SAFETY LINK INC.
9F-1, No. 80, Sec. 2, Kung Fu Rd., San Chung City, Taipei Hsien, Taiwan
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LVD Report

Scientech Electronics Co., Ltd.

LS-30

93-0929-12

Asia Safety Link Inc.
9F-1, No. 80, Sec. 2, Guang Fu Rd., San Chung City, Taipei Hsien, Taiwan
Tel:+886-2-85123188 Fax:+886-2-29959169

Certificate of Compliance

Low Voltage Directive 73/23/EEC and the Amendment Directive 93/68/EEC

Certificate Number: 93-0929-12

Manufacturer: Scientech Electronics Co., Ltd.
4F, No. 501-17, Chung-Cheng Rd., Hsin-Tien City, Taipei 231, Taiwan, R.O.C.

Product : Alarm Base Unit

Model/Type : LS-30

Electrical Rating: I/P: 12Vdc

Other Specification:

Standards applied: **EN 60335-1: 2002**

The tested samples of the above products are in conformity with the technical provisions of the Following European Directive -

- Low Voltage Directive 73/23/EEC and the Amendment Directive 93/68/EEC

Date Issued: December 10, 2004

Approve & Authorized Signer:_____

Jeff Chang

EU Declaration of Conformity

According to the Low Voltage Directive 73/23/EEC and the Amendment Directive 93/68/EEC

For the following equipment:	
Product:	**Alarm Base Unit**
Type Designation/Trademark:	**LS-30**
Manufacturer's Name:	**Scientech Electronics Co., Ltd.**
Manufacturer's Address:	**4F, No. 501-17, chung-Cheng Rd., Hsin-Tien City, Taipei 231, Taiwan, R.O.C.**

is herewith confirmed to comply with the requirements set out in the Council Directive 73/23/EEC for electrical equipment used within certain voltage limits and the Amendment Directive 93/68/EEC. For the evaluation of the compliance with this Directives, the following standards were applied:

EN 60335-1:2002

Responsible for making this declaration is the :

Manufacturer ☐ **Authorized representative established within the EU** ☐

Authorized representative established within the EU (if applicable) :

Company Name : _____

Company Address : _____

_____

Person responsible for making this declaration

Name, Surname : _____

Position/Title : _____

_____	_____	_____
(Place)	**(Date)**	**(Company stamp and legal signature)**

INDEX

ASIA SAFETY LINK INC.

Test Report

Scientech Electronics Co., Ltd.

LS-30

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ASIA SAFETY LINK INC.

Test Report

Scientech Electronics Co., Ltd.

LS-30

93-0929-12

TEST REPORT
EN 60335-1:2002
Safety of household and similar electrical appliances

Report Order No.	:	93-0929-12
Compiled by (+ signature)	:	Jacky Hsu
Approved by (+ signature)	:	Jeff Chang
Date of issue	:	December 10, 2004
Testing Laboratory	:	ASIA Safety Link Inc.
Address	:	9F-1, No. 80, Sec. 2, Guang Fu Rd., San Chung City, Taipei Hsine, Taiwan
Testing location/procedure	:	Same as above
Address	:	Same as above
Applicant's name	:	Scientech Electroics Co., Ltd.
Address	:	4F, No. 501-17, Chung-Cheng Rd., Hsin-Tien City, Taipei 231, Taiwan, R.O.C.
Test specification:		
Standard	:	EN 60335-1:2002
Test procedure	:	LVD of CE
Non-standard test method……	:	N/A
Test Report Form No	:	EN60335_1_2002
TRF Originator	:	Nemko AS, modified from IEC to EN by TÜV PS
Master TRF	:	Dated 03-05

Test item description	:	
Trade Mark	:	None
Model/Type reference	:	LS-30
Ratings	:	12Vdc

Copy of marking plate and summary of test results (information/comments):
Summary of testing

Test item particulars ..... :	Alarm Base Unit
Classification of installation and use ..... :	Class III
Supply Connection ..... :	12Vdc by DC Connector
..... :	
..... :	
Possible test case verdicts:	
- test case does not apply to the test object ..... :	N/A
- test object does meet the requirement ..... :	P(Pass)
- test object does not meet the requirement ..... :	F(Fail)
Testing ..... :	
Date of receipt of test item ..... :	October 27, 2004
Date (s) of performance of tests ..... :	December 10, 2004

General remarks:

This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

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.

"(see Enclosure #)" refers to additional information appended to the report.
"(see appended table)" refers to a table appended to the report.

Throughout this report a comma (point) is used as the decimal separator.

General product information:

Clause	Requirement - Test	Result - Remark	Verdict
5	GENERAL CONDITIONS FOR THE TESTS		
	Tests performed according to cl. 5, e.g. nature of supply, sequence of testing, etc.	Consider.	P
6	CLASSIFICATION		P
6.1	Protection against electric shock: Class I, II, III .....: EN 60335-1:2001	Class III	P
6.2	Protection against harmful ingress of water	IP00	N
7	MARKING AND INSTRUCTIONS		P
7.1	Rated voltage or voltage range (V) .....: 230V single phase 400V 3 phase EN 60335-1:2001	12Vdc by EN 61558-1 approved power adaptor.	P
	Nature of supply.....:	DC input only.	N
	Rated frequency (Hz).....:	Ditto.	N
	Rated power input (W):.....:	No provided.	N
	Rated current (A) .....:	No provided.	N
	Manufacturer's or responsible vendor's name, trademark or identification mark.....:	Scientech Electronics Co., Ltd.	P
	Model or type reference.....:	LS-30	P
	Symbol 5172 of IEC 60417, for Class II appliances	Class III equipment.	N
	IP number, other than IPX0.....:	IPX0	N
7.2	Warning for stationary appliances for multiple supply	No provided multiple supply.	N
	Warning placed in vicinity of terminal cover	Ditto.	N
7.3	Range of rated values marked with the lower and upper limits separated by a hyphen	DC input only.	N
	Different rated values marked with the values separated by an oblique stroke	Ditto.	N
7.4	Appliances adjustable for different rated voltages, the voltage setting is clearly discernible	No such voltage set.	N
7.5	Appliances with more than one rated voltage or one or more rated voltage ranges, marked with rated input or rated current for each rated voltage or range, unless	By 12Vdc only.	N
	the power input is related to the mean value of the rated voltage range	Ditto.	N
	Relation between marking for upper and lower limits of rated power input or rated current and voltage is clear	Ditto.	N
7.6	Correct symbols used	5031 of IEC 60417	P

Clause	Requirement - Test	Result - Remark	Verdict
7.7	Connection diagram fixed to appliances to be connected to more than two supply conductors and appliances for multiple supply	By one DC input connecter only.	N
7.8	Except for type Z attachment, terminals for connection to the supply mains indicated as follows:		N
	- marking of terminals exclusively for the neutral conductor (N)	Class III equipment.	N
	- marking of protective earthing terminals (symbol 5019 of IEC 60417)	Ditto.	N
	- marking not placed on removable parts	Ditto.	N
7.9	Marking or placing of switches which may cause a hazard	No provided switch and Class III equipment.	N
7.10	Indications of switches on stationary appliances and controls on all appliances by use of figures, letters or other visual means.....:	No provided switch.	N
	The figure 0 indicates only OFF position, unless no confusion with the OFF position	Ditto.	N
7.11	Indication for direction of adjustment of controls	Ditto.	N
7.12	Instructions for safe use provided	See as below..	P
7.12.1	Sufficient details for installation supplied	Consider	P
7.12.2	Stationary appliances not fitted with means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under overvoltage category III, the instructions state that means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules	No such part.	N
7.12.3	Insulation of the fixed wiring in contact with parts exceeding 50 K during clause 11; instructions stating that the fixed wiring must be protected	No such part.	N
7.12.4	Instructions for built-in appliances:		N
	- dimensions of space	Not built-in appliance.	N
	- dimensions and position of supporting means	Ditto.	N
	- distances between parts and surrounding structure	Ditto.	N
	- dimensions of ventilation openings and arrangement	Ditto.	N
	- connection to supply mains and interconnection of separate components	Ditto.	N
	- plug accessible after installation, unless	Ditto.	N
	a switch complying with 24.3	Ditto.	N
7.12.5	Replacement cord instructions, type X attachment with a specially prepared cord	No such power cord.	N
	Replacement cord instructions, type Y attachment	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
	Replacement cord instructions, type Z attachment	Ditto.	N
7.13	Instructions and other texts in an official language	Consider.	P
7.14	Marking clearly legible and durable	The label was subjected to the permanence of marking test. The label was rubbed with cloth soaked with water for 15 sec. and then again for 15 sec. with the cloth soaked with petroleum spirit. After this test there was no damage to the label. The marking on the label did not fade. There was no curling nor lifting of the label edge.	P
7.15	Marking on a main part	No such marking.	N
	Marking clearly discernible from the outside, if necessary after removal of a cover	Ditto.	N
	For portable appliances, cover can be removed or opened without a tool	Ditto.	N
	For stationary appliances, name, trademark or identification mark and model or type reference visible after installation	Ditto.	N
	For fixed appliances, name, trademark or identification mark and model or type reference visible after installation according to the instructions	Ditto.	N
	Indications for switches and controls placed on or near the components. Marking not on parts which can be positioned or repositioned in such a way that the marking is misleading	Ditto.	N
7.16	Marking of a possible replaceable thermal link or fuse link clearly visible with regard to replacing the link	No such part.	N
8	PROTECTION AGAINST ACCESS TO LIVE PARTS		N
8.1	Adequate protection against accidental contact with live parts	Class III equipment. Max. d.c. voltage does not exceed 42,4 V,	N
8.1.1	Requirement applies for all positions, detachable parts removed	Ditto.	N
	Insertion or removal of lamps, protection against contact with live parts of the lamp cap	Ditto.	N
	Use of test probe B of IEC 61032: no contact with live parts	Ditto.	N
8.1.2	Use of test probe 13 of IEC 61032 through openings in class 0 appliances and class II appliances/ constructions: no contact with live parts	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
	Test probe 13 also applied through openings in earthed metal enclosures having a non-conductive coating: no contact with live parts	Ditto.	N
8.1.3	For appliances other than class II, use of test probe 41 of IEC 61032: no contact with live parts of visible glowing heating elements	Ditto.	N
8.1.4	Accessible part not considered live if:		N
	- safety extra-low a.c. voltage: peak value not exceeding 42.4 V	Class III equipment. Max. d.c. voltage does not exceed 42,4 V,	N
	- safety extra-low d.c. voltage: not exceeding 42.4 V	Ditto.	N
	- or separated from live parts by protective impedance	Ditto.	N
	If protective impedance: d.c. current not exceeding 2 mA, and	Ditto.	N
	a.c. peak value not exceeding 0.7 mA	Ditto.	N
	- for peak values over 42.4 V up to and including 450 V, capacitance not exceeding 0,1 μF	Ditto.	N
	- for peak values over 450 V up to and including 15 kV, discharge not exceeding 45 μC	Ditto.	N
8.1.5	Live parts protected at least by basic insulation before installation or assembly:		N
	- built-in appliances	Ditto.	N
	- fixed appliances	Ditto.	N
	- appliances delivered in separate units	Ditto.	N
8.2	Class II appliances and constructions constructed so that there is adequate protection against accidental contact with basic insulation and metal parts separated from live parts by basic insulation only	Class III Equipment.	N
	Only possible to touch parts separated from live parts by double or reinforced insulation	Ditto.	N
9	STARTING OF MOTOR-OPERATED APPLIANCES		N
	Requirements and tests are specified in part 2 when necessary	No such part.	N
10	POWER INPUT AND CURRENT		N
10.1	Power input at normal operating temperature, rated voltage and normal operation not deviating from rated power input by more than shown in table 1	Power from 12Vdc by approved power adaptor.	N
10.2	Current at normal operating temperature, rated voltage and normal operation not deviating from rated current by more than shown in table 2	Ditto.	N
11	HEATING		P
11.1	No excessive temperatures in normal use	All temperature result not exceed table 3.	P

