*	EL 2108-10	See above cl. no. 2.6	N/A
2.6.5	Integrity of protective earthing*		See above cl. no. 2.6	N/A
2.6.5.1	Interconnection of equipment*	EL 2108-11	See above cl. no. 2.6	N/A
2.6.5.2	Components in protective earthing conductors and protective bonding conductors*	EL 2108-12	See above cl. no. 2.6	N/A
2.6.5.3	Disconnection of protective earth*	EL 2108-13	See above cl. no. 2.6	N/A

2.6.5.4	Parts that can be removed by an operator*	EL 2108-14	See above cl. no. 2.6	N/A
2.6.5.5	Parts removed during servicing*	EL 2108-15	See above cl. no. 2.6	N/A
2.6.5.6	Corrosion resistance*	EL 2108-16	See above cl. no. 2.6	N/A
2.6.5.7	Screws for protective bonding*	EL 2108-17	See above cl. no. 2.6	N/A
2.6.5.8	Reliance on telecommunication network or cable distribution system*	EL 2108-18	See above cl. no. 2.6	N/A

*- Total number of Requirements to be observed / inspected = 14

Total No of applicable Requirement = 00

No of Requirements for which the sample passed = N/A

Total number of tests to be conducted = 05

Total No of applicable Tests = 00

No. of tests for which the sample passed = N/A

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

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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	See below cl. no. 2.7.1 to cl. no. 2.7.6	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	Protection against over current and short-circuits is provided as an integral part of the equipment.	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.		Neither pluggable equipment types B nor permanently connected equipment	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	No such protection as integral part of the equipment	N/A
2.7.3	Short-circuit backup protection	EL 2109-03	The equipment is pluggable Type A. The building installation is considered as providing short-circuit backup protection.	P
2.7.4	Number and location of protective devices :	EL 2109-04	The protective device is located adequately therefore able to interrupt the overcurrent flowing in any possible fault current path.	P
2.7.5	Protection by several devices*	EL 2109-05	Protection by single Fuse (F1) only	N/A
2.7.6	Warning to service personnel* :	EL 2109-06	No service work required	N/A

*- Total number of Requirements to be observed / inspected = 04

Total No of applicable Requirement = 01

No of Requirements for which the sample passed = 01

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/~~failing~~ in the requirement tested.

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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 interlocks in the EUT	N/A
2.8.1	General principles*	EL 2110-01	See above cl.no.2.8	N/A
2.8.2	Protection requirements	EL 2110-02	See above cl.no.2.8	N/A
2.8.3	Inadvertent reactivation	EL 2110-03	See above cl.no.2.8	N/A
2.8.4	Fail-safe operation	EL 2110-04	See above cl.no.2.8	N/A
2.8.5	Moving parts	EL 2110-05	See above cl.no.2.8	N/A
2.8.6	Overriding*	EL 2110-06	See above cl.no.2.8	N/A
2.8.7	Switches, relays and their related circuits	EL 2110-07	See above cl.no.2.8	N/A
2.8.7.1	Separation distances for contact gaps and their related circuits`	EL 2110-08	See above cl.no.2.8	N/A
2.8.7.2	Overload test	EL 2110-09	See above cl.no.2.8	N/A
2.8.7.3	Endurance test	EL 2110-10	See above cl.no.2.8	N/A
2.8.7.4	Electric strength test	EL 2110-11	See above cl.no.2.8	N/A
2.8.8	Mechanical actuators	EL 2110-12	See above cl.no.2.8	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 = N/A

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

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

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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	See below cl no. 2.9.1 to cl no. 2.9.4	P
2.9.1	Properties of insulating materials*	EL 2111-01	Neither natural rubber, materials containing asbestos nor hygroscopic materials are used as insulation. No driving belts or couplings used	P
2.9.2	Humidity conditioning	EL 2111-02	See below	P
	Relative Humidity: 93 ±3 % Temperature: t at 40 ± 2°C Duration: 120 hours		Relative humidity (93±3) %, temperature (40 ±2) °C, tested for 120 hours.	P
2.9.3	Grade of insulation*	EL 2111-03	Insulations considered to be functional insulation, reinforced or double insulation	P
2.9.4	Separation from hazardous voltages*	EL 2111-04	The adequate levels of safety insulation provided and maintained to comply with the requirements of this standard	P
	Method(s) used		Method 1	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/~~failing~~ in the requirement tested.

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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	See below cl no. 2.10.1.1 to cl no. 2.10.12	P
2.10.1.1	Frequency *	EL 2112-01	50-60Hz	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	Complies with 5.3.4 (c)	P
2.10.1.4	Intervening unconnected conductive parts	EL 2112-04	No intervening unconnected conductive parts	N/A
2.10.1.5	Insulation with varying dimensions	EL 2112-05	No insulation with varying dimensions	N/A
2.10.1.6	Special separation requirements	EL 2112-06	No special separation requirement	N/A
2.10.1.7	Insulation in circuits generating starting pulses	EL 2112-07	No circuit generating starting pulse	N/A
2.10.2	Determination of working voltage	EL 2112-08	See below cl no. 2.10.2.2 and cl no. 2.10.2.3	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	(See appended table 2.10.3 and 2.10.4)	P
2.10.3.1	General	EL 2112-12	See below cl no. 2.10.3.2	P
2.10.3.2	Mains transient voltages*		See below	P
	a) AC mains supply * :	EL 2112-13	Overvoltage category II, Mains transient voltage 2500Vpeak considered	P
	b) Earthed d.c. mains supplies*	EL 2112-14	No d.c. mains supply	N/A
	c) Unearthed d.c. mains supplies* :	EL 2112-15	No d.c. mains supply	N/A
	d) Battery operation* :	EL 2112-16	No such battery used	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 c) considered	P
2.10.3.5	Clearances in circuits having starting pulses	EL 2112-19	No such circuit used	N/A
2.10.3.6	Transients from a.c. mains supply :	EL 2112-20	Considered mains transient voltage 1500Vpeak	P
2.10.3.7	Transients from d.c. mains supply :	EL 2112-21	No d.c. mains supply	N/A

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2.10.3.8	Transients from telecommunication networks and cable distribution systems	EL 2112-22	No telecommunication networks and cable distribution systems	N/A
2.10.3.9	Measurement of transient voltages		Not measured, normal transient levels considered	N/A
	a) Transients from a mains supply	EL 2112-23	See below	N/A
	For an a.c. mains supply		See above cl. no. 2.10.3.9	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 telecommunication network	N/A
2.10.4	Creepage distances*	EL 2112-25	See below cl. no. 2.10.4.2 to cl no. 2.10.4.3	P
2.10.4.1	General	EL 2112-26	Considered	P
2.10.4.2	Material group and comparative tracking index : CTI tests*	EL 2112-27	Material group IIIb Considered	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	See below cl no. 2.10.5.1 to cl.no. 2.10.5.14	P
2.10.5.1	General	EL 2112-30	Considered	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	No such components used	N/A
2.10.5.4	Semiconductor devices	EL 2112-33	Certified Photo Coupler (Optocoupler) Used (see appended table 1.5.1)	P
2.10.5.5.	Cemented joints	EL 2112-34	No cemented joints	N/A
2.10.5.6	Thin sheet material – General	EL 2112-35	Considered	P
2.10.5.7	Separable thin sheet material	EL 2112-36	Separable thin sheet material used in transformer	P
2.10.5.8	Non-separable thin sheet material	EL 2112-37	Non-separable thin sheet material not used	N/A
2.10.5.9	Thin sheet material – standard test procedure	EL 2112-38	Alternative test procedure used	N/A
	Electric strength test as per Cl.5.2.2		See above cl.no. 2.10.5.9	N/A
2.10.5.10	Thin sheet material – alternative test procedure	EL 2112-39	Electric strength test applied	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	No such construction	N/A
2.10.5.12	Wire in wound components		Certified triple insulated wire used (see appended table 1.5.1)	N/A
	If Peak Working voltage >71 V		See above cl. no. 2.10.5.12	N/A

	a) Basic insulation not under stress	EL 2112-41	See above cl. no. 2.10.5.12	N/A
	b) Basic, supplementary, reinforced insulation	EL 2112-42	See above cl. no. 2.10.5.12	N/A
	c) Compliance with Annex U	EL 2112-43	See above cl. no. 2.10.5.12	N/A
	d) Where two winding wires in contact inside wound component; angle between 45° and 90°	EL 2112-44	See above cl. no. 2.10.5.12	N/A
2.10.5.13	Wire with solvent-based enamel in wound components		No such wire used	N/A
	a) Electric strength test (Type test as per Cl.5.2.2)	EL 2112-45	See above cl. no. 2.10.5.13	N/A
	b) Electric Strength test (Routine test as per Cl.5.2.2)	EL 2112-46	See above cl. no. 2.10.5.13	N/A
2.10.5.14	Additional insulation in wound components		No such additional insulation used	N/A
	If Peak Working Voltage >71V		See above cl. no. 2.10.5.14	N/A
	a) Basic insulation not under stress	EL 2112-47	See above cl. no. 2.10.5.14	N/A
	b) Supplementary, reinforced insulation	EL 2112-48	See above cl. no. 2.10.5.14	N/A
2.10.6	Construction of printed boards*		See below cl.no.2.10.6.1 to cl.no.2.10.6.4	P
2.10.6.1	Uncoated printed boards	EL 2112-49	(see appended table 2.10.3 and 2.10.4)	P
2.10.6.2	Coated printed boards	EL 2112-50	No coated printed boards	N/A
2.10.6.3	Insulation between conductors on the same inner surface of a printed board	EL 2112-51	Not multi-layer printed board.	N/A
2.10.6.4	Insulation between conductors on different surfaces of a printed board*		Single layer PCB used	N/A
	a) Minimum Thickness of insulation: 0.4mm or	EL 2112-52	See above cl. no. 2.10.6.4	N/A
	b) Confirm with one of the specification and pass the relevant tests as per Table 2R	EL 2112-53	See above cl. no. 2.10.6.4	N/A
2.10.7	Component external terminations	EL 2112-54	No such external terminations	N/A
2.10.8	Tests on coated printed boards and coated components		No coated printed boards	N/A
2.10.8.1	Sample preparation and preliminary inspection*	EL 2112-55	See above cl. no. 2.10.8	N/A
2.10.8.2	Thermal conditioning	EL 2112-56	See above cl. no. 2.10.8	N/A
2.10.8.3	Electric strength test	EL 2112-57	See above cl. no. 2.10.8	N/A

2.10.8.4	Abrasion resistance test	EL 2112-58	See above cl. no. 2.10.8	N/A
2.10.9	Thermal cycling	EL 2112-59	No such component used	N/A
2.10.10	Test for Pollution Degree 1 environment and insulating compound	EL 2112-60	Pollution Degree 2	N/A
2.10.11	Tests for semiconductor devices and cemented joints	EL 2112-61	No semiconductor device	N/A
2.10.12	Enclosed and sealed parts	EL 2112-62	No enclosed and sealed parts	N/A

*- 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 = 19

No. of tests for which the sample passed = 19

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

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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	See below cl.no. 3.1.1 to cl.no. 3.1.10	P
3.1.1	Current rating and overcurrent protection	EL 2113-01	Adequate cross-sectional areas	P
3.1.2	Protection against mechanical damage*	EL 2113-02	See above cl. no. 3.1.1	P
3.1.3	Securing of internal wiring*	EL 2113-03	See above cl. no. 3.1.1	P
3.1.4	Insulation of conductors	EL 2113-04	See above cl. no. 3.1.1	P
3.1.5	Beads and ceramic insulators	EL 2113-05	No beads & ceramic insulators on conductors	N/A
3.1.6	Screws for electrical contact pressure*	EL 2113-06	No screws for electrical contact	N/A
3.1.7	Insulating materials in electrical connections*	EL 2113-07	No contact pressure through insulating material	N/A
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	All conductors are secured Compliance verified by 10N pull test	P
3.1.10	Sleeving on wiring*	EL 2113-10	No Sleeving used	N/A

*- Total number of Requirements to be observed / inspected = 07
Total No of applicable Requirement = 03
No of Requirements for which the sample passed = 03

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/~~failing~~ in the requirement tested.

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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	See below cl no. 3.2.1 to cl no. 3.2.9	P
3.2.1	Means of connection		See below cl.no. 3.2.1.1 to cl. no. 3.2.1.2	P
3.2.1.1	Connection to an a.c. mains supply*	EL 2114-01	The equipment is intended for Direct Plug-in connection to mains	P
3.2.1.2	Connection to a d.c. mains supply*	EL 2114-02	No d.c mains supply	N/A
3.2.2	Multiple supply connections	EL 2114-03	No multiple supply	N/A
3.2.3	Permanently connected equipment	EL 2114-04	Not a permanently 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	Appliance inlet not used	N/A
3.2.5	Power supply cords		See below cl no. 3.2.5.1 to cl.no.3.2.5.2	N/A
3.2.5.1	AC power supply cords*	EL 2114-06	Direct plug-in Equipment	N/A
	Rated current (A), cross-sectional area (mm^2), AWG		See above cl no. 3.2.5.1	N/A
3.2.5.2	DC power supply cords*	EL 2114-07	No d.c supply	N/A
3.2.6	Cord anchorages and strain relief		No non-detachable power supply cord set provided	N/A
	Mass of the equipment: Pull Force (N):	EL 2114-08	See above cl.no. 3.2.6	N/A
	b) Longitudinal displacement: 2 mm (Max)	EL 2114-09	See above cl.no. 3.2.6	N/A
3.2.7	Protection against mechanical damage	EL 2114-10	No such Construction	N/A
3.2.8	Cord guards		Not hand-held or non-detachable equipment	N/A
	a) Diameter or minor dimension D (mm) : Test mass (g) :	EL 2114-11	See above cl. no. 3.2.7	N/A

	b) Radius of curvature of cord : 1.5 D (Min)	EL 2114-12	See above cl. no. 3.2.7	N/A
3.2.9	Supply wiring space	EL 2114-13	Not permanently or non-detachable equipment	N/A

*- Total number of Requirements to be observed / inspected = 04
Total No of applicable Requirement = 02
No of Requirements for which the sample passed = 02

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

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

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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	No wiring terminals for connection of external conductors	N/A
3.3.1	Wiring terminals*	EL 2115-01	See above cl.no. 3.3	N/A
3.3.2	Connection of non-detachable power supply cords	EL 2115-02	See above cl.no. 3.3	N/A
3.3.3	Screw terminals*	EL 2115-03	See above cl.no. 3.3	N/A
3.3.4	Conductor sizes to be connected	EL 2115-04	See above cl.no. 3.3	N/A
	Rated current (A), cord/cable type, cross-sectional area (mm2)		See above cl.no. 3.3	N/A
3.3.5	Wiring terminal sizes	EL 2115-05	See above cl.no. 3.3	N/A
	Rated current (A), type, nominal thread diameter (mm)		See above cl.no. 3.3	N/A
3.3.6	Wiring terminal design	EL 2115-06	See above cl.no. 3.3	N/A
3.3.7	Grouping of wiring terminals*	EL 2115-07	See above cl.no. 3.3	N/A
3.3.8	Stranded wire	EL 2115-08	See above cl.no. 3.3	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 = N/A

Total number of tests to be conducted = 05

Total No of applicable Tests = 00

No. of tests for which the sample passed = N/A

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

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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	See below cl.no. 3.4.1 to cl.no. 3.4.11	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	Satisfactory	P
3.4.2	Disconnect devices*	EL 2116-02	Plug is part of direct plug-in equipment considered as disconnect device	P
3.4.3	Permanently connected equipment*	EL 2116-03	The equipment is not permanently connected equipment	N/A
3.4.4	Parts which remain energized*	EL 2116-04	When the equipment is disconnected from mains, No remaining parts at hazardous voltage in the equipment	N/A
3.4.5	Switches in flexible cords*	EL 2116-05	No such parts in the EUT	N/A
3.4.6	Number of poles - single-phase and d.c. equipment*	EL 2116-06	Plug is part of direct plug-in equipment considered as disconnect device	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 such switches	N/A
3.4.9	Plugs as disconnect devices*	EL 2116-09	Plug is part of direct plug-in equipment considered as disconnect device	N/A
3.4.10	Interconnected equipment*	EL 2116-10	No interconnections using hazardous voltages	N/A
3.4.11	Multiple power sources*	EL 2116-11	Only one power source	N/A

*- Total number of Requirements to be observed / inspected = 11
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/~~failing~~ in the requirement tested.

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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	See below cl.no. 3.5.1 to cl.no. 3.5.4	P
3.5.1	General requirements*	EL 2117-01	SELV to SELV connections	P
3.5.2	Types of interconnection circuits*	EL 2117-02	Interconnection circuits are only SELV Circuit	P
3.5.3	ELV circuits as interconnection circuits *	EL 2117-03	No ELV circuits	N/A
3.5.4	Data ports for additional equipment	EL 2117-04	The SELV circuit of data ports is supplied by a limited power source that complies with clause 2.5	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/~~failing~~ in the requirement tested.

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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	See below cl no. 4.1	N/A
4.1	Stability	EL 2118-01	See below cl no.4.1 a), b), c)	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 EUT 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 = 00

No of Requirements for which the sample passed = N/A

Total number of tests to be conducted = 04

Total No of applicable Tests = 00

No. of tests for which the sample passed = N/A

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

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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 cl no. 4.2.1 to cl no. 4.2.10	P
4.2.1	General	EL 2119-01	Complies with the requirement also after tests described below are applied	P
4.2.2	Steady force test, 10 N	EL 2119-02	The EUT is still complying with relevant requirements of this standard after 10 N force is applied to the relevent parts	P
4.2.3	Steady force test, 30 N	EL 2119-03	No such parts	N/A
4.2.4	Steady force test, 250 N	EL 2119-04	The equipment is still complying with relevant requirements of this standard after 250 N force is applied to the external enclosure	P
4.2.5	Impact test	EL 2119-05	Direct plug-in equipment	N/A
	a) Fall test as per Fig. 4A	EL 2119-06	See above cl. no. 4.2.5	N/A
	b) Swing test as per Fig. 4A	EL 2119-07	See above cl. no. 4.2.5	N/A
4.2.6	Drop test; height (mm):	EL 2119-08	After drop test, the equipment is still complying with relevant requirements of this standard	P
4.2.7	Stress relief test	EL 2119-09	Test performed at 70°C for 7 hours. No deformation of enclosure occured	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 intended to be mounted on a wall or ceiling	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 = N/A

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/~~failing~~ in the requirement tested.

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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	See below cl no. 4.3.1 to cl no. 4.3.13.6	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 Knob, grips, handles, lever etc	N/A
4.3.3	Adjustable controls	EL 2120-03	No hazardous adjustable controls	N/A
4.3.4	Securing of parts	EL 2120-04	No loosening of parts impairing creepage distances or clearances is likely to occur	P
4.3.5	Connections by Plugs and Sockets*	EL 2120-05	The equipment does not have such plugs/sockets	P
4.3.6	Direct plug-in equipment	EL 2120-06	complies	P
	Torque	EL 2120-07	0.012Nm torque applied and complies with the requirement	P
	Compliance with the relevant mains plug standard	EL 2120-08	Plug Pin of ITE Power supply (Adapter) is verified for its dimensions as per IS 1293:2005, (refer table 1.5.2/4.3.6 at page no. 102)	P
4.3.7	Heating elements in earthed equipment*	EL 2120-09	No heating element	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 used in Equipment	N/A
	a) Overcharging of a rechargeable battery	EL 2120-10	See above cl no. 4.3.8	N/A
	b) Unintentional charging of a non-rechargeable battery	EL 2120-11	See above cl no. 4.3.8	N/A
	c) Reverse charging of a rechargeable battery	EL 2120-12	See above cl no. 4.3.8	N/A
	d) Excessive discharging rate for any battery	EL 2120-13	See above cl no. 4.3.8	N/A
	e) Electric strength as per Cl.5.3.9.2	EL 2120-14	See above cl no. 4.3.8	N/A
4.3.9	Oil & grease*	EL 2120-15	No oil and grease	N/A
4.3.10	Dust, powders, liquids and gases	EL 2120-16	No dust, powders, liquids and gases	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	N/A

4.3.13	Radiation		See below cl no. 4.3.13.2 to cl no. 4.3.13.6	P
4.3.13.2	Ionizing radiation	EL 2120-19	No UV radiation produced by EUT	N/A
4.3.13.3	Effect of ultraviolet (UV) radiation on materials	EL 2120-20	No UV radiation in the EUT	N/A
4.3.13.4	Human exposure to ultraviolet (UV) radiation	EL 2120-21	No such type construction	N/A
4.3.13.5	Lasers (including laser diodes) and LED's:		Low power LED is used for indication only	P
4.3.13.5.1	Lasers (including laser diodes) For laser see IEC 60825-1, respective part as applicable.	EL 2120-22	See above cl no. 4.3.13.5	N/A
	Laser class		See above cl no. 4.3.13.5	N/A
4.3.13.5.2	Light emitting diodes (LED's)	EL 2120-23	Low power LED is used for indication only	P
4.3.13.6	Other types*	EL 2120-24	No other type of radiations in the EUT	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 = 05
No. of tests for which the sample passed = 05