Clause	Requirement - Test	Result - Remark	Verdict
11.2	Placing and mounting of appliance as described	Not Hand-held appliances	N
11.3	Temperature rises, other than of windings, determined by thermocouples	See test result.	P
	Temperature rises of windings determined by resistance method, unless	No provided winding.	N
	the windings makes it difficult to make the necessary connections	Ditto.	N
11.4	Heating appliances operated under normal operation at 1.15 times rated power input ..... :	Not eating appliance.	N
11.5	Motor-operated appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage..... :	Not motor-operated appliance.	N
11.6	Combined appliances operated under normal operation at most unfavourable voltage between 0.94 and 1.06 times rated voltage..... :	No combined appliance.	N
11.7	Operation duration corresponding to the most unfavourable conditions of normal use	Testing for continuous to ring work.	P
11.8	Temperature rises not exceeding values in table 3	See test result.	P
	Protective devices do not operate	No such part.	N
	Sealing compound does not flow out	No such part.	N
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		N
13.1	Leakage current not excessive and electric strength adequate	Class III equipment. Max. d.c. voltage does not exceed 42,4 V,	N
	Heating appliances operated at 1.15 times rated power input ..... :	Ditto.	N
	Motor-operated appliances and combined appliances supplied at 1.06 times rated voltage ..... :	Ditto.	N
	Protective impedance and radio interference filters disconnected before carrying out the tests	Ditto.	N
13.2	Leakage current measured by means of the circuit described in figure 4 of IEC 60990	Ditto.	N
	Leakage current measurements	Ditto.	N
13.3	Electric strength tests according to table 4	Ditto.	N
	No breakdown during the tests	Ditto.	N
14	TRANSIENT OVERVOLTAGES		N
	Appliances withstand the transient overvoltages to which they may be subjected	Class III equipment.	N
	Clearances having a value less than specified in table 16 subjected to an impulse voltage test, the test voltage specified in table 6	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
	No flashover during the test, unless of functional insulation	Ditto.	N
	In case of flashover of functional insulation, the appliance complies with clause 19 with the clearance short circuited	Ditto.	N
15	MOISTURE RESISTANCE		N
15.1	Enclosure provides the degree of moisture protection according to classification of the appliance	Class III equipment.	N
	Compliance checked as specified in 15.1.1, taking into account 15.1.2, followed by the electric strength test of 16.3	Ditto.	N
	No trace of water on insulation which can result in a reduction of clearances and creepage distances below values specified in clause 29	Ditto.	N
15.1.1	Appliances, other than IPX0, subjected to tests as specified in IEC 60529 ..... :	IPX0	N
15.1.2	Hand-held appliance turned continuously through the most unfavourable positions during the test	No Hand-held appliance.	N
	Built-in appliances installed according to the instructions	Ditto.	N
	Appliances placed or used on the floor or table placed on a horizontal unperforated support	Ditto.	N
	Appliances normally fixed to a wall and appliances with pins for insertion into socket-outlets are mounted on a wooden board	Ditto.	N
	For IPX3 appliances, the base of wall mounted appliances is placed at the same level as the pivot axis of the oscillating tube	Ditto.	N
	For IPX4 appliances, the horizontal centre line of the appliance is aligned with the pivot axis of the oscillating tube	Ditto.	N
	However, for appliances normally used on the floor or table, the movement is limited to two times 90° for a period of 5 min, the support being placed at the level of the pivot axis of the oscillating tube	Ditto.	N
	Wall-mounted appliances, take into account the distance to the floor stated in the instructions	Ditto.	N
	Appliances with type X attachment fitted with a flexible cord as described	Ditto.	N
	Detachable parts tested as specified	Ditto.	N
15.2	Spillage of liquid does not affect the electrical insulation	No such part.	N
	Appliances with type X attachment fitted with a flexible cord as described	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
	Appliances incorporating an appliance inlet tested with or without an connector, whichever is most unfavourable	Ditto.	N
	Detachable parts removed	Ditto.	N
	Overfilling test with additional amount of water, over a period of 1 min (l) ..... :	Ditto.	N
	The appliance withstands the electric strength test of 16.3	Ditto.	N
	No trace of water on insulation that can result in a reduction of clearances and creepage distances below values specified in clause 29	Ditto.	N
15.3	Appliances proof against humid conditions	Class III equipment.	N
	Humidity test for 48 h in a humidity cabinet	Ditto.	N
	The appliance withstands the tests of clause 16	Ditto.	N
16	LEAKAGE CURRENT AND ELECTRIC STRENGTH		N
16.1	Leakage current not excessive and electric strength adequate	Class III equipment.	N
	Protective impedance disconnected from live parts before carrying out the tests	Ditto.	N
16.2	Single-phase appliances: test voltage 1.06 times rated voltage..... :	Ditto.	N
	Three-phase appliances: test voltage 1.06 times rated voltage divided by √3 ..... :	Ditto.	N
	Leakage current measurements	Ditto.	N
16.3	Electric strength tests according to table 7	Ditto.	N
	No breakdown during the tests	Ditto.	N
17	OVERLOAD PROTECTION OF TRANSFORMERS AND ASSOCIATED CIRCUITS		N
	No excessive temperatures in transformer or associated circuits in event of short-circuits likely to occur in normal use	No provided transformer.	N
	Appliance supplied with 1.06 or 0.94 times rated voltage and the most unfavourable short-circuit or overload likely to occur in normal use applied..... :	Ditto.	N
	Temperature rise of insulation of the conductors of safety extra-low voltage circuits not exceeding the relevant value specified in table 3 by more than 15 K	Ditto.	N
	Temperature of the winding not exceeding the value specified in table 8,	Ditto.	N
	however limits do not apply to fail-safe transformers complying with sub-clause 15.5 of IEC 61558-1	Ditto.	N
18	ENDURANCE		N

Clause	Requirement - Test	Result - Remark	Verdict
	Requirements and tests are specified in part 2 when necessary	No such requirement.	N
19	ABNORMAL OPERATION		P
19.1	The risk of fire or mechanical damage under abnormal or careless operation obviated	Class III equipment.	N
	Electronic circuits so designed and applied that a fault will not render the appliance unsafe	Ditto.	N
19.2	Test of appliance with heating elements with restricted heat dissipation; test voltage (V): power input of 0.85 times rated power input..... :	No such part.	N
19.3	Test of 19.2 repeated; test voltage (V): power input of 1.24 times rated power input..... :	Ditto.	N
19.4	Test conditions as in cl. 11, any control limiting the temperature during tests of cl. 11 short-circuited	Consider.	P
19.5	Test of 19.4 repeated on Class 0I and I appliances with tubular sheathed or embedded heating elements. No short-circuiting, but one end of the element connected to the elements sheath	No such part.	N
	The test repeated with reversed polarity and the other end of the heating element connected to the sheath	Ditto.	N
	The test is not carried out on appliances intended to be permanently connected to fixed wiring and on appliances where an all-pole disconnection occurs during the test of 19.4	Ditto.	N
19.6	Appliances with PTC heating elements tested at rated voltage, establishing steady conditions	No such part.	N
	The working voltage of the PTC heating element is increased by 5% and the appliance is operated until steady conditions are re-established. The voltage is then increased in similar steps until 1.5 times working voltage or until the PTC heating element ruptures	Ditto.	N
19.7	Stalling test by locking the rotor if the locked rotor torque is smaller than the full load torque or locking moving parts of other appliances	No such part.	N
	Locked rotor, motor capacitors open-circuited or short-circuited, if required	Ditto.	N
	Locked rotor, capacitors open-circuited one at a time	Ditto.	N
	Test repeated with capacitors short-circuited one at a time, if required	Ditto.	N
	Appliances with timer or programmer supplied with rated voltage for each of the tests, for a period equal to the maximum period allowed	Ditto.	N
	Other appliances supplied with rated voltage for a period as specified	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
	Winding temperatures not exceeding values specified in table 8	Ditto.	N
19.8	Three-phase motors operated at rated voltage with one phase disconnected	Class III equipment.	N
19.9	Running overload test on appliances incorporating motors intended to be remotely or automatically controlled or liable to be operated continuously	Ditto.	N
	Winding temperatures not exceeding values as specified	Ditto.	N
19.10	Series motor operated at 1.3 times rated voltage for 1 min ..... :	No such part.	N
	During the test, parts not being ejected from the appliance	Ditto.	N
19.11	Electronic circuits, compliance checked by evaluation of the fault conditions specified in 19.11.2 for all circuits or parts of circuits, unless they comply with the conditions specified in 19.11.1	Class III equipment.	N
19.11.1	Before applying the fault conditions a) to f) in 19.11.2, it is checked if circuits or parts of circuit meet both of the following conditions:		N
	- the electronic circuit is a low-power circuit, that is, the maximum power at low-power points does not exceed 15 W according to the tests specified	Class III equipment.	N
	- the protection against electric shock, fire hazard, mechanical hazard or dangerous malfunction in other parts of the appliance does not rely on the correct functioning of the electronic circuit	Ditto.	N
19.11.2	Fault conditions applied one at a time, the appliance operated under conditions specified in cl. 11, but supplied at rated voltage, the duration of the tests as specified:		N
	a) short circuit of functional insulation if clearances or creepage distances are less than the values specified in 29	Class III equipment.	N
	b) open circuit at the terminals of any component	Ditto.	N
	c) short circuit of capacitors, unless they comply with IEC 60384-14	Ditto.	N
	d) short circuit of any two terminals of an electronic component, other than integrated circuits. This fault condition is not applied between the two circuits of an optocoupler	Ditto.	N
	e) failure of triacs in the diode mode	Ditto.	N
	f) failure of an integrated circuit. The possible hazardous situations of the appliance are assessed to ensure that safety does not rely on the correct functioning of such a component	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
19.11.3	If the appliance incorporates a protective electronic circuit which operates to ensure compliance with clause 19, the relevant test is repeated with a single fault simulated, as indicated in a) to f) of 19.11.2	No such protective.	N
	During and after each test the following is checked:		N
	- the temperature rise of the windings do not exceed the values specified in table 8		P
	- the appliance complies with the conditions specified in 19.13		P
	- any current flowing through protective impedance not exceeding the limits specified in 8.1.4		N
	If a conductor of a printed board becomes open-circuited, the appliance is considered to have withstood the particular test, provided all three of the following conditions are met:		P
	- the material of the printed circuit board withstands the burning test of annex E	Use approved PCB .	N
	- any loosened conductor does not reduce the clearances or creepage distances between live parts and accessible metal parts below the values specified in cl. 29	Ditto.	N
	- the appliance withstands the tests of 19.11.2 with open-circuited conductor bridged	Ditto.	N
19.12	If the safety of the appliance for any of the fault conditions specified in 19.11.2 depends on the operation of a miniature fuse-link complying with IEC 60127, the test is repeated, measuring the current flowing through the fuse-link; measured current (A); rated current of the fuse-link (A) ..... :	No provided Fuse.	N
19.13	During the tests the appliance does not emit flames, molten metal, poisonous or ignitable gas in hazardous amounts	No emit flames or molten metal.	P
	Temperature rises not exceeding the values shown in table 9	See test result	P
	Enclosures not deformed to such an extent that compliance with cl. 8 is impaired	See test result	P
	If the appliance can still be operated it complies with 20.2	No such part.	N
	Insulation, other than of class III appliance, withstand the electric strength test of 16.3, the test voltage specified in table 4:		N
	- basic insulation ..... :	Class III equipment.	N
	- supplementary insulation ..... :	Ditto.	N
	- reinforced insulation ..... :	Ditto.	N
20	STABILITY AND MECHANICAL HAZARDS		P
20.1	Adequate stability	Not for fixed appliances and hand-held appliances,	N

Clause	Requirement - Test	Result - Remark	Verdict
	Tilting test through an angle of 10° (appliance placed on an inclined plane/horizontal plane); appliance does not overturn	Ditto.	N
	Tilting test repeated on appliances with heating elements, angle of inclination increased to 15°	Ditto.	N
	Possible heating test in overturned position; temperature rise does not exceed values shown in table 9	Ditto.	N
20.2	Moving parts adequately arranged or enclosed as to provide protection against personal injury	No provided moving part.	N
	Protective enclosures, guards and similar parts are non-detachable	Ditto.	N
	Adequate mechanical strength and fixing of protective enclosures	Ditto.	N
	Self-resetting thermal cut-outs and overcurrent protective devices not causing a hazard, by unexpected reclosure	Ditto.	N
	Not possible to touch dangerous moving parts with test probe	Ditto.	N
21	MECHANICAL STRENGTH		N
	Appliance has adequate mechanical strength and is constructed as to withstand rough handling	Class III equipment.	N
	No damage after three blows applied to various parts of the enclosure, impact energy 0,5 ± 0,04 J	Ditto.	N
	If necessary, supplementary or reinforced insulation subjected to the electric strength test of 16.3	Ditto.	N
	If necessary, repetition of groups of three blows on a new sample	Ditto.	N
22	CONSTRUCTION		P
22.1	Appliance marked with the first numeral of the IP system, relevant requirements of IEC 60529 are fulfilled	IPX0 Only.	N
22.2	Stationary appliance: means to provide all-pole disconnection from the supply provided, the following means being available:		N
	- a supply cord fitted with a plug	Not stationary appliance.	N
	- a switch complying with 24.3	Ditto.	N
	- a statement in the instruction sheet that a disconnection incorporated in the fixed wiring is to be provided	Ditto.	N
	- an appliance inlet	Ditto.	N
	Singe-pole switches and single-pole protective devices for the disconnection of heating elements in single-phase permanently connected class I appliances, connected in the phase conductor	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
22.3	Appliance provided with pins: no undue strain on socket-outlets	No provided socket-outlets.	N
	Applied torque not exceeding 0.25 Nm	Ditto.	N
	Pull force of 50N to each pin after the appliance has being placed in the heating cabinet; when cooled to room temperature the pins are not displaced by more than 1mm	Ditto.	N
	Each pin subjected to a tork of 0.4Nm; the pins are not rotating unless rotating does not impair compliance with the standard	Ditto.	N
22.4	Appliance for heating liquids and appliance causing undue vibration not provided with pins for insertion into socket-outlets	No such part.	N
22.5	No risk of electric shock when touching the pins of the plug	No such plug.	N
22.6	Electrical insulation not affected by condensing water or leaking liquid	Class III equipment.	N
	Electrical insulation of Class II appliances not affected in case of a hose rupture or seal leak	Ditto.	N
22.7	Adequate safeguards against the risk of excessive pressure in appliances provided with steam-producing devices	Class III equipment.	N
22.8	Electrical connections not subject to pulling during cleaning of compartments to which access can be gained without the aid of a tool, and that are likely to be cleaned in normal use	Class III equipment.	N
22.9	Insulation, internal wiring, windings, commutators and slip rings not exposed to oil, grease or similar substances	No such part.	N
	Adequate insulating properties of oil or grease to which insulation is exposed	Ditto.	N
22.10	Location or protection of reset buttons of non-self-resetting controls is so that accidental resetting is unlikely	No such protection.	N
22.11	Reliable fixing of non-detachable parts that provide the necessary degree of protection against electric shock, moisture or contact with moving parts	Class III equipment.	N
	Obvious locked position of snap-in devices used for fixing such parts	Ditto.	N
	No deterioration of the fixing properties of snap-in devices used in parts that are likely to be removed during installation or servicing	Ditto.	N
	Tests as described	Ditto.	N
22.12	Handles, knobs etc. fixed in a reliable manner	No such part.	N

Clause	Requirement - Test	Result - Remark	Verdict
	Fixing in wrong position of handles, knobs etc. indicating position of switches or similar components not possible	Ditto.	N
	Axial force 15 N applied to parts, the shape being so that an axial pull is unlikely to be applied	Ditto.	N
	Axial force 30 N applied to parts, the shape being so that an axial pull is likely to be applied	Ditto.	N
22.13	Unlikely that handles, when gripped as in normal use, make the operators hand touch parts having a temperature rise exceeding the value specified for handles which are held for short periods only	No such handle.	N
22.14	No ragged or sharp edges creating a hazard for the user in normal use, or during user maintenance	No provided sharp edges and heatsinks which could damage the insulation and cause hazard.	P
	No exposed pointed ends of self tapping screws etc., liable to be touched by the user in normal use or during user maintenance	Consider.	P
22.15	Storage hooks and the like for flexible cords smooth and well rounded	No such part.	N
22.16	Automatic cord reels cause no undue abrasion or damage to the sheath of the flexible cord, no breakage of conductors strands, no undue wear of contacts	No such part.	N
	Cord reel tested with 6000 operations, as specified	Ditto.	N
	Electric strength test of 16.3, voltage of 1000 V applied	Ditto.	N
22.17	Spacers not removable from the outside by hand or by means of a screwdriver or a spanner	No such overheating walls	N
22.18	Current-carrying parts and other metal parts resistant to corrosion under normal conditions of use	Considered for battery box.	P
22.19	Driving belts not used as electrical insulation	No such part.	N
22.20	Direct contact between live parts and thermal insulation effectively prevented, unless material used is non-corrosive, non-hygroscopic and non-combustible	Consider.	P
	Compliance is checked by inspection and, if necessary, by appropriate test	Consider.	P
22.21	Wood, cotton, silk, ordinary paper and fibrous or hygroscopic material not used as insulation, unless impregnated	No such part.	N
22.22	Appliances not containing asbestos	No such part.	N
22.23	Oils containing polychlorinated biphenyl (PCB) not used	No such part.	N
22.24	Bare heating elements adequately supported	No such part.	N