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

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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 inside the equipment	N/A
4.4.1	General	EL 2121-01	See above cl no. 4.4	N/A
4.4.2	Protection in operator access areas	EL 2121-02	See above cl no. 4.4	N/A
4.4.3	Protection in restricted access locations *	EL 2121-03	See above cl no. 4.4	N/A
4.4.4	Protection in service access areas*	EL 2121-04	See above cl no. 4.4	N/A
4.4.5	Protection against moving fan blades	EL 2121-05	See above cl no. 4.4	N/A
4.4.5.1	General*	EL 2121-06	See above cl no. 4.4	N/A
	Not considered likely to cause pain or injury. a).....:	EL 2121-07	See above cl no. 4.4	N/A
	Is considered likely to cause pain, not injury. b)	EL 2121-08	See above cl no. 4.4	N/A
	Considered likely to cause injury. c).....:	EL 2121-09	See above cl no. 4.4	N/A
4.4.5.2	Protection for users*	EL 2121-10	See above cl no. 4.4	N/A
	Use of symbol or warning*	EL 2121-11	See above cl no. 4.4	N/A
4.4.5.3	Protection for service persons*	EL 2121-12	See above cl no. 4.4	N/A
	Use of symbol or warning *	EL 2121-13	See above cl no. 4.4	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 = N/A

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

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

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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	Components, parts temperture within limits	P
4.5.1	General	EL 2122-01	Operated in the most unfavorable way of operation given in the operating instructions until steady conditions established (see appended table 4.5)	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	complies (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/~~failing~~ in the requirement tested.

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(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 such opening	N/A
4.6.1	Top and side openings	EL 2123-01	See above cl no. 4.6	N/A
	Dimensions (mm) :		See above cl no. 4.6	N/A
4.6.2	Bottoms of fire enclosures :	EL 2123-02	See above cl no. 4.6	N/A
	Construction of the bottom, dimensions (mm) :		See above cl no. 4.6	N/A
4.6.3	Doors or covers in fire enclosures*	EL 2123-03	Doors or covers not used	N/A
4.6.4	Openings in transportable equipment	EL 2123-04	No such openings in the equipment	N/A
4.6.4.1	Constructional design measures	EL 2123-05	See above cl. no. 4.6.4	N/A
	Dimensions (mm)		See above cl. no. 4.6.4	N/A
4.6.4.2	Evaluation measures for larger openings	EL 2123-06	See above cl. no. 4.6.4	N/A
4.6.4.3	Use of metallized parts	EL 2123-07	No metalized parts	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	No adhesive parts	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	See above cl no. 4.6.5	N/A
	After temperature conditioning b) Leave the sample between 20°C to 30°C for 1 hour	EL 2123-10	See above cl no. 4.6.5	N/A
	c) Place the sample at 40°C±2°C for 4 hours	EL 2123-11	See above cl no. 4.6.5	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	See above cl no. 4.6.5	N/A
	e) Place the sample in a cabinet at 91 % to 95 % relative humidity for 72 h;	EL 2123-13	See above cl no. 4.6.5	N/A

	f) Remove the sample and leave it at any convenient temperature between 20 °C and 30 °C for 1 h;	EL 2123-14	See above cl no. 4.6.5	N/A
	g) Place the sample in an oven at the temperature used for the temperature conditioning for 4 h;	EL 2123-15	See above cl no. 4.6.5	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	See above cl no. 4.6.5	N/A
	i) The sample is then immediately subjected to the tests of Cl.4.2 as applicable.	EL 2123-17	See above cl no. 4.6.5	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 = N/A

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

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

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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	See below cl.no. 4.7.1 to cl. no. 4.7.3.6	P
4.7.1	Reducing the risk of ignition and spread of flame		Materials with the required flammability classes are used. Safety relevant components used within Specified rating. Electrical parts are not likely to ignite nearby materials	P
	Method 1, selection and application of components wiring and materials OR	EL 2124-01	Method 1 used	P
	Method 2, application of all of simulated fault condition tests	EL 2124-02	Method 2 not 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	All parts cover inside fire enclosure	P
4.7.2.2	Parts not requiring a fire enclosure	EL 2124-04	Transformer and plug	P
4.7.3	Materials*	EL 2124-05	See below cl. no. 4.7.3.1 to cl. no. 4.7.3.6	P
4.7.3.1	General*	EL 2124-06	Components and materials have adequate flammability classification. (see appended table 1.5.1)	P
	a) Class of material used*	EL 2124-07	Certified materials used (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 class of material used	N/A
	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 material used	N/A
4.7.3.2	Materials for fire enclosures		See below	

	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	Certified materials used (See appended table 1.5.1)	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	Mass of the equipment is less than 18Kg	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 material used	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 arcing part	N/A
	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 arcing part	N/A

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4.7.3.3	Materials for components and other parts outside fire enclosures *		No such parts outside 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	See above cl. no. 4.7.3.3	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	See above cl. no. 4.7.3.3	N/A
4.7.3.4	Materials for components and other parts inside fire enclosures		See below	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	Internal components are mounted on V-0 certified Class PCB material (See appended table 1.5.1)	P
	Requirements for voltage dependent resistors (VDR's) are in Annex Q.*	EL 2124-18	No such components 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 used	N/A
4.7.3.6	Materials used in high-voltage components		No high-voltage components	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	See above cl no. 4.7.3.6	N/A
	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	See above cl no. 4.7.3.6	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	See above cl no. 4.7.3.6	N/A
	Clause 8 - Conditioning	EL 2124-23	See above cl no. 4.7.3.6	N/A
	Clause 11 - Evaluation of test results	EL 2124-24	See above cl no. 4.7.3.6	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 = 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/~~failing~~ in the requirement tested.

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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	See below cl.no. 5.1 to cl.no. 5.1.8.2	P
5.1	Touch current and protective conductor current*	EL 2125-01	See sub-clauses 5.1.2 to 5.1.6	P
5.1.2	Configuration of equipment under test (EUT)*	EL 2125-02	Complete unit	N/A
5.1.2.1	Single connection to an a.c. mains supply*	EL 2125-03	Not a interconnected equipment	N/A
5.1.2.2	Redundant multiple connections to an a.c. mains supply*	EL 2125-04	No multiple connection	N/A
5.1.2.3	Simultaneous multiple connections to an a.c. mains supply	EL 2125-05	No multiple connection	N/A
5.1.3	Test circuit	EL 2125-06	Single phase equipment intended only for connection to TN system. Touch current test conducted based on TN systems using the test circuit in Figure 5A.	P
5.1.4	Application of measuring instrument	EL 2125-07	Testing performed per Annex D	P
5.1.5	Test procedure	EL 2125-08	The touch current was measured from mains to plastic enclosure with metal foil	P
5.1.6	Test measurements		(see appended table 5.1.6)	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 such equipment	N/A
	e) Max. protective conductor current =5% of Input current	EL 2125-13	No such equipment	N/A
5.1.7	Equipment with touch current exceeding 3.5 mA	EL 2125-14	See below cl.no. 5.1.7.1 to cl.no.5.1.7.2	N/A

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5.1.7.1	General	EL 2125-15	No such equipment	N/A
5.1.7.2	Simultaneous multiple connections to the supply	EL 2125-16	No such multiple connections to supply	N/A
5.1.8	Touch currents to telecommunication networks and cable distribution systems and from telecommunication networks	EL 2125-17	No telecommunication network or cable distribution system	N/A
5.1.8.1	Limitation of the touch current to a telecommunication network or to a cable distribution system	EL 2125-18	No telecommunication network or cable distribution system	N/A
	Supply voltage (V)		See above cl.no. 5.1.8.1	N/A
	Measured touch current (mA)		See above cl.no. 5.1.8.1	N/A
	Max. allowed touch current (mA)		See above cl.no. 5.1.8.1	N/A
5.1.8.2	Summation of touch currents from telecommunication networks	EL 2125-19	No telecommunication network or cable distribution system	N/A
	a) EUT with earthed telecommunication ports :		See above cl.no. 5.1.8.2	N/A
	b) EUT whose telecommunication ports have no reference to protective earth		See above cl.no. 5.1.8.2	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 = 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/~~failing~~ in the requirement tested.

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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	See below cl no. 5.2.1 and cl no. 5.2.2	P
5.2.1	General*	EL 2126-01	(See appended table 5.2)	P
5.2.2	Test procedure		No insulation breakdown observed during the test	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	(See appended table 5.2)	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/~~failing~~ in the requirement tested.

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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	See below cl. no. 5.3.1 to cl. no. 5.3.9.2	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 such parts in the equipment	N/A
5.3.3	Transformers	EL 2127-03	see annex C	P
5.3.4	Functional insulation:	EL 2127-04	Complies with 5.3.4 c)	P
5.3.5	Electromechanical components	EL 2127-05	No electromechanical component	N/A
5.3.6	Audio amplifiers in ITE:	EL 2127-06	No Audio Amplifiers in the EUT	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	Not un-attended equipment	N/A
5.3.9	Compliance criteria for abnormal operating and fault conditions*		See below	P
5.3.9.1	During the tests	EL 2127-09	No fire, emission of molten metal or deformation was noted during the tests.	P
5.3.9.2	After the tests	EL 2127-10	Electric Strength performed after abnormal and fault tests.	P

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

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/~~failing~~ in the requirement tested.