Clause	Requirement - Test	Result - Remark	Verdict
	In case of rupture, the heating conductor is unlikely to come in contact with accessible metal parts	Ditto.	N
22.25	Sagging heating conductors cannot come into contact with accessible metal parts	Class III equipment.	N
22.26	The insulation between parts operating at safety extra-low voltage and other live parts complies with the requirements for double or reinforced insulation	No provided Class II construction.	N
22.27	Parts connected by protective impedance separated by double or reinforced insulation	No such part.	N
22.28	Metal parts of Class II appliances conductively connected to gas pipes or in contact with water: separated from live parts by double or reinforced insulation	Class III equipment.	N
22.29	Class II appliances permanently connected to fixed wiring so constructed that the required degree of access to live parts is maintained after installation	Class III equipment.	N
22.30	Parts serving as supplementary or reinforced insulation fixed so that they cannot be removed without being seriously damaged, or	Class III equipment.	N
	so constructed that they cannot be replaced in an incorrect position, and so that if they are omitted, the appliance is rendered inoperable or manifestly incomplete	Ditto	N
22.31	Clearances and creepage distances over supplementary and reinforced insulation not reduced below values specified for supplementary insulation	Class III equipment.	N
	Creepage distances and clearances over supplementary or reinforced insulation not reduced to less than 50% of values specified in 29 if wires, screws etc. becomes loose	Ditto.	N
22.32	Supplementary and reinforced insulation designed or protected against deposition of dirt or dust	Class III equipment.	N
	Supplementary insulation of natural or synthetic rubber resistant to ageing, or arranged and dimensioned so that creepage distances are not reduced below values specified in 29.2	Ditto.	N
	Ceramic material not tightly sintered, similar material or beads alone not used as supplementary or reinforced insulation	Ditto.	N
	Oxygen bomb test at 70 °C for 96 h and 16 h at room temperature	Ditto.	N
22.33	Conductive liquids that are or may become accessible in normal use are not in direct contact with live parts	Class III equipment.	N
	Electrodes not used for heating liquids	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
	For class II constructions, conductive liquids that are or may become accessible in normal use, not in direct contact with basic or reinforced insulation	Ditto.	N
	For class II constructions, conductive liquids which are in contact with live parts, not in direct contact with reinforced insulation	Ditto.	N
22.34	Shafts of operating knobs, handles, levers etc. not live, unless the shaft is not accessible when the part is removed	No such part.	N
22.35	Handles, levers and knobs, held or actuated in normal use, not becoming live in the event of an insulation fault	No such part.	N
	Such parts being of metal, and their shafts or fixings are likely to become live in the event of an insulation fault, they are either adequately covered by insulation material, or their accessible parts are separated from their shafts or fixings by supplementary insulation	Ditto.	N
	This requirement does not apply to handles, levers and knobs on stationary appliances other than those of electrical components, provided they are either reliably connected to an earthing terminal or earthing contact, or separated from live parts by earthed metal	Ditto.	N
22.36	Handles continuously held in the hand in normal use are so constructed that when gripped as in normal use, the operators hand is not likely to touch metal parts, unless they are separated from live parts by double or reinforced insulation	No such part.	N
22.37	Capacitors in Class II appliances not connected to accessible metal parts, unless complying with 22.42	Class III equipment.	N
	Metal casings of capacitors in Class II appliances separated from accessible metal parts by supplementary insulation, unless complying with 22.42	Ditto.	N
22.38	Capacitors not connected between the contacts of a thermal cut-out	No such part.	N
22.39	Lamp holders used only for the connection of lamps	No such part.	N
22.40	Motor-operated appliances and combined appliances intended to be moved while in operation, or having accessible moving parts, fitted with a switch to control the motor. The actuating member of the switch being easily visible and accessible	No such part.	N
22.41	No components, other than lamps, containing mercury	No such part.	N
22.42	Protective impedance consisting of at least two separate components	No such part.	N

Clause	Requirement - Test	Result - Remark	Verdict
	Values specified in 8.1.4 not exceeded if any one of the components are short-circuited or open-circuited	Ditto.	N
22.43	Appliances adjustable for different voltages, accidental changing of the setting of the voltage unlikely to occur	No such part.	N
22.44	Appliances are not allowed to have an enclosure that is shaped and decorated so that the appliance is likely to be treated as a toy by children	No such part.	N
22.45	When air is used as reinforced insulation, clearances not reduced below the values specified in 29.1.4 due to deformation as a result of an external force applied to the enclosure	No such part.	N
23	INTERNAL WIRING		P
23.1	Wireways smooth and free from sharp edges	Wires do not touch sharp edges and heatsinks which could damage the insulation and cause hazard.	P
	Wires protected against contact with burrs, cooling fins etc.	Ditto.	P
	Wire holes in metal well rounded or provided with bushings	Ditto.	P
	Wiring effectively prevented from coming into contact with moving parts	No provided moving part.	N
23.2	Beads etc. on live wires cannot change their position, and are not resting on sharp edges or corners	No such part.	N
	Beads inside flexible metal conduits contained within an insulating sleeve	Ditto.	N
23.3	Electrical connections and internal conductors movable relatively to each other not exposed to undue stress	No such part.	N
	Flexible metallic tubes not causing damage to insulation of conductors	Ditto.	N
	Open-coil springs not used	Ditto.	N
	Adequate insulating lining provided inside a coiled spring, the turns of which touch one another	Ditto.	N
	No damage after 10 000 flexings for conductors flexed during normal use or 100 flexings for conductors flexed during user maintenance	Ditto.	N
	Electric strength test, 1000 V between live parts and accessible metal parts	Ditto.	N
23.4	Bare internal wiring sufficiently rigid and fixed	Class III equipment.	N
23.5	The insulation of internal wiring withstanding the electrical stress likely to occur in normal use	Class III equipment.	N

Clause	Requirement - Test	Result - Remark	Verdict
	No breakdown when a voltage of 2000 V is applied for 15 min between the conductor and metal foil wrapped around the insulation	Ditto.	N
23.6	Sleeving used as supplementary insulation on internal wiring retained in position by positive means	No such part.	N
23.7	The colour combination green/yellow used only for earthing conductors	Class III equipment.	N
23.8	Aluminium wires not used for internal wiring	No such part.	N
23.9	No lead-tin soldering of stranded conductors where they are subject to contact pressure, unless	Class III equipment	N
	clamping means so constructed that there is no risk of bad contact due to cold flow of the solder	Ditto.	N
24	COMPONENTS		P
24.1	Components comply with safety requirements in relevant IEC standards	Components which were found to affect safety aspects comply with the requirements of this standard or within the safety aspects of the relevant IEC component standards. (see appended tables)	P
	List of components	See component list.	P
	Components not tested and found to comply with relevant IEC standard for the number of cycles specified are tested in accordance with 24.1.1 to 24.1.6	Considered.	P
	Components not tested and found to comply with relevant IEC standard, components not marked or not used in accordance with its marking, tested under the conditions occurring in the appliance	Considered.	P
24.1.1	Capacitors likely to be permanently subjected to the supply voltage and used for radio interference suppression or for voltage dividing, complying with IEC 60384-14, or	No such part.	N
	tested according to annex F	Ditto.	N
24.1.2	Safety isolating transformers complying with IEC 61558-2-6, or	No such transformer.	N
	tested according to annex G	Ditto.	N
24.1.3	Switches complying with IEC 61058-1, the number of cycles of operation being at least 10 000, or	No such switch.	N
	tested according to annex H	Ditto.	N
24.1.4	Automatic controls complying with IEC 60730-1 with relevant part 2. The number of cycles of operation being:		N
	- thermostats: 10 000	No such part.	N
	- temperature limiters: 1 000	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
	- self-resetting thermal cut-outs: 300	Ditto.	N
	- non-self-resetting thermal cut-outs: 30	Ditto.	N
	- timers: 3 000	Ditto.	N
	- energy regulators: 10 000	Ditto.	N
24.1.5	Appliance couplers complying with IEC 60320-1	No such part.	N
	However, appliances classified higher than IPX0, the appliance couplers complying with IEC 60320-2-3	Ditto.	N
24.1.6	Small lamp holders similar to E10 lampholders complying with IEC 60238, the requirements for E10 lampholders being applicable	No such part.	N
24.2	No switches or automatic controls in flexible cords	No such part.	N
	No devices causing the protective device in the fixed wiring to operate in the event of a fault in the appliance	Ditto	N
	No thermal cut-outs that can be reset by soldering	Ditto.	N
24.3	Switches intended for all-pole disconnection of stationary appliances are directly connected to the supply terminals and having a contact separation in all poles, providing full disconnection under overvoltage category III conditions	No such part.	N
24.4	Plugs and socket-outlets for extra-low voltage circuits and heating elements, not interchangeable with plugs and socket-outlets listed in IEC 60083 or IEC 60906-1 or with connectors and appliance inlets complying with the standard sheets of IEC 60320-1	No such part.	N
24.5	Capacitors in auxiliary windings of motors marked with their rated voltage and capacitance and used accordingly	No such part.	N
	Capacitors in appliances for which 30.2.3 is applicable and that are permanently connected in series with a motor winding, are of class P1 or P2 of IEC 60252	Ditto.	N
	Voltage across capacitors in series with a motor winding does not exceed 1,1 times rated voltage, when the appliance is supplied at 1,1 times rated voltage under minimum load	Ditto.	N
24.6	Working voltage of motors connected to the supply mains and having basic insulation that is inadequate for the rated voltage of the appliance, not exceeding 42V.	Ditto.	N
	In addition, the motors are complying with the requirements of Annex I	Ditto.	N
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS		N
25.1	Appliance not intended for permanent connection to fixed wiring, means for connection to the supply:		N