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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 telecommunication network	N/A
6.1.1	Protection from hazardous voltages	EL 2128-01	See above cl. no. 6.1	N/A
6.1.2	Separation of the telecommunication network from earth* .		See above cl. no. 6.1	N/A
6.1.2.1	Requirements: - Surge suppressors that bridge the insulation shall have a minimum rated operating voltage Uop of Uop =Upeak + ΔUsp + ΔUsa Where Upeak is 360V or 180V ΔUsp 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) ΔUsa 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	See above cl. no. 6.1	N/A
6.1.2.2	Exclusions	EL 2128-03	See above cl. no. 6.1	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 = N/A

Total number of tests to be conducted = 04

Total No of applicable Tests = 00

No. of tests for which the sample passed = N/A

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

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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 overvoltage on telecommunication networks*	EL 2129-00	No telecommunication network	N/A
6.2.1	Separation requirements	EL 2129-01	See above cl. no. 6.2	N/A
6.2.2	Electric strength test procedure	EL 2129-02	See above cl. no. 6.2	N/A
6.2.2.1	Impulse test	EL 2129-03	See above cl. no. 6.2	N/A
6.2.2.2	Steady-state test	EL 2129-04	See above cl. no. 6.2	N/A
6.2.2.3	Compliance criteria	EL 2129-05	See above cl. no. 6.2	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 = N/A

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

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

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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 telecommunication network	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	See above cl. no. 6.3	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	See above cl. no. 6.3	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	See above cl. no. 6.3	N/A

	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	See above cl. no. 6.3	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 = N/A

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

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

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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	No connection to cable distribution system	N/A
7.1	General requirements*	EL 2131-01	See above cl. no. 7	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	See above cl. no. 7	N/A
7.3	Protection of equipment users from overvoltages on the cable distribution system	EL 2131-03	See above cl. no. 7	N/A
7.4	Insulation between primary circuits and cable distribution systems	EL 2131-04	See above cl. no. 7	N/A
7.4.1	General	EL 2131-05	See above cl. no. 7	N/A
7.4.2	Voltage surge test	EL 2131-06	See above cl. no. 7	N/A
7.4.3	Impulse test	EL 2131-07	See above cl. no. 7	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 = N/A

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

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

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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	See below cl. no. A.1 to cl. no. A.3.3	P
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	Equipment mass not exceeding 18 kg	N/A
A.1.1	Samples:	EL 2132-02	See above cl. no. A.1	N/A
	Wall thickness (mm):		See above cl. no. A.1	N/A
A.1.2	Conditioning of samples; temperature (°C) :	EL 2132-03	See above cl. no. A.1	N/A
A.1.3	Mounting of samples :	EL 2132-04	See above cl. no. A.1	N/A
A.1.4	Test flame (see IEC 60695-11-3)	EL 2132-05	See above cl. no. A.1	N/A
	Flame A, B, C or D :		See above cl. no. A.1	N/A
A.1.5	Test procedure	EL 2132-06	See above cl. no. A.1	N/A
A.1.6	Compliance criteria	EL 2132-07	See above cl. no. A.1	N/A
	Sample 1 burning time (s):		See above cl. no. A.1	N/A
	Sample 2 burning time (s):		See above cl. no. A.1	N/A
	Sample 3 burning time (s):		See above cl. no. A.1	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	Certified materials used (see appended table 1.5.1) and Internal components are mounted on certified V-0 class PCB material (see appended table 1.5.1)	P
A.2.1	Samples, material:	EL 2132-09	See above cl. no. A.2	P
	Wall thickness (mm):		See above cl. no. A.2	P
A.2.2	Conditioning of samples; temperature (°C) :	EL 2132-10	See above cl. no. A.2	P
A.2.3	Mounting of samples :	EL 2132-11	See above cl. no. A.2	P
A.2.4	Test flame (see IEC 60695-11-4)	EL 2132-12	See above cl. no. A.2	P
	Flame A, B or C :		See above cl. no. A.2	P
A.2.5	Test procedure	EL 2132-13	See above cl. no. A.2	P
A.2.6	Compliance criteria	EL 2132-14	See above cl. no. A.2	P
	Sample 1 burning time (s):		See above cl. no. A.2	P

Tests relating to Fire Safety **EL 2132 – V1.4**

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

Total number of tests to be conducted = 20
Total No of applicable Tests = 08
No. of tests for which the sample passed = 08

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

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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 such motor used in equipment	N/A
B.1	General requirements	EL 2133-01	See above cl. no. B	N/A
	Position :		See above cl. no. B	N/A
	Manufacturer :		See above cl. no. B	N/A
	Type :		See above cl. no. B	N/A
	Rated values :		See above cl. no. B	N/A
B.2	Test conditions	EL 2133-02	See above cl. no. B	N/A
B.3	Maximum temperatures	EL 2133-03	See above cl. no. B	N/A
B.4	Running overload test	EL 2133-04	See above cl. no. B	N/A
B.5	Locked-rotor overload test	EL 2133-05	See above cl. no. B	N/A
	Test duration (days):		See above cl. no. B	N/A
	Electric strength test: test voltage (V) :		See above cl. no. B	N/A
B.6	Running overload test for d.c. motors in secondary circuits	EL 2133-06	See above cl. no. B	N/A
B.6.1	General	EL 2133-07	See above cl. no. B	N/A
B.6.2	Test procedure	EL 2133-08	See above cl. no. B	N/A
B.6.3	Alternative test procedure	EL 2133-09	See above cl. no. B	N/A
B.6.4	Electric strength test; test voltage (V):	EL 2133-10	See above cl. no. B	N/A
B.7	Locked-rotor overload test for d.c. motors in secondary circuits	EL 2133-11	See above cl. no. B	N/A
B.7.1	General	EL 2133-12	See above cl. no. B	N/A
B.7.2	Test procedure	EL 2133-13	See above cl. no. B	N/A
B.7.3	Alternative test procedure	EL 2133-14	See above cl. no. B	N/A
B.7.4	Electric strength test; test voltage (V) :	EL 2133-15	See above cl. no. B	N/A
B.8	Test for motors with capacitors	EL 2133-16	See above cl. no. B	N/A
B.9	Test for three-phase motors	EL 2133-17	See above cl. no. B	N/A
B.10	Test for series motors	EL 2133-18	See above cl. no. B	N/A
	Operating voltage (V) :		See above cl. no. B	N/A

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

Total No of applicable Requirement = 00

No of Requirements for which the sample passed = N/A

Total number of tests to be conducted = 19

Total No of applicable Tests = 00

No. of tests for which the sample passed = N/A

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

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(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	See below	P
	Position :		On PCB (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:		Overcurrent protection by circuit design	P
C.1	Overload test	EL 2134-01	Complies (see appended table 5.3)	P
C.2	Insulation	EL 2134-02	(see appended table 5.2)	P
	Protection from displacement of windings:		Insulation tape provided at each end of winding	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/~~failing~~ in the requirement tested.

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(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 cl no. D.1 and cl no. D.2	P
D.1	Measuring instrument	EL 2135-01	Measuring instrument as per figure D.1 of annex D	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 = N/A

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/~~failing~~ in the requirement tested.

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(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	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 = N/A

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

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

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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	(See appended table 2.10.3 and 2.10.4)	P

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

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/~~failing~~ in the requirement tested.

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(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	See above cl. no. G	N/A
G.1.1	General	EL 2138-02	See above cl. no. G	N/A
G.1.2	Summary of the procedure for determining minimum clearances	EL 2138-03	See above cl. no. G	N/A
G.2	Determination of mains transient voltage (V)	EL 2138-04	See above cl. no. G	N/A
G.2.1	AC Mains supply	EL 2138-05	See above cl. no. G	N/A
G.2.2	Earthed d.c. mains supplies	EL 2138-06	See above cl. no. G	N/A
G.2.3	Unearthed d.c. mains supplies	EL 2138-07	See above cl. no. G	N/A
G.2.4	Battery operation	EL 2138-08	See above cl. no. G	N/A
G.3	Determination of telecommunication network transient voltage (V)	EL 2138-09	See above cl. no. G	N/A
G.4	Determination of required withstand voltage (V)	EL 2138-10	See above cl. no. G	N/A
G.4.1	Mains transients and internal repetitive peaks	EL 2138-11	See above cl. no. G	N/A
G.4.2	Transients from telecommunication networks:	EL 2138-12	See above cl. no. G	N/A
G.4.3	Combination of transients	EL 2138-13	See above cl. no. G	N/A
G.4.4	Transients from cable distribution systems	EL 2138-14	See above cl. no. G	N/A
G.5	Measurement of transient voltages (V)	EL 2138-15	See above cl. no. G	N/A
	a) Transients from a mains supply		See above cl. no. G	N/A
	For an a.c. mains supply		See above cl. no. G	N/A
	For a d.c. mains supply		See above cl. no. G	N/A
	b) Transients from a telecommunication network		See above cl. no. G	N/A
G.6	Determination of minimum clearances	EL 2138-16	See above cl. no. G	N/A

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

Total No of applicable Requirement = 00

No of Requirements for which the sample passed = N/A

Total number of tests to be conducted = 17

Total No of applicable Tests = 00

No. of tests for which the sample passed = N/A

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

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(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 ionizing 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 = N/A

Total number of tests to be conducted = 01

Total No of applicable Tests = 00

No. of tests for which the sample passed = N/A

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

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(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 electromechanical component	N/A
	Metal(s) used :		See above cl. no. J	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 = N/A

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

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

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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 in the equipment	N/A
K.1	Making and breaking capacity	EL 2141-01	See above cl. no. K	N/A
K.2	Thermostat reliability; operating voltage (V) :	EL 2141-02	See above cl. no. K	N/A
K.3	Thermostat endurance test; operating voltage (V) :	EL 2141-03	See above cl. no. K	N/A
K.4	Temperature limiter endurance; operating voltage (V) :	EL 2141-04	See above cl. no. K	N/A
K.5	Thermal cut-out reliability	EL 2141-05	See above cl. no. K	N/A
K.6	Stability of operation	EL 2141-06	See above cl. no. K	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 = N/A

Total number of tests to be conducted = 06

Total No of applicable Tests = 00

No. of tests for which the sample passed = N/A

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

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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	See below cl no. L.1 to cl no. L .7	P
L.1	Typewriters*	EL 2142-01	No such equipment	N/A
L.2	Adding machines and cash registers*	EL 2142-02	No such equipment	N/A
L.3	Erasers*	EL 2142-03	No such equipment	N/A
L.4	Pencil sharpeners*	EL 2142-04	No such equipment	N/A
L.5	Duplicators and copy machines*	EL 2142-05	No such equipment	N/A
L.6	Motor-operated files*	EL 2142-06	No such equipment	N/A
L.7	Other business equipment*	EL 2142-07	Maximum normal load	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 = N/A

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

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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	No such construction present	N/A
M.1	Introduction*	EL 2143-01	See above cl. no. M	N/A
M.2	Method A	EL 2143-02	See above cl. no. M	N/A
M.3	Method B	EL 2143-03	See above cl. no. M	N/A
M.3.1	Ringing signal	EL 2143-04	See above cl. no. M	N/A
M.3.1.1	Frequency (Hz)	EL 2143-05	See above cl. no. M	N/A
M.3.1.2	Voltage (V)	EL 2143-06	See above cl. no. M	N/A
M.3.1.3	Cadence; time (s), voltage (V)	EL 2143-07	See above cl. no. M	N/A
M.3.1.4	Single fault current (mA)	EL 2143-08	See above cl. no. M	N/A
M.3.2	Tripping device and monitoring voltage	EL 2143-09	See above cl. no. M	N/A
M.3.2.1	Conditions for use of a tripping device or a monitoring voltage	EL 2143-10	See above cl. no. M	N/A
M.3.2.2	Tripping device	EL 2143-11	See above cl. no. M	N/A
M.3.2.3	Monitoring voltage (V)	EL 2143-12	See above cl. no. M	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 = N/A

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

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

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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	EUT is not connected to telecommunication network	N/A
N.1	ITU-T impulse test generators	EL 2144-01	See above cl. no. N	N/A
N.2	IEC 60065 impulse test generator	EL 2144-02	See above cl. no. N	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 = N/A

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

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

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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	Satisfactory	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 = N/A

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

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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	Certified Varistor used (See appended table 1.5.1)	P
	A VDR SHALL COMPLY WITH IEC 61051-2, WHETHER A FIRE ENCLOSURE IS PROVIDED OR NOT, TAKING INTO ACCOUNT ALL OF THE FOLLOWING:		See above cl. no. Q	P
	A) PREFERRED CLIMATIC CATEGORIES LOWER CATEGORY TEMPERATURE: -10ºC UPPER CATEGORY TEMPERATURE: +85ºC DURATION OF DAMP TEST, STEADY STATE TEST:21 DAYS		See above cl. no. Q	P
	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		See above cl. no. Q	P
	C) COMBINATION PULSE :	EL 2146-01	See above cl. no. Q	P
	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	See above cl. no. Q	P

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

Total No of applicable Requirement = 00

No of Requirements for which the sample passed = N/A

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/~~failing~~ in the requirement tested.

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Tests relating to General Requirement **EL 2147– V1.4**

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 such equipment	N/A
R.1	Minimum separation distances for unpopulated coated printed boards (see 2.10.6.2)*	EL 2147-01	See above cl. no. R	N/A
R.2	Reduced clearances (see 2.10.3)*	EL 2147-02	See above cl. no. R	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 = N/A

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

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

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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	EUT is not connected to telecommunication network	N/A
S.1	Test equipment*	EL 2148-01	See above cl. no. S	N/A
S.2	Test procedure*	EL 2148-02	See above cl. no. S	N/A
S.3	Examples of waveforms during impulse testing*	EL 2148-03	See above cl. no. S	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 = N/A

Total number of tests to be conducted = 00

Total No of applicable Tests = 00

No. of tests for which the sample passed = N/A

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

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Tests relating to Protection against Ingress of water **EL 2149 – V1.4**

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	IP42 (declared by manufacturer)	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 = N/A

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

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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	Certified triple insulated wire used (see appended table 1.5.1)	N/A
U.1	GENERAL	EL2150-01	See above cl. no. U	N/A
U.2	TYPE TESTS	EL2150-02	See above cl. no. U	N/A
U.2.1	GENERAL	EL2150-03	See above cl. no. U	N/A
U.2.2	ELECTRIC STRENGTH	EL2150-04	See above cl. no. U	N/A
U.2.2.1	SOLID ROUND WINDING WIRE AND STRANDED WINDING WIRES	EL2150-05	See above cl. no. U	N/A
U.2.2.1.1	WIRES WITH NOMINAL CONDUCTOR DIAMETER UPTO AND INCLUDING 0.100MM	EL2150-06	See above cl. no. U	N/A
U.2.2.1.2	WIRES WITH NOMINAL CONDUCTOR DIAMETER OVER 0.100MM AND INCLUDING 2.500MM	EL2150-07	See above cl. no. U	N/A
U.2.2.1.3	WIRES WITH NOMINAL CONDUCTOR DIAMETER OVER 2.500MM	EL2150-08	See above cl. no. U	N/A
U.2.2.2	SQUARE OR RECTANGULAR WIRES	EL2150-09	See above cl. no. U	N/A
U.2.3	FLEXIBILITY AND ADHERENCE	EL2150-10	See above cl. no. U	N/A
U.2.4	HEAT SHOCK	EL2150-11	See above cl. no. U	N/A
U.2.5	RETENTION OF ELECTRIC STRENGTH AFTER BENDING	EL2150-12	See above cl. no. U	N/A
U.3	TESTING DURING MANUFACTURING	EL2150-13	See above cl. no. U	N/A
U.3.1	GENERAL	EL2150-14	See above cl. no. U	N/A
U.3.2	ROUTINE TESTS	EL2150-15	See above cl. no. U	N/A
U.3.3	SAMPLING TEST	EL2150-16	See above cl. no. U	N/A

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

Total No of applicable Requirement = 00

No of Requirements for which the sample passed = N/A

Total number of tests to be conducted = 17

Total No of applicable Tests = 00

No. of tests for which the sample passed = N/A

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

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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	Evaluated for TN power distribution systems	P
V.1	Introduction*	EL 2151-01	See below cl. no. V.2 to cl. no. V.4	P
V.2	TN power distribution systems	EL 2151-02	TN power distribution systems considered	P
V.3	TT Power Distribution systems	EL 2151-03	No TT Power Distribution systems	N/A
V.4	IT Power Distribution systems	EL 2151-04	No IT 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/~~failing~~ in the requirement tested.

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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	No such telecommunication networks in equipment	N/A
W.1	Touch current from electronic circuits*	EL 2152-01	See above cl. no. W	N/A
W.1.1	Floating circuits*	EL 2152-02	See above cl. no. W	N/A
W.1.2	Earthed circuits*	EL 2152-03	See above cl. no. W	N/A
W.2	Interconnection of several equipments*	EL 2152-04	See above cl. no. W	N/A
W.2.1	Isolation*	EL 2152-05	See above cl. no. W	N/A
W.2.2	Common return, isolated from earth*	EL 2152-06	See above cl. no. W	N/A
W.2.3	Common return, connected to protective earth*	EL 2152-07	See above cl. no. W	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 = N/A

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

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

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Tests relating to Electrical Safety **EL 2153– V1.4**

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 below cl no. X.1 and cl no. X.2	P
X.1	Determination of maximum input current*	EL 2153-01	(see appended table 5.3)	P
X.2	Overload test procedure*	EL 2153-02	See above cl. no. X.1	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 = 00
Total No of applicable Tests = 00
No. of tests for which the sample passed = N/A

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

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(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	No U.V. produced in the equipment	N/A
Y.1	Test apparatus	EL 2154-01	See above cl. no. Y	N/A
Y.2	Mounting of test samples	EL 2154-02	See above cl. no. Y	N/A
Y.3	Carbon-arc light-exposure apparatus	EL 2154-03	See above cl. no. Y	N/A
Y.4	Xenon-arc light exposure apparatus	EL 2154-04	See above cl. no. Y	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 = N/A

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

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

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(Approving Authority)

Tests relating to Electrical Safety **EL 2155– V1.4**

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	Overvoltage category II	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 = N/A

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

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(Approving Authority)

NEMKO INDIA (TEST LAB) PRIVATE LIMITED

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	Seperable thin sheet 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 = N/A

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

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

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(Approving Authority)

Tests relating to Electrical Safety **EL 2158 – V1.4**

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

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

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

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(Approving Authority)

Tests relating to Mechanical Properties **EL 2159 – V1.4**

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

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

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

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(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	No such equipment	N/A
EE.1	General		See above cl. no. EE	N/A
EE.2	Markings and instructions*	EL 2160-01	See above cl. no. EE	N/A
	Use of markings or symbols*.....:		See above cl. no. EE	N/A
	Information of user instructions, maintenance and/or servicing instructions*.....:		See above cl. no. EE	N/A
EE.3	Inadvertent reactivation test.....:	EL 2160-02	See above cl. no. EE	N/A
EE.4	Disconnection of power to hazardous moving parts*	EL 2160-03	See above cl. no. EE	N/A
	Use of markings or symbols*.....:		See above cl. no. EE	N/A
EE.5	Protection against hazardous moving parts		See above cl. no. EE	N/A
	Test with test finger (Figure 2A) .....:	EL 2160-04	See above cl. no. EE	N/A
	Test with wedge probe (Figure EE1 and EE2) .....:	EL 2160-05	See above cl. no. EE	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 = N/A

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

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

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(Approving Authority)

1.5.1	TABLE: List of components				P
Object/part no.	Manufacturer/ trademark	Type/model	Technical data	Standard	Mark(s) of conformity[1)]
PCB	Dafeng Arex Electronics Technology Co Ltd	04V0	V-0, 130°C	UL 796(#)	UL E186016
Alternate	Dafeng Arex Electronics Technology Co Ltd	02V0	V-0, 130°C	UL 796(#)	UL E186016
Alternate	WALEX ELECTRONIC (WUXI) CO LTD	T2, T2A, T2B, T4	V-0, 130°C	UL 796(#)	UL E154355
Alternate	GUANGDONG HETONG TECHNOLOGY CO LTD	CEM1, 2V0, FR4	V-0, 130°C	UL 796(#)	UL E243157
Alternate	CHEERFUL PLASTIC ELECTRONIC PRODUCTS	02, 03, 03A	V-0, 130°C	UL 796(#)	UL E199724
Alternate	DONGGUAN DAYSUN ELECTRONIC CO LTD	DS2	V-0, 130°C	UL 796(#)	UL E251754
Alternate	SUZHOU CITY YILIHUA ELECTRONICS CO LTD	YLH-1	V-0, 130°C	UL 796(#)	UL E251781
Alternate	BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	DKV0-3A, DGV0-3A	V-0, 130°C	UL 796(#)	UL E177671
Alternate	KUOTIANG ENT LTD	C-2, C-2A	V-0, 130°C	UL 796(#)	UL E227299
Alternate	SHENZHEN TONGCHUANGXIN ELECTRONICS CO LTD	TCX	V-0, 130°C	UL 796(#)	UL E250336
Alternate	PACIFIC WIN INDUSTRIAL LTD	PW-02, PW-03	V-0, 130°C	UL 796(#)	UL E228070
Alternate	YUANMAN PRINTED CIRCUIT CO LTD	1V0	V-0, 130°C	UL 796(#)	UL E74757
Alternate	SUZHOU XINKE ELECTRONICS CO LTD	XK-1, XK-2	V-0, 130°C	UL 796(#)	UL E231590
Alternate	KUNSHAN HARRY ELECTRONIC TECHNOLOGY CO., LTD	HS-S	V-0, 130°C	UL 796(#)	UL E229877
Alternate	JIANGSU DIFEIDA ELECTRONICS CO LTD	DFD-1	V-0, 130°C	UL 796(#)	UL E213009
Alternate	WUJIANG SANJIANG GUANGYUAN TECHNOLOGY DEVELOPMENT CO LTD	SJ-B	V-0, 130°C	UL 796(#)	UL E364493