Clause	Requirement - Test	Result - Remark	Verdict
	- supply cord fitted with a plug	Class III equipment.	N
	- an appliance inlet having at least the same degree of protection against moisture as required for the appliance	Ditto.	N
	- pins for insertion into socket-outlets	Ditto.	N
25.2	Appliance not provided with more than one means of connection to the supply mains	Class III equipment.	N
	Stationary appliance for multiple supply may be provided with more than one means of connection, provided electric strength test of 1250 V for 1 min between each means of connection causes no breakdown	Ditto.	N
25.3	Connection of supply conductors for appliance intended to be permanently connected to fixed wiring possible after the appliance has been fixed to its support	Class III equipment.	N
	Appliance provided with a set of terminals for the connection of cables or fixed wiring, cross-sectional areas specified in 26.6	Ditto.	N
	Appliance provided with a set of terminals allowing the connection of a flexible cord	Ditto.	N
	Appliance provided with a set of supply leads accommodated in a suitable compartment	Ditto.	N
	Appliance provided with a set of terminals and cable entries, conduit entries, knock-outs or glands, allowing connection of appropriate type of cable or conduit	Ditto.	N
25.4	Cable and conduit entries, rated current of appliance not exceeding 16 A, dimensions according to table 10	Class III equipment.	N
	Introduction of conduit or cable does not reduce clearances or creepage distances below values specified in 29	Ditto.	N
25.5	Method for assemble supply cord with the appliance:		N
	- type X attachment	Class III equipment.	N
	- type Y attachment	Ditto.	N
	- type Z attachment, if allowed in part 2	Ditto.	N
	Type X attachment, other than those with a specially prepared cord, not used for flat twin tinsel cords	Ditto.	N
25.6	Plugs fitted with only one flexible cord Plugs for < 16A according to IEC 60083:1975 . **Class I devices** sheet C2b, C3b or C4; . **Class II devices** sheet C5 or C6. EN 60335-1:2001	Class III equipment.	N
25.7	Supply cord not lighter than:		N

Clause	Requirement - Test	Result - Remark	Verdict
	- braided cord (60245 IEC 51)	Class III equipment.	N
	- ordinary tough rubber sheathed cord (60245 IEC 53)	Ditto.	N
	. rubber cord sheathed with polychloropren (60245 IEC 57); EN 60335-1:2001	Ditto.	N
	- flat twin tinsel cord (60227 IEC 41)	Ditto.	N
	- light polyvinyl chloride sheathed cord (60227 IEC 52), appliance not exceeding 3 kg	Ditto.	N
	- ordinary polyvinyl chloride sheathed cord (60227 IEC 53), appliance exceeding 3 kg	Ditto.	N
	Other power cords with high flexibility not lighter than (see annex ZD)	Ditto.	N
	. rubber cord (60245 IEC 86);	Ditto.	N
	. rubber cord sheathed with cross linked PVC (60245 IEC 87);	Ditto.	N
	. sheathed cord with cross linked PVC (60245 IEC 88). EN 60335-1:2001	Ditto.	N
	Temperature rise of external metal parts exceeding 75 K, PVC cord not used, unless	Ditto.	N
	appliance so constructed that the supply cord is not likely to touch external metal parts in normal use, or	Ditto.	N
	the supply cord is appropriate for higher temperatures, type Y or type Z attachment used	Ditto.	N
25.8	Nominal cross-sectional area of supply cords according to table 11; rated current (A); cross-sectional area (mm^2) ..... :	Class III equipment.	N
25.9	Supply cord not in contact with sharp points or edges	Class III equipment.	N
25.10	Green/yellow core for earthing purposes in Class I appliance	Class III equipment.	N
25.11	Conductors of supply cords not consolidated by lead-tin soldering where they are subject to contact pressure, unless	Class III equipment.	N
	clamping means so constructed that there is no risk of bad contacts due to cold flow of the solder	Ditto.	N
25.12	Moulding the cord to part of the enclosure does not damage the insulation of the supply cord	Ditto.	N
25.13	Inlet opening so shaped as to prevent damage to the supply cord	Class III equipment.	N
	Unless the enclosure at the inlet opening is of insulation material, a non-detachable lining or bushing complying with 29.3 for supplementary insulation provided	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
	If unsheathed supply cord, a similar additional bushing or lining is required, unless	Ditto.	N
	the appliance is class 0	Ditto.	N
25.14	Supply cords adequately protected against excessive flexing	Class III equipment.	N
	Flexing test:		N
	- applied force (N)..... :	Ditto.	N
	- number of flexings..... :	Ditto.	N
	The test does not result in:		N
	- short circuit between the conductors	Ditto.	N
	- breakage of more than 10% of the strands of any conductor	Ditto.	N
	- separation of the conductor from its terminal	Ditto.	N
	- loosening of any cord guard	Ditto.	N
	- damage, within the meaning of the standard, to the cord or the cord guard	Ditto.	N
	- broken strands piercing the insulation and becoming accessible	Ditto.	N
25.15	Conductors of the supply cord relieved from strain, twisting and abrasion by use of cord anchorage	Class III equipment.	N
	The cord cannot be pushed into the appliance to such an extent that the cord or internal parts of the appliance can be damaged	Ditto.	N
	Pull and torque test of supply cord, values shown in table 10: pull (N); torque (not on automatic cord reel) (Nm) ..... :	Ditto.	N
	Max. 2 mm displacement of the cord, and conductors not moved more than 1 mm in the terminals	Ditto.	N
	Creepage distances and clearances not reduced below values specified in 29.1	Ditto.	N
25.16	Cord anchorages for type X attachments constructed and located so that:		N
	- replacement of the cord is easily possible	Class III equipment.	N
	- it is clear how the relief from strain and the prevention of twisting are obtained	Ditto.	N
	- they are suitable for different types of cord	Ditto.	N
	- cord cannot touch the clamping screws of cord anchorage if these screws are accessible, unless separated from accessible metal parts by supplementary insulation	Ditto.	N
	- the cord is not clamped by a metal screw which bears directly on the cord	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
	- at least one part of the cord anchorage securely fixed to the appliance, unless part of a specially prepared cord	Ditto.	N
	- screws which have to be operated when replacing the cord do not fix any other component, if applicable	Ditto.	N
	- if labyrinths can be bypassed the test of 25.15 is nevertheless withstood	Ditto.	N
	- for Class 0, 0I and I appliances: they are of insulating material or are provided with an insulating lining, unless a failure of the insulation of the cord does not make accessible metal parts live	Ditto.	N
	- for Class II appliances: they are of insulating material, or if of metal, they are insulated from accessible metal parts by supplementary insulation	Ditto.	N
25.17	Adequate cord anchorages for type Y and Z attachment	Class III equipment.	N
25.18	Cord anchorages only accessible with the aid of a tool, or	Class III equipment.	N
	so constructed that the cord can only be fitted with the aid of a tool	Ditto.	N
25.19	Type X attachment, glands not used as cord anchorage in portable appliances	Class III equipment.	N
	Tying the cord into a knot or tying the cord with string not used	Ditto.	N
25.20	Conductors of the supply cord for type Y and Z attachment adequately additionally insulated	Class III equipment.	N
25.21	Space for supply cord for type X attachment or for connection of fixed wiring constructed to permit checking of conductors with respect to correct positioning and connection before fitting any cover, no risk of damage to the conductors when fitting the cover, no contact with accessible metal parts if a conductor becomes loose, etc.	Ditto.	N
	For portable appliances, the uninsulated end of a conductor prevented from any contact with accessible metal parts, unless the end of the cord is such that the conductors are unlikely to slip free	Ditto.	N
25.22	Appliance inlet:		N
	- live parts not accessible during insertion or removal	Class III equipment.	N
	- connector can be inserted without difficulty	Ditto.	N
	- the appliance is not supported by the connector	Ditto.	N
	- is not for cold conditions if temp. rise of external metal parts exceeds 75 K, unless the supply cord is not likely to touch such metal parts	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
25.23	Interconnection cords comply with the requirements for the supply cord, except as specified	Class III equipment.	N
	If necessary, electric strength test of 16.3	Ditto.	N
25.24	Interconnection cords not detachable without the aid of a tool if compliance with the standard is impaired when they are disconnected	Class III equipment.	N
25.25	Dimensions of pins compatible with the dimensions of the relevant socket-outlet. Dimensions of pins and engagement face in accordance with the relevant plug in IEC 60083	Class III equipment.	N
26	TERMINALS FOR EXTERNAL CONDUCTORS		N
26.1	Appliances provided with terminals or equally effective devices for connection of external conductors	No such part.	N
	Terminals only accessible after removal of a non-detachable cover	Ditto.	N
26.2	Appliances with type X attachment and appliances for connection to fixed wiring provided with terminals in which connections are made by means of screws, nuts or similar devices, unless the connections are soldered	Class III equipment.	N
	Screws and nuts serve only to clamp supply conductors, except	Ditto.	N
	internal conductors, if so arranged that they are unlikely to be displaced when fitting the supply conductors	Ditto.	N
	If soldered connections used, the conductor so positioned or fixed that reliance is not placed on soldering alone	Ditto.	N
	Soldering alone used, barriers provided, clearances and creepage distances satisfactory if the conductor becomes free at the soldered joint	Ditto.	N
26.3	Terminals for type X attachment and for connection to fixed wiring so constructed that the conductor is clamped between metal surfaces with sufficient contact pressure and without damaging the conductor	Class III equipment.	N
	Terminals for type X attachment and those for connection to fixed wiring so fixed that when tightening or loosening the clamping means:		N
	- the terminal does not loosen	Ditto.	N
	- internal wiring is not subjected to stress	Ditto.	N
	- clearances and creepage distances are not reduced below the values in 29	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
	Compliance checked by inspection and by the test of subclause 8.6 of IEC 60999-1, the torque applied being equal to two-thirds of the torque specified. Nominal diameter of thread (mm); screw category; torque (Nm) ..... :	Ditto.	N
26.4	Terminals for type X attachment, except those with a specially prepared cord, and those for connection to fixed wiring, no special preparation of conductors required, and so constructed or placed that conductors prevented from slipping out	Class III equipment.	N
26.5	Terminals for type X attachment so located or shielded that if a wire of a stranded conductor escapes, no risk of accidental connection to other parts that result in a hazard	Class III equipment.	N
	Stranded conductor test, 8 mm insulation removed	Ditto.	N
	No contact between live parts and accessible metal parts and, for class II constructions, between live parts and metal parts separated from accessible metal parts by supplementary insulation only	Ditto.	N
26.6	Terminals for type X attachment and for connection to fixed wiring suitable for connection of conductors with required cross-sectional area according to table 13; rated current (A); nominal cross-sectional area (mm^2) ..... :	Class III equipment.	N
	Terminals only suitable for a specially prepared cord	Ditto.	N
26.7	Terminals for type X attachment accessible after removal of a cover or part of the enclosure	Class III equipment.	N
26.8	Terminals for the connection to fixed wiring, including the earthing terminal, located close to each other	Class III equipment.	N
26.9	Terminals of the pillar type constructed and located as specified	Class III equipment.	N
26.10	Terminals with screw clamping and screwless terminals not used for flat twin tinsel cords, unless conductors ends fitted with a device suitable for screw terminals	Class III equipment.	N
	Pull test of 5 N to the connection	Ditto.	N
26.11	For type Y and Z attachment: soldered, welded, crimped and similar connections may be used	Class III equipment.	N
	For Class II appliances: the conductor so positioned or fixed that reliance is not placed on soldering, welding or crimping alone	Ditto.	N
	For Class II appliances: soldering, welding or crimping alone used, barriers provided, clearances and creepage distances satisfactory if the conductor becomes free	Ditto.	N
27	PROVISION FOR EARTHING		N