Fuse (F1)	Conquer Electronics Co., Ltd.	MST	T1.6A, 250V~	IEC 60127-1:2006, IEC 60127-3:2015	VDE 40017118
Alternate	Conquer Electronics Co., Ltd.	MST	T3.15A, 250V~	IEC 60127-1:2006, IEC 60127-3:2015	VDE 40017118
Alternate	Suzhou Walter Electronic Co. Ltd.	2010 Serie(s)	T1.6A, 250V~ T3.15A, 250V~	IEC 60127-1:2006, IEC 60127-3:2015	VDE 40018781
Alternate	Bel Fuse Ltd.	RST	T1.6A, 250V~ T3.15A, 250V~	IEC 60127-1:2006, IEC 60127-3:2015	VDE 40011144
Alternate	Bel Fuse Ltd.	RSTA	T1.6A, 250V~ T3.15A, 250V~	IEC 60127-1:2006, IEC 60127-3:2015	VDE 40039089
Alternate	Cooper Bussmann LLC	SS-5	T1.6A, 250V~ T3.15A, 250V~	IEC 60127-1:2006, IEC 60127-3:2015	VDE 40015513
Alternate	Shenzhen Lanson Electronics Co. Ltd.	SMT	T1.6A, 250V~ T3.15A, 250V~	IEC 60127-1:2006, IEC 60127-3:2015	VDE 40012592
Alternate	Dongguan Better Electronics Technology Co., Ltd.	932	T1.6A, 250V~ T3.15A, 250V~	IEC 60127-1:2006, IEC 60127-3:2015	VDE 40033369
Alternate	Hollyland Company Limited	5ET	T1.6A, 250V~ T3.15A, 250V~	IEC 60127-1:2006, IEC 60127-3:2015	VDE 40015669
Alternate	Sunny East Enterprise Co. Ltd.	CFD	T1.6A, 250V~ T3.15A, 250V~	IEC 60127-1:2006, IEC 60127-3:2015	VDE 40030246
Alternate	Conquer Electronics Co., Ltd.	MET	T1.6A, 250V~ T3.15A, 250V~	IEC 60127-1:2006, IEC 60127-3:2015	VDE 40017157
Alternate	Zhongshan Lanbao Electrical Appliances Co., Ltd.	RTI-10 Serie(s)	T1.6A, 250V~ T3.15A, 250V~	IEC 60127-1:2006, IEC 60127-3:2015	VDE 40017009
Y-Capacitors (CY1, CY2)	Success Electronics Co., Ltd.	SE	1500pF, 250Vac	IEC 60384-14:2013	VDE 40037211
Alternate	Success Electronics Co., Ltd. No	SB	1500pF, 250Vac	IEC 60384-14:2013	VDE 40037221
Alternate	TDK Corporation	CD	1500pF, 250Vac	IEC 60384-14:2013	VDE 40029780
Alternate	Murata Mfg. Co., Ltd.	KH	1500pF, 250Vac	IEC 60384-14:2013	VDE 40002796
Alternate	Walsin Technology Corp.	AH	1500pF, 250Vac	IEC 60384-14:2013	VDE 40001804
Alternate	Haohua Electronic Co.	CT 7	1500pF, 250Vac	IEC 60384-14:2013	VDE 40003902
Alternate	Jyh Chung Electronic Co., Ltd.	JD	1500pF, 250Vac	IEC 60384-14:2013	VDE 137027
X-Capacitor (CX1)	Ultra Tech Xiphi Enterprise Co. Ltd.	HQX	0.22µF, 275Vac	IEC 60384-14:2013	VDE 40015608
Alternate	Cheng Tung Industrial Co., Ltd.	CTX series	0.22µF, 250Vac	IEC 60384-14:2013	ENEC-01396-M1

Alternate	Tenta Electric Industrial Co. Ltd.	MEX	0.22µF, 275Vac	IEC 60384-14:2013	VDE 119119
Alternate	Joey Electronics (Dong Guan) Co., Ltd.	MPX	0.22µF, 275Vac	IEC 60384-14:2013	VDE 40032481
Alternate	Yuon Yu Electronics Co. Ltd.	MPX	0.22µF, 250Vac	IEC 60384-14:2013	VDE 40032392
Alternate	Sinhua Electronics (Huzhou) Co., Ltd	MPX	0.22µF, 250Vac	IEC 60384-14:2013	VDE 40014686
Alternate	Jiangsu Xinghua Huayu Electronics Co., Ltd.	MPX - Series	0.22µF, 250Vac	IEC 60384-14:2013	VDE 40022417
Alternate	Dain Electronics Co., Ltd.	MEX, MPX, NPX	0.22µF, 250Vac	IEC 60384-14:2013	VDE 40018798
Alternate	Shenzhen Jinghao Capacitor Co., Ltd.	CBB62B	0.22µF, 250Vac	IEC 60384-14:2013	VDE 40018690
Photo Coupler (U3)	Lite-On Technology Corporation	LTV-817	Ex ≥7.8mm Di ≥0.8mm,	IEC 60747-5-5	VDE 40015248
Alternate	COSMO Electronics Corporation	K1010, KP1010	Ext. Cr. ≥ 8.0mm Dti≥0.40mm	EN 60747-5-5 (Harmonized with IEC 60747-5-5)	VDE 101347
Alternate	Everlight Electronics Co. Ltd.	EL817	Ext. Cr.≥ 7.6mm Dti.≥0.60mm	EN 60747-5-5 (Harmonized with IEC 60747-5-5)	VDE 132249
Alternate	Fairchild Semiconductor Pte Ltd	H11A817B, FOD817B	Ext. Cr.≥7.6mm Dti.≥0.40mm	IEC 60747-5-5	VDE 40026857
Alternate	Sharp Corporation Electronic	PC817	Ext. Cr.≥ 7.6mm Dti.≥0.40mm	IEC 60747-5-5	VDE 40008087
Alternate	Bright Led Electronics Corp.	BPC-817 (A; B; C; D; L), BPC-817 M, BPC-817 S	Ext. Cr.≥ 7.6mm Dti.≥0.40mm	IEC 60747-5-5	VDE 40007240
Alternate	Toshiba Electronic Devices	TLP781F	Ext. Cr.≥ 7.6mm Dti.≥0.40mm	EN 60747-5-5 (Harmonized with IEC 60747-5-5)	VDE 40021173
Varistor (MOV1)	Success Electronics Co., Ltd.	SVR10D471K	85°C, 300Vrms	IEC 61051-1 IEC 61051-2-2	VDE 40030401
Alternate	Success Electronics Co., Ltd.	SVR14D471K	85°C, 300Vrms	IEC 61051-1 IEC 61051-2-2	VDE 40030401
Alternate	Thinking Electronic Industrial Co., Ltd.	TVR10471K, TVR14471K	85°C, 300Vrms	IEC 61051-1 IEC 61051-2-2	VDE 005944
Alternate	Centra Science Corp.	CNR-10D471K, CNR-14D471K	85°C, 300Vrms	IEC 61051-1 IEC 61051-2-2	VDE 40008220

Alternate	Walsin Technology Co., Ltd.	VZ14D471K, VZ10D471K	85°C, 300Vrms	IEC 61051-1 IEC 61051-2-2	VDE 40010090
Alternate	HuiZhou Lien Shun Electronic Co., Ltd.	10D471K, 14D471K	85°C, 300Vrms	IEC 61051-1 IEC 61051-2-2	VDE 40005858
Alternate	Ceramate Techn. Co., Ltd.	10D471K, 14D471K	85°C, 300Vrms	IEC 61051-1 IEC 61051-2-2	VDE 40031745
Alternate	Brightking (Shenzhen) Co., Ltd.	14D471K, 10D471K	85°C, 300Vrms	IEC 61051-1 IEC 61051-2-2	VDE 40027827
Alternate	Joyin Co., Ltd.	10N471K, 14N471K	85°C, 300Vrms	IEC 61051-1 IEC 61051-2-2	VDE 005937
Plastic Enclosure & Plug Holder Material	SABIC INNOVATIVE PLASTICS B V	SE1	V-1, min. thickness: 1.5 mm	UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E45329
Alternate	SABIC INNOVATIVE PLASTICS B V	SE1X(GG)(f1)	V-1, min. thickness: 2.0 mm	UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E45329
Alternate	SABIC INNOVATIVE PLASTICS B V	SE100	V-1, min. thickness: 1.5 mm	UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E45329
Alternate	SABIC INNOVATIVE PLASTICS B V	HF500R(f2), CX7211(GG), C2950, 945 (GG)	V-0, min. thickness: 1.5 mm	UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E45329
Alternate	TEIJIN LIMITED RESIN AND PLASTIC	LN-1250P(#)(f1), LN-1250G(#)(*)	V-0, min. thickness: 1.5 mm	UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E50075
Line Filter (LF1)	GlobTek Haopuwei BOAM	NF00001D	130°C	IS 13252 (Part 1): 2010 + A1: 2013 +A2:2015 / IEC 60950-1: 2005 +A1:2009 + A2:2013	Tested with appliance
Wire	JIANGSU HONGLIU MAGNET WIRE TECHNOLOGY CO LTD	2UEW/130	130°C	UL 1446 (#)	UL E335065
Bobbin	CHANG CHUN PLASTICS CO LTD	T375J	V-0,150°C	UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E59481
Insulation Tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT-280B	130°C	UL 510A(#)	UL E165111

Transformer (T1)	GlobTek Haopuwei BOAM	TF046	Class B	IS 13252 (Part 1): 2010 + A1: 2013 +A2:2015 / IEC 60950-1: 2005 +A1:2009 + A2:2013	Tested with Appliance
Triple Insulated wire	GREAT LEOFLON INDUSTRIAL CO LTD	TRW(B)*	130°C	UL 2353 (Harmonized with annex U of IEC 60950-1)	UL E211989
Alternate	COSMOLINK CO LTD	TIW-M	130°C	UL 2353 (Harmonized with annex U of IEC 60950-1)	UL E213764
Alternate	FURUKAWA ELECTRIC CO LTD	TEX-E	130°C	UL 2353 (Harmonized with annex U of IEC 60950-1)	UL E206440
Alternate	SHENZHEN JIUDING NEW MATERIAL CO LTD	DTFW-B	130°C	UL 2353 (Harmonized with annex U of IEC 60950-1)	UL E357999
Alternate	TOTOKU ELECTRIC CO LTD	TIW-2X$+	130°C	UL 2353 (Harmonized with annex U of IEC 60950-1)	UL E166483
Alternate	E&B TECHNOLOGY CO LTD	E&B-XXXB	130°C	UL 2353 (Harmonized with annex U of IEC 60950-1)	UL E315265
Bobbin	CHANG CHUN PLASTICS CO LTD	T375J	V-0	UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E59481
Alternate	CHANG CHUN PLASTICS CO LTD	4130	V-0	UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E59481
Alternate	CHANG CHUN PLASTICS CO LTD	T375HF	V-0	UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E59481

Alternate	SUMITOMO BAKELITE CO LTD	PM-9820	V-0	UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E41429
Alternate	HITACHI CHEMICAL CO LTD	CP-J-8800	V-0	UL 94 (Flammability test equivalent to IEC 60695-11-10)	UL E42956
Insulation Tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT* (c)(g)	130°C	UL 510A(#)	UL E165111
Alternate	3M COMPANY	1350F-1 (b)	130°C	UL 510A(#)	UL E17385
Alternate	3M COMPANY	1350T-1 (b), 44 (a)	130°C	UL 510A(#)	UL E17385
Alternate	BONDTEC PACIFIC CO LTD	370S (b)	130°C	UL 510A(#)	UL E175868
Alternate	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ* (b), CT* (b)(g)	130°C	UL 510A(#)	UL E165111
Alternate	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A (b)	130°C	UL 510A(#)	UL E246950
Alternate	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX*	130°C	UL 510A(#)	UL E246820

Supplementary information:

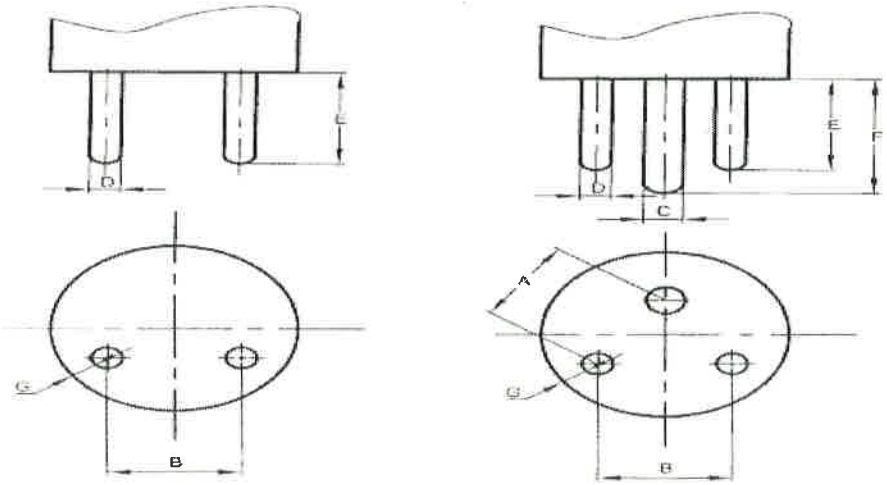
1) Evidence have been evaluated and checked for the agreed level of compliance as per the referred standard

(#): No equivalent IEC standard available

1.5.2 / 4.3.6	Table: Plug Dimensions	P

Type of Plug: ☐ Two pin ☒ Three pin (Earthing pin is dummy)

Reference points	Ratings					
	☒ 2.5A		☐ 6A/10A		☐ 16A	
	Limits	Measured	Limits	Measured	Limits	Measured
A	---	22.27	22.2 ± 0.15	--	28.6± 0.15	--
B	19.10 ± 0.15	19.16	19.1 ± 0.15	--	25.4 ± 0.15	--
C	---	7.01	7.06 +0.025 -0.050	--	8.71 +0.025 0.050	--
D	5.08 +0.025 -0.050	5.05	5.08 +0.025 -0.050	-- --	7.06 +0.025 -0.050	--
E	15.9 +1.04 -0.13	16.28	15.9 +1.04 -0.13	--	20.6 +1.04 -0.13	--
F	---	---	20.6 +1.04 -0.13		28.6 +1.04 -0.13	--
G	7.94 (min.)	08.32	7.94 (min.)	--	9.52 (min.)	--



Supplementary information:Above dimensions as per IS 1293:2005 in milimeter

Limit of Reference Point A & C is not given for current 2.5A. Measured values for reference only.

1.6.2	TABLE: Electrical data (in normal conditions)					P
U (V)	I (A)	I rated (A)	P (W)	Fuse #	I fuse (A)	Condition/status
90	0.380	--	20.98	F1	0.380	maximum normal load at 50Hz
100	0.348	0.6	20.74	F1	0.348	
240	0.237	0.6	20.11	F1	0.237	
254.4	0.233	--	20.14	F1	0.233	
90	0.384	--	20.95	F1	0.384	maximum normal load at 60Hz
100	0.355	0.6	20.72	F1	0.355	
240	0.239	0.6	20.11	F1	0.239	
254.4	0.235	--	20.15	F1	0.235	
Supplementary information: Maximum normal load is obtained by operating the equipment at rated output						

2.1.1.5	TABLE: Energy hazard measurement				P
Voltage (rated) (V)	Current (rated) (A)	Voltage (max.) (V)	Current (max.) (A)	VA (max.) (VA)	
48 Vdc	0.375	48.14	0.555	26.63	
Supplementary information: Voltage (max.) and Current (max.) obtained at the same time.					

2.1.1.7	TABLE: Discharge test			P
Condition	τ calculated (s)	τ measured (s)	t u→ 0V (s)	Comments
Line to Neutral	--	96 ms	--	Vpeak: 342.4V 37% of V_{peak}: 126.69V Voltage after 1 sec decayed to 0V
Supplementary information:				

2.2.2	TABLE: SELV measurement (under normal conditions)			P
Transformer	Location	Voltage (max.) (V)		Voltage Limitation Component
		V peak	V d.c.	
After transformer(T1)	Capacitor (C4)	--	48.25	--
After transformer(T1)	Diode (D2)	--	48.39	--
After transformer(T1)	Output	--	48.25	
Supplementary information:				

2.2.3	TABLE: SELV measurement (under fault conditions)	P

Location	Voltage (max.) (V)	Comments
Diode (D2) Short Circuited	0.0 V	--
Output Short Circuited	0.0 V	--
Capacitor (C4)	0.0 V	

Supplementary information:

2.4.2	TABLE: Limited current circuit measurement				P

Location	Voltage (V)	Current (mA)	Freq. (kHz)	Limit (mA)	Comments
Bridging Capacitors*	1.362	0.681	3.25	2.275	--

Supplementary information: Non inductive 2000 Ω Resistor used.
Limit (mA) is the multiplication of Freq. (kHz) and 0.7mA
* CY1 and CY2 capacitors are connetced in series.

2.5	TABLE: Limited power source measurement		P
	Limits	Measured	Verdict
According to Table 2B/~~2C~~ (normal condition) U_{oc}=48.14Vdc (Location: output port)			
current (in A)	≤ 3.115	0.555	P
apparent power (in VA)	≤ 100	26.63	P
According to Table 2B/~~2C~~ (single fault condition) (Short Circuit) (Location: output port)			
current (in A)	≤ 3.115	0.0	P
apparent power (in VA)	≤ 100	0.0	P
Supplementary information: Limit for current (in A) is calculated as per Table 2B (150/ U_{oc})			

2.6.3.4	TABLE: Resistance of earthing measurement	N/A

Location	Resistance measured (mΩ)	Comments
--	--	--

Supplementary information: Class II equipment.

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2.10.2	Table: Working voltage measurement			P
Location		RMS voltage (V)	Peak voltage (V)	Comments
Line to Neutral		239	344	Max. Vrms and Max. Vpeak
Transformer T1 (pin 1/2- pin A)		132	208	--
Transformer T1 (pin 1/2- pin B)		163	268	--
Transformer T1 (pin 3- pin A)		134	268	--
Transformer T1 (pin 3- pin B)		122	216	--
Transformer T1 (pin 4- pin A)		134	268	--
Transformer T1 (pin 4- pin B)		122	224	--
Transformer T1 (pin 5- pin A)		128	252	--
Transformer T1 (pin 5- pin B)		124	248	--
Photocoupler U3 (Pin 1 to Pin 4)		111	212	--
Photocoupler U3 (Pin 2 to Pin 3)		112	214	--
Bridging Capacitors*		61	136	--
Supplementary information: * CY1 and CY2 capacitors are connetced in series.				

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 before Fuse F1	344	239	1.5	5.40	2.5	5.40
Basic / supplementary:						
--	--	--	--	--	--	--
Reinforced:						
Capacitor (CY1, CY2)	136	61	4.0	6.03	5.0	6.03
Transformer (T1) Primary to secondary	268	163	4.0	16.81	5.0	16.81
Photocoupler (U3) Primary to secondary	214	112	4.0	7.80	5.0	7.80
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:					
Enclosure	344	239	3000	0.4	1.5
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 battery used	N/A
Is it possible to install the battery in a reverse polarity position?	No battery used	N/A

	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:		Verdict
- Chemical leaks	No battery used	N/A
- Explosion of the battery	No battery used	N/A
- Emission of flame or expulsion of molten metal	No battery used	N/A
- Electric strength tests of equipment after completion of tests	No battery used	N/A
Supplementary information:		

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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: 90Vac, 60Hz	B: 254.4 Vac, 60Hz
t_{amb1} (°C):	A: 24.2 B: 24.3	t_{amb2} (°C):	A: 24.3 B: 24.5

Temperature of part/at: (measured with thermocouples)	Measured temperature rise at T_{amb}		Calculated temperature at T_{ma}		Allowed T_{max} (°C)
	A dT (K)	B dT (K)	A T (°C)	B T (°C)	
Transformer (T1) coil	31.18	29.38	71.18	69.38	110
Plastic Enclosure	09.80	07.98	49.80	47.98	95
PCB near Fuse (F1)	20.38	18.18	60.38	58.18	130
Line filter (LF1)	27.23	26.57	67.23	66.57	130

Supplementary information: Maximum normal load is obtained by operating the equipment at rated output.