Clause	Requirement - Test	Result - Remark	Verdict
27.1	Accessible metal parts of Class 0I and I appliances, permanently and reliably connected to an earthing terminal or contact of the appliance inlet	Class III equipment.	N
	Earthing terminals not connected to neutral terminal	Ditto.	N
	Class 0, II and III appliance have no provision for earthing	Ditto.	N
	Safety extra-low voltage circuits not earthed, unless protective extra-low voltage circuits	Ditto.	N
27.2	Clamping means adequately secured against accidental loosening	Class III equipment.	N
	Terminals used for the connection of external equipotential bonding conductors allow connection of conductors of 2.5 to 6 mm², and	Ditto.	N
	do not provide earthing continuity between different parts of the appliance	Ditto.	N
	Conductors cannot be loosened without the aid of a tool	Ditto.	N
27.3	For appliances with supply cord, current-carrying conductors become taut before earthing conductor, if the cord slips out of the cord anchorage	Class III equipment.	N
27.4	No risk of corrosion resulting from contact between metal of earthing terminal and other metal	Class III equipment.	N
	Adequate resistance to corrosion of coated or uncoated parts providing earthing continuity, other than parts of a metal frame or enclosure	Ditto.	N
	Parts of steel providing earthing continuity provided at the essential areas with an electroplated coating, thickness at least 5 µm	Ditto.	N
	Adequate protection against rusting of parts of coated or uncoated steel, only intended to provide or transmit contact pressure	Ditto.	N
	In case of aluminium alloys precautions taken to avoid risk of corrosion	Ditto.	N
27.5	Low resistance of connection between earthing terminal and earthed metal parts	Class III equipment.	N
	This requirement does not apply to connections providing earthing continuity in the protective extra-low voltage circuit, provided that clearances of basic insulation are based on the rated voltage of the appliance	Ditto.	N
	Resistance not exceeding 0,1 Ù at the specified low-resistance test	Ditto.	N
27.6	The printed conductors of printed circuit boards not used to provide earthing continuity in hand held appliances	Class III equipment.	N

Clause	Requirement - Test	Result - Remark	Verdict
	They may be used in other appliances if:		N
	- at least two tracks are used with independent soldering points and the appliance complies with requirements of 27.5 for each circuit	Ditto.	N
	- the material of the printed circuit board complies with IEC 60249-2-4 or IEC 60249-2-5	Ditto.	N
28	SCREWS AND CONNECTIONS		N
28.1	Fixings, electrical connections and connections providing earthing continuity withstand mechanical stresses	Class III equipment.	N
	Screws not of soft metal liable to creep, such as zinc or aluminium	Ditto.	N
	Diameter of screws of insulating material min. 3 mm	Ditto.	N
	Screws of insulating material not used for any electrical connection or connections providing earthing continuity	Ditto.	N
	Screws used for electrical connections or connections providing earthing continuity screw into metal	Ditto.	N
	Screws not of insulating material if their replacement by a metal screw can impair supplementary or reinforced insulation	Ditto.	N
	Type X attachment, screws to be removed for replacement of supply cord or for user maintenance, not of insulating material if their replacement by a metal screw can impair basic insulation	Ditto.	N
	For screws and nuts; test as specified	Ditto.	N
28.2	Electrical connections and connections providing earthing continuity constructed so that contact pressure not transmitted through insulating material liable to shrink or distort, unless shrinkage or distortion compensated	Class III equipment.	N
	This requirement does not apply to electrical connections in circuits carrying a current not exceeding 0.5A	Ditto.	N
28.3	Space-threaded (sheet metal) screws only used for electrical connections if they clamp the parts together	Class III equipment.	N
	Thread-cutting (self-tapping) screws only used for electrical connections if they generate a full form standard machine screw thread	Ditto.	N
	Such screws not used if they are likely to be operated by the user or installer unless the thread is formed by a swaging action	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
	Thread-cutting and space-threaded screws may be used in connections providing earthing continuity, provided unnecessary to disturb the connection and at least two screws are used for each connection	Ditto.	N
28.4	Screws and nuts that make mechanical connection secured against loosening if they also make electrical connections or connections providing earthing continuity	Class III equipment.	N
	Rivets for electrical connections or connections providing earthing continuity secured against loosening if subjected to torsion	Ditto.	N
29	CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION		P
	Clearances, creepage distances and solid insulation withstand electrical stress	Class III equipment.	N
	For coatings used on printed circuits boards to protect the microenvironment or to provide basic insulation, annex J applies	Ditto.	N
29.1	Clearances not less than the values specified in table 16, taking into account the rated impulse voltage for the overvoltage categories of table 15	Class III equipment.	N
	The values specified may be smaller for basic insulation and functional insulation if the clearance meets the impulse voltage test of clause 14	Ditto.	N
	Appliances are in overvoltage category II	Ditto.	N
	Clearances less than specified in table 16 not allowed for basic insulation of class 0 and class 0I appliances,	Ditto.	N
	or if pollution degree 3 is applicable	Ditto.	N
	Compliance is checked by inspection and measurements as specified	Ditto.	N
29.1.1	Clearances of basic insulation withstand the overvoltages, taking into account the rated impulse voltage	Class III equipment.	N
	Clearance at the terminals of tubular sheathed heating elements may be reduced to 1mm if the microenvironment is pollution degree 1	Ditto.	N
	Lacquered conductors of windings assumed to be bare conductors, but the clearances specified in table 16 are reduced by 0.5mm for rated impulse voltages of at least 1500V	Ditto.	N
29.1.2	Clearances of supplementary insulation not less than those specified for basic insulation in table 16	Class III equipment.	N
29.1.3	Clearances of reinforced insulation not less than those specified for basic insulation in table 16, but using the next higher step for rated impulse voltage	Class III equipment.	N

Clause	Requirement - Test	Result - Remark	Verdict
29.1.4	For functional insulation, the values of table 16 are applicable, unless	Class III equipment.	N
	the appliance complies with clause 19 with the functional insulation short-circuited	Ditto.	N
	Clearances at crossover points of lacquered conductors not measured	Ditto.	N
	Clearance between surfaces of PTC heating elements may be reduced to 1mm	Ditto.	N
	Lacquered conductors of windings assumed to be bare conductors, but the clearances specified in table 16 are reduced by 0.5mm for rated impulse voltages of at least 1500V	Ditto.	N
29.1.5	Appliances having higher working voltage than rated voltage, the voltage used for determining clearances from table 16 is the sum of the rated impulse voltage and the difference between the peak value of the working voltage and the peak value of the rated voltage	Class III equipment.	N
	If the secondary winding of a step-down transformer is earthed, or if there is an earthed screen between the primary and secondary windings, clearances of basic insulation on the secondary side not less than those specified in table 16, but using the next lower step for rated impulse voltage	Ditto.	N
	Circuits supplied with a voltage lower than rated voltage, clearances of functional insulation based on the working voltage used as the rated voltage in table 15	Ditto.	N
29.2	Creepage distances not less than those appropriate for the working voltage, taking into account the material group and the pollution degree	Class III equipment.	N
	Pollution degree 2 applies, unless	Ditto.	N
	precautions taken to protect the insulation; pollution degree 1	Ditto.	N
	insulation subjected to conductive pollution; pollution degree 3	Ditto.	N
	Compliance is checked by inspection and measurements as specified	Ditto.	N
29.2.1	Creepage distances of basic insulation not less than specified in table 17	Class III equipment.	N
	For pollution degree 1, creepage distance not less than the minimum specified for the clearance in table 16, if the clearance has been checked according to the test of clause 14	Ditto.	N
29.2.2	Creepage distances of supplementary insulation at least as specified for basic insulation in table 17	Class III equipment.	N

Clause	Requirement - Test	Result - Remark	Verdict
29.2.3	Creepage distances of reinforced insulation at least double as specified for basic insulation in table 17	Class III equipment.	N
29.2.4	Creepage distances of functional insulation not less than specified in table 18	Class III equipment.	N
	Creepage distances may be reduced if the appliance complies with clause 19 with the functional insulation short-circuited	Ditto.	N
29.3	Solid insulation having a minimum thickness of 1mm for supplementary insulation,	Class III equipment.	N
	and 2mm for reinforced insulation	Ditto.	N
	This requirement does not apply if the supplementary insulation, other than mica or similar scaly material, consists of at least two layers, each of the layers withstands the electric strength test of 16.3	Ditto.	N
	This requirement does not apply if the reinforced insulation, other than mica or similar scaly material, consists of at least three layers, any two layers together withstand the electric strength test of 16.3	Ditto.	N
	This requirement also does not apply to inaccessible insulation and does not exceed the maximum permissible temperature values, or	Ditto.	N
	if the insulation, after conditioning as specified, withstands the electric strength test of 16.3	Ditto.	N
30	RESISTANCE TO HEAT AND FIRE		P
30.1	External parts of non-metallic material,	See as below.	P
	parts supporting live parts, and	Class III equipment.	N
	thermoplastic material providing supplementary or reinforced insulation,	Class III equipment.	N
	sufficiently resistant to heat	Consider.	P
	Ball-pressure test according to IEC 60695-10-2	Class III equipment.	N
	External parts: at 40 °C plus the maximum temperature rise determined during the test of clause 11, or at 75 °C, whichever is the higher; temperature (°C)..... :	Ditto.	N
	Parts supporting live parts: at 40°C plus the maximum temperature rise determined during the test of clause 11, or at 125°C, whichever is the higher; temperature (°C) ..... :	Ditto.	N
	Parts of thermoplastic material providing supplementary or reinforced insulation, 25°C plus the maximum temperature rise determined during clause 19, if higher; temperature (°C) ..... :	Ditto.	N
30.2	Relevant parts of non-metallic material adequately resistant to ignition and spread of fire	V-1 or better.	P

Clause	Requirement - Test	Result - Remark	Verdict
30.2.1	Glow-wire test of IEC 60695-2-11 at 550 °C, unless	Class III equipment.	N
	the material is classified at least HB40 according to IEC 60695-11-10	Ditto.	N
	Parts for which the glow-wire test cannot be carried out meet the requirements in ISO9772 for category FH3 material	Ditto.	N
30.2.2	Appliances operated while attended, parts of insulating material supporting current-carrying connections and parts within a distance of 3mm subjected to the glow-wire test of IEC 60695-2-11 at a temperature of:		N
	-750°C, for connections carrying a current exceeding 0,5A during normal operation	Class III equipment.	N
	-650°C, for other connections	Ditto.	N
	Test not applicable to conditions as specified	Ditto.	N
30.2.3	Appliances operated while unattended, tested as specified in 30.2.3.1 and 30.2.3.2	Class III equipment.	N
	Test not applicable to conditions as specified	Ditto.	N
30.2.3.1	Parts of insulating material supporting connections carrying a current exceeding 0.2A during normal operation, and	Class III equipment.	N
	parts of insulating material within a distance of 3mm,	Ditto.	N
	having a glow-wire flammability index of at least 850°C according to IEC 60695-2-12	Ditto.	N
30.2.3.2	Parts of insulating material supporting current-carrying connections, and	Class III equipment.	N
	parts of insulating material within a distance of 3mm,	Ditto.	N
	subjected to glow-wire test of IEC 60695-2-11	Ditto.	N
	Test not carried out on material having a glow-wire ignition temperature according to IEC 60695-2-13 as specified	Ditto.	N
	Glow-wire test of IEC 60695-2-11, the temperature being:		N
	-750°C, for connections carrying a current exceeding 0,2A during normal operation	Ditto.	N
	-650°C, for other connections	Ditto.	N
	Parts that during the test produce a flame persisting longer than 2 s, tested as specified	Ditto.	N
	If a flame persists longer than 2 s during the test, parts above the connection, as specified, subjected to the needle-flame test of annex E, unless	Ditto.	N
	the material is classified as V-0 or V-1 according to IEC 60695-11-10	Ditto.	N
30.2.4	Base material of printed circuit boards subjected to needle-flame test of annex E	Class III equipment.	N

Clause	Requirement - Test	Result - Remark	Verdict
	Test not applicable to conditions as specified	Ditto.	N
31	RESISTANCE TO RUSTING		P
	Relevant ferrous parts adequately protected against rusting	Consider.	P
32	RADIATION, TOXICITY AND SIMILAR HAZARDS		N
	Appliance does not emit harmful radiation	No such part.	N
	Appliance does not present a toxic or similar hazard	Ditto.	N
A	ANNEX A (INFORMATIVE) ROUTINE TESTS		P
	Description of routine tests to be carried out by the manufacturer		P
B	ANNEX B (NORMATIVE) APPLIANCES POWERED BY RECHARGEABLE BATTERIES		N
	The following modifications to this standard are applicable for appliances powered by batteries that are recharged in the appliance	No such part.	N
	This annex does not apply to battery chargers	Ditto.	N
3.1.9	Appliance operated under the following conditions:		N
	-the appliance, supplied by its fully charged battery, operated as specified in relevant part 2	Ditto.	N
	-the battery is charged, the battery being initially discharged to such an extent that the appliance cannot operate	Ditto.	N
	-if possible, the appliance is supplied from the supply mains through its battery charger, the battery being initially discharged to such an extent that the appliance cannot operate. The appliance is operated as specified in relevant part 2	Ditto.	N
	If the appliance incorporates inductive coupling between two parts that are detachable from each other, the appliance is supplied from the supply mains with the detachable part removed	Ditto.	N
3.6.2	Part to be removed in order to discard the battery is not considered to be detachable	Ditto.	N
5.101	Appliances supplied from the supply mains tested as specified for motor-operated appliances	Ditto.	N
7.1	Battery compartment for batteries intended to be replaced by the user, marked with battery voltage and polarity of the terminals	Ditto.	N
7.12	The instructions for appliances incorporating batteries intended to be replaced by the user includes required information	Ditto.	N
	Details about how to remove batteries containing materials hazardous to the environment given	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
7.15	Markings placed on the part of the appliance connected to the supply mains	Ditto.	N
8.2	Appliances having batteries that according to the instruction may be replaced by the user need only have basic insulation between live parts and the inner surface of the battery compartment	Ditto.	N
	If the appliance can be operated without batteries, double or reinforced insulation required	Ditto.	N
11.7	The battery is charged for the period described	Ditto.	N
19.1	Appliances subjected to tests of 19.101, 19.102 and 19.103	Ditto.	N
19.101	Appliances supplied at rated voltage for 168 h, the battery being continually charged	Ditto.	N
19.102	Short-circuiting of the terminals of the battery, being fully charged, for appliances having batteries that can be removed without the aid of a tool	Ditto.	N
19.103	Appliances having batteries replaceable by the user supplied at rated voltage under normal operation with the battery removed or in any position allowed by the construction	Ditto.	N
21.101	Appliances having pins for insertion into socket-outlets have adequate mechanical strength, checked according to procedure 2 of IEC 68-2-32	Ditto.	N
	Part of the appliance incorporating the pins subjected to the free fall test, procedure 2, of IEC 60068-2-32, the number of falls being:		N
	- 100, the mass of part does not exceed 250 g	Ditto.	N
	- 50, the mass of part exceeds 250 g	Ditto.	N
	After the test, the requirements of 8.1, 15.1.1, 16.3 and clause 29 are met	Ditto.	N
22.3	Appliances having pins for insertion into socket-outlets tested as fully assembled as possible	Ditto.	N
25.13	An additional lining or bushing not required for interconnection cords operating at safety extra-low voltage	Ditto.	N
30.2	For parts of the appliance connected to the supply mains during the charging period, 30.2.3 applies	Ditto.	N
	For other parts, 30.2.2 applies	Ditto.	N
C	ANNEX C (NORMATIVE) AGEING TEST ON MOTORS		N
	Tests, as described, carried out when doubt with regard to the temperature classification of the insulation of a motor winding	No such part.	N
D	ANNEX D (NORMATIVE) ALTERNATIVE REQUIREMENTS FOR PROTECTED MOTORS		N