Temperatures measured with winding resistance method: Not used

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 Material	125	0.9

Supplementary information:

4.6.1, 4.6.2	Table: Enclosure opening measurements	N/A

Location	Size (mm)	Comments
--	--	--

Supplementary information: No such openings

4.7	Table: Resistance to fire				N/A
Part	Manufacturer of material	Type of material	Thickness (mm)	Flammability class	Evidence
--	--	--	--	--	--
Supplementary information: certified materials used (see appended table 1.5.1)					

5.1.6	TABLE: Touch current and protective conductor current measurement						P
	Test voltage (V) ..... :		254.4Vac, 60Hz				—
Measurement location (Terminal A connected to...)	Polarity (normal) [mA]		Polarity (reverse) [mA]		Limit (mA)	Comments	
	Switch: ON	Switch: OFF	Switch: ON	Switch: OFF			
Plastic Enclosure wrapped with metal foil	0.103	--	0.099	--	0.25	--	
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:				
Line to Neutral (Fuse open)		AC	1500	No
Basic / supplementary:				
--		--	--	--
Reinforced:				
Line-neutral shorted to plastic enclosure wrapped with metal foil		AC	3000	No
Line-neutral shorted to output		AC	3000	No
Thin sheet material		AC	3000	No
Supplementary information:				

5.3	TABLE: Fault condition tests		P
	Ambient temperature (°C) .....:	23.8°C	—
	Power source for EUT: Manufacturer, model/type, output rating .....:	(See appended table 1.5.1)	—

Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
Output	Short-circuited	240Vac	10 minute	--	--	EUT Shut down immediately. No hazard. Normal operation after removing fault. No components damaged seen
Transformer (T1) (Pin (A) - pin (B))	Overload	90 Vac	2 hour	--	--	EUT working normally, Temperature rise on Plastic Enclosure:11.29°C PCB near fuse (F1):22.90°C Transformer (T1) coil:34.86°C Line filter (LF1):29.54°C Ambient temperature=23.8°C No damage or hazard seen during /after the test.
Transformer (T1) (Pin (A) - pin (B))	Short-circuited	90Vac	10 minute	--	--	Unit shut down. No damage, No hazard.
Supplementary information:						

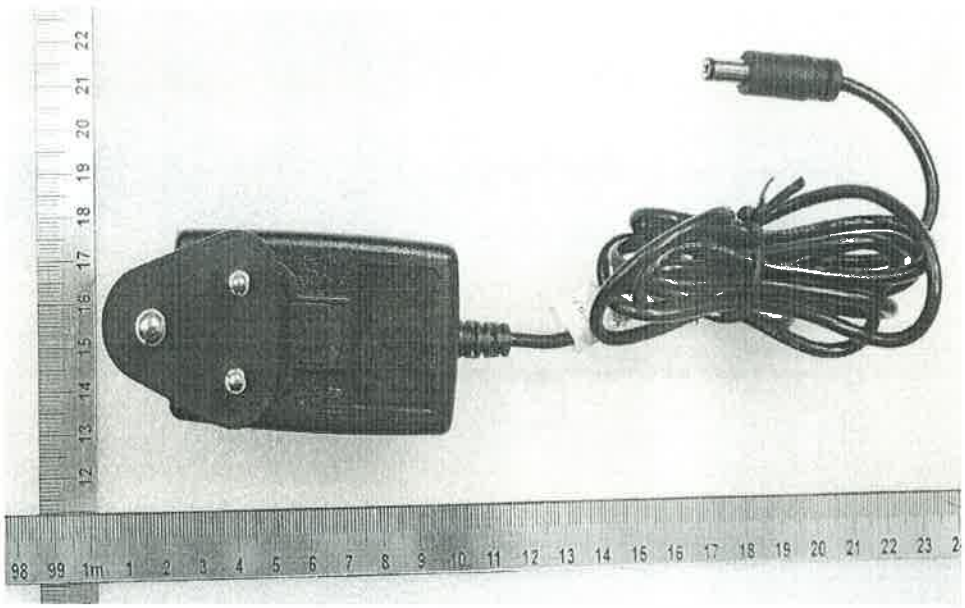
C.2	TABLE: Insulation of transformers		P
	Transformer part name..... :	T1	—
	Manufacturer ..... :	(see appended table 1.5.1)	—
	Type..... :	(see appended table 1.5.1)	—

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)	268	163	4.0	Triple insulated wire used	5.0	Triple insulated wire used
Primary/input winding and core (internal)			1.5	Core considered as part of primary	2.5	Core considered as part of primary
Secondary/output winding and core (internal)			4.0	Triple insulated wire used	5.0	Triple insulated wire used
Primary/input part and secondary/output part (external)			4.0	15.50	5.0	15.50
Primary/input part and core (external)			1.5	Core considered as part of primary	2.5	Core considered as part of primary
Primary/input part and secondary/output winding (external)			4.0	Triple insulated wire used	5.0	Triple insulated wire used
Secondary/output part and core (external)			4.0	06.31	5.0	06.31
Secondary/output part and primary/input winding (external)			4.0	12.96	5.0	12.96

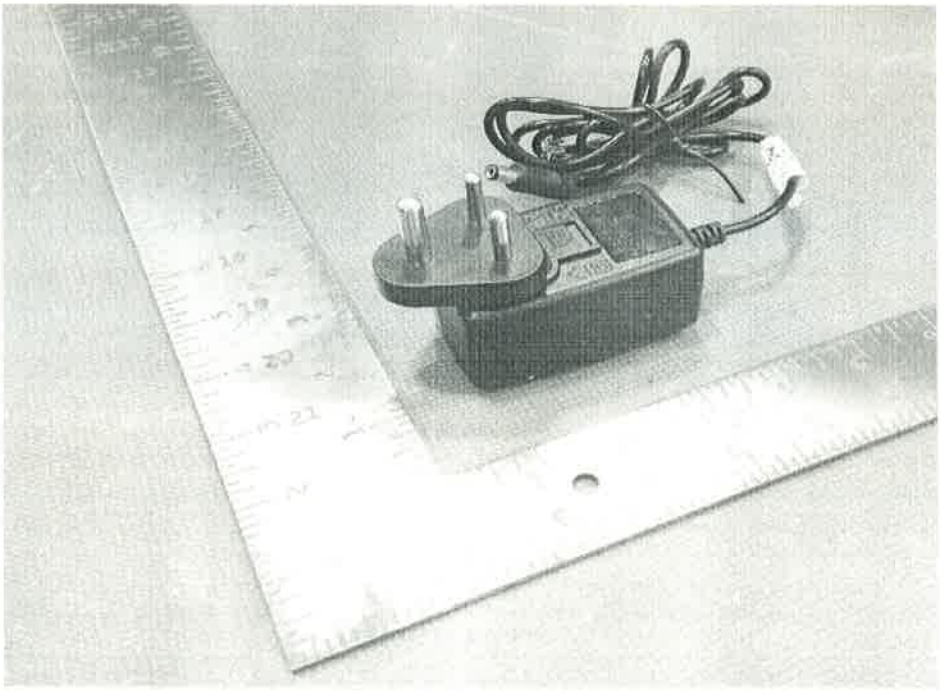
Description of design:	
(a) Bobbin	
Primary/input pins..... :	1-2,3,4,5
Secondary/output pins..... :	A,B
Material (manufacturer, type, ratings) ..... :	(See appended table 1.5.1)
Thickness (mm) ..... :	3.25
(b) General	
Supplementary information:	

Attachment-1

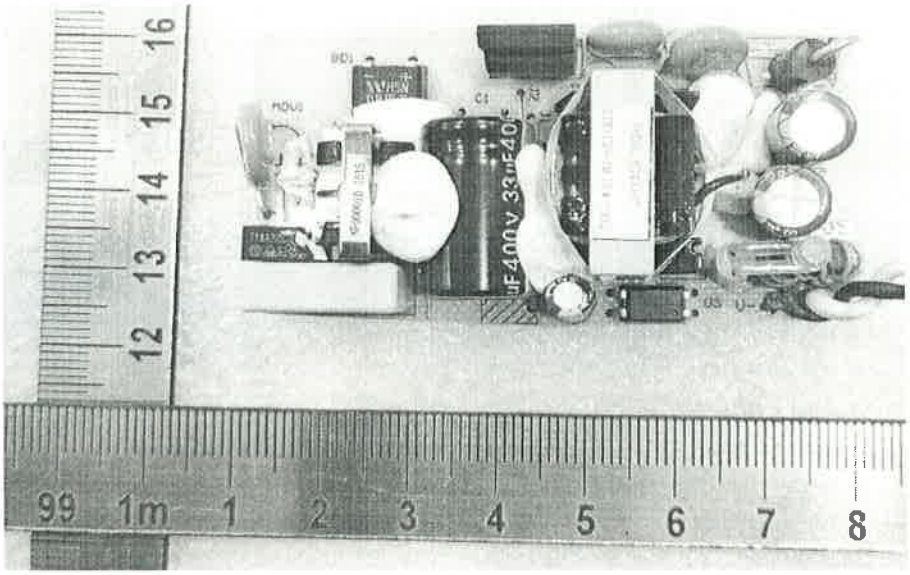
Photo Documents:



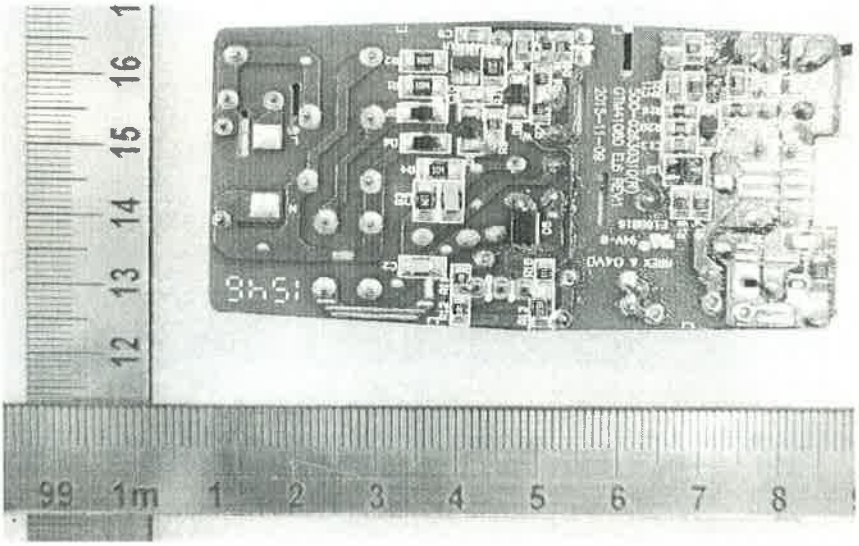
Front view



Side View



PCB front view



PCB rear view

End of Test Report