Clause	Requirement - Test	Result - Remark	Verdict
	Applicable to protected motors for unattended use, test of 19.7 carried out on a separate sample according to the specification	No such part.	N
E	ANNEX E (NORMATIVE) NEEDLE-FLAME TEST		N
	Needle-flame test carried out in accordance with IEC 60695-2-2, with the following modifications:	Class III equipment.	N
5	Severities		N
	The duration of application of the test flame is 30 s ± 1 s	Ditto.	N
8	Test procedure		N
8.2	The specimen so arranged that the flame can be applied to a vertical or horizontal edge as shown in the examples of figure 1	Ditto.	N
8.4	The first paragraph does not apply	Ditto.	N
	If possible, the flame is applied at least 10 mm from a corner	Ditto.	N
8.5	The test is carried out on one specimen	Ditto.	N
	If the specimen does not withstand the test, the test may be repeated on two further specimens, both withstanding the test	Ditto.	N
10	Evaluation of test results		N
	The duration of burning not exceeding 30 s	Ditto.	N
	However, for printed circuit boards, the duration of burning not exceeding 15 s	Ditto.	N
F	ANNEX F (NORMATIVE) CAPACITORS		N
	Capacitors likely to be permanently subjected to the supply voltage, and used for radio interference suppression or voltage dividing, comply with the following clauses of IEC 60384-14, with the following modifications:	No such part.	N
1.5	Terminology		N
1.5.3	Class X capacitors tested according to subclass X2	Ditto.	N
1.5.4	This subclause is applicable	Ditto.	N
1.6	Marking		N
	Items a) and b) are applicable	Ditto.	N
3.4	Approval testing		N
3.4.3.2	Table II is applicable as described	Ditto.	N
4.1	Visual examination and check of dimensions		N
	This subclause is applicable	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
4.2	Electrical tests		N
4.2.1	This subclause is applicable	Ditto.	N
4.2.5	This subclause is applicable	Ditto.	N
4.2.5.2	Only table IX is applicable	Ditto.	N
	Values for test A apply	Ditto.	N
	However, for capacitors in heating appliances the values for test B or C apply	Ditto.	N
4.12	Damp heat, steady state		N
	This subclause is applicable	Ditto.	N
	Only insulation resistance and voltage proof are checked	Ditto.	N
4.13	Impulse voltage		N
	This subclause is applicable	Ditto.	N
4.14	Endurance		N
	Subclauses 4.14.1, 4.14.3, 4.14.4 and 4.14.7 applicable	Ditto.	N
4.14.7	Only insulation resistance and voltage proof are checked	Ditto.	N
	Visual examination, no visible damage	Ditto.	N
4.17	Passive flammability test		N
	This subclause is applicable	Ditto.	N
4.18	Active flammability test		N
	This subclause is applicable	Ditto.	N
G	ANNEX G (NORMATIVE) SAFETY ISOLATING TRANSFORMERS		N
	The following modifications to this standard are applicable for safety isolating transformers:	No such part.	N
7	Marking and instructions		N
7.1	Transformers for specific use marked with:		N
	-name, trademark or identification mark of the manufacturer or responsible vendor	Ditto.	N
	-model or type reference	Ditto.	N
17	Overload protection of transformers and associated circuits		N
	Fail-safe transformers comply with subclause 15.5 of IEC 61558-1	Ditto.	N
22	Construction		N
	Subclauses 19.1 and 19.1.2 of IEC 61558-2-6 are applicable	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
29	Clearances, creepage distances and solid insulation		N
29.1 and 29.2	The distances specified in items 2a, 2c and 3 in table 13 of IEC 61558-1 apply	Ditto.	N
H	ANNEX H (NORMATIVE) SWITCHES		N
	Switches comply with the following clauses of IEC 61058-1, as modified:		N
	-The tests of IEC 61058-1 carried out under the conditions occurring in the appliance	No such part.	N
	-Before being tested, switches are operated 20 times without load	Ditto.	N
8	Marking and documentation		N
	Switches are not required to be marked	Ditto.	N
	However, switches that can be tested separately from the appliance marked with the manufacturer's name or trade mark and the type reference	Ditto.	N
13	Mechanism		N
	The tests may be carried out on a separate sample	Ditto.	N
15	Insulation resistance and dielectric strength		N
15.1	Not applicable	Ditto.	N
15.2	Not applicable	Ditto.	N
15.3	Applicable for full disconnection and micro-disconnection	Ditto.	N
17	Endurance		N
	Compliance is checked on three separate appliances or switches	Ditto.	N
	For 17.2.4.4, the number of cycles is 10 000, unless otherwise specified in 24.1.3 of the relevant part 2 of IEC 60335	Ditto.	N
	Switches for operation under no load and which can be operated only by a tool and switches operated by hand that are interlocked so that they cannot be operated under load, are not subjected to the tests	Ditto.	N
	Subclause 17.2.5.2 is not applicable	Ditto.	N
	Temperature rise of the terminals not more than 30 K above the temperature rise measured in clause 11 of IEC 60335-1	Ditto.	N
20	Clearances, creepage distances, solid insulation and coatings of rigid printed board assemblies		N
	This clause is applicable to clearances and creepage distances for functional insulation, across full disconnection and micro-disconnection, as stated in table 24	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
I	ANNEX I (NORMATIVE) MOTORS HAVING BASIC INSULATION THAT IS INADEQUATE FOR THE RATED VOLTAGE OF THE APPLIANCE		N
	The following modifications to this standard are applicable for motors having basic insulation that is inadequate for the rated voltage of the appliance:	No such part.	N
8	Protection against access to live parts		N
8.1	Metal parts of the motor are considered to be bare live parts	Ditto.	N
11	Heating		N
11.3	Temperature rise of the body of the motor is determined instead of the temperature rise of the windings	Ditto.	N
11.8	Temperature rise of the body of the motor, where in contact with insulating material, not exceeding values in table 3 for the relevant insulating material	Ditto.	N
16	Leakage current and electric strength		N
16.3	Insulation between live parts of the motor and its other metal parts not subjected to the test	Ditto.	N
19	Abnormal operation		N
19.1	The tests of 19.7 to 19.9 not carried out	Ditto.	N
19.101	Appliance operated at rated voltage with each of the following fault conditions:		N
	- short circuit of the terminals of the motor, including any capacitor incorporated in the motor circuit	Ditto.	N
	- short circuit of each diode of the rectifier	Ditto.	N
	- open circuit of the supply to the motor	Ditto.	N
	- open circuit of any parallel resistor, the motor being in operation	Ditto.	N
	Only one fault simulated at a time, the tests carried out consecutively	Ditto.	N
22	Construction		N
22.101	For class I appliances incorporating a motor supplied by a rectifier circuit, the d.c. circuit being insulated from accessible parts of the appliance by double or reinforced insulation	Ditto.	N
	Compliance checked by the tests specified for double and reinforced insulation	Ditto.	N
J	ANNEX J (NORMATIVE) COATED PRINTED CIRCUIT BOARDS		N
	Testing of protective coatings of printed circuit boards carried out in accordance with IEC 60664-3 with the following modifications:	Ditto.	N

Clause	Requirement - Test	Result - Remark	Verdict
6.6	Climatic sequence		N
	When production samples are used, three samples of the printed circuit board are tested	Ditto.	N
6.6.1	Cold		N
	The test is carried out at -25°C	Ditto.	N
6.6.3	Rapid change of temperature		N
	Severity 1 is specified	Ditto.	N
6.8.6	Partial discharge extinction voltage		N
	Type A coatings not subjected to a partial discharge test	Ditto.	N
6.9	Additional tests		N
	This subclause is not applicable	Ditto.	N
K	ANNEX K (NORMATIVE) OVERVOLTAGE CATEGORIES		N
	The information on overvoltage categories is extracted from IEC 60664-1	Class III equipment.	N
	Overvoltage category is a numeral defining a transient overvoltage condition	Ditto.	N
	Equipment of overvoltage category IV is for use at the origin of the installation	Ditto.	N
	Equipment of overvoltage category III is equipment in fixed installations and for cases where the reliability and the availability of the equipment is subject to special requirements	Ditto.	N
	Equipment of overvoltage category II is energy consuming equipment to be supplied from the fixed installation	Ditto.	N
	If such equipment is subjected to special requirements with regard to reliability and availability, overvoltage category III applies	Ditto.	N
	Equipment of overvoltage category I is equipment for connection to circuits in which measures are taken to limit transient overvoltages to an appropriate low level	Ditto.	N
L	ANNEX L (INFORMATIVE) GUIDANCE FOR THE MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES		N
	Sequences for the determination of clearances and creepage distances	Class III equipment.	N
M	ANNEX M (NORMATIVE) POLLUTION DEGREE		N
	The information on pollution degrees is extracted from IEC 60664-1		N

Clause	Requirement - Test	Result - Remark	Verdict
N	ANNEX N (NORMATIVE) PROOF TRACKING TEST		N
O	ANNEX O (INFORMATIVE) SELECTION AND SEQUENCE OF THE TESTS OF CLAUSE 30		N

Clause	Requirement - Test	Result - Remark	Verdict

10.1	TABLE: Power input deviation				N
Input deviation of/at:	P rated (W)	P measured (W)	dP	Required dP	Remark

10.2	TABLE: Current deviation				N
Current deviation of/at:	I rated (A)	I measured (A)	dI	Required dI	Remark

11.8	TABLE: Heating test, thermocouples		P
	Test voltage (V) ..... :	12Vdc	—
	Ambient (°C) ..... :		—

Thermocouple locations	dT (K)	Max. dT (K)
Surface of front Enclosure.	22.4	
PCB Under K3	13.2	
Battery Body	24.2	
C47 Body	7.9	
T4 Transformer Coil	31.2	
K2 Relay Body	14.2	
K1 Relay Body	9.4	
DC Jack Body	7.2	
Internal Plastic Enclosure	27.4	
Ambient Air	24.6°C	

11.8	TABLE: Heating test, resistance method		N
	Test voltage (V) ..... :		—
	Ambient, t_1 (°C) ..... :		—
	Ambient, t_2 (°C) ..... :		—

Temperature rise of winding	R_1 (Ù)	R_2 (Ù)	dT (K)	Max. dT (K)	Insulation class

Clause	Requirement - Test	Result - Remark	Verdict

13.2	TABLE: Leakage current		N
	Heating appliances: 1.15 x rated input.....:		—
	Motor-operated and combined appliances: 1.06 x rated voltage .....:		—

Leakage current between	I (mA)	Max. allowed I (mA)

13.3	TABLE: Electric strength		N

Test voltage applied between:	Voltage (V)	Breakdown (Yes/No)

14	TABLE: Transient overvoltages				N
Clearance between:	Cl (mm)	Required Cl (mm)	Rated impulse voltage (V)	Impulse test voltage (V)	Flashover (Yes/No)

16.2	TABLE: Leakage current		N
	Single phase appliances: 1.06 x rated voltage .....:		—
	Three phase appliances 1.06 x rated voltage divided by √3: .....:		—

Leakage current between	I (mA)	Max. allowed I (mA)

Clause	Requirement - Test	Result - Remark	Verdict

16.3	TABLE: Electric strength		N
Test voltage applied between:		Voltage (V)	Breakdown (Yes/No)

17	TABLE: Overload protection, temperature rise		N
Temperature rise of part/at:		dT (K)	Max. dT (K)

19.7	TABLE: Abnormal operation, locked rotor/moving parts		N
	Test voltage (V) ..... :		—
	Ambient, t_1 (°C) ..... :		—
	Ambient, t_2 (°C) ..... :		—

Temperature of winding	R_1 (Ù)	R_2 (Ù)	dT (K)	T (°C)	Max. T (°C)

19.9	TABLE: Abnormal operation, running overload		N
	Test voltage (V) ..... :		—
	Ambient, t_1 (°C) ..... :		—
	Ambient, t_2 (°C) ..... :		—

Temperature of winding	R_1 (Ù)	R_2 (Ù)	dT (K)	T (°C)	Max. T (°C)

Clause	Requirement - Test	Result - Remark	Verdict

19.13	TABLE: Abnormal operation, temperature rises		N
Thermocouple locations		dT (K)	Max. dT (K)

24.1	TABLE: Components				P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity
Enclosure	--	--	V-1 or better	UL 94	UL
Battery	--	--	Ni-MH Type, 9.6V (provided 4 cell)	--	UL
Power Adpaotor	--	--	Ip: 230Vac, 50Hz, 41mA, op: 12Vdc, 300mA	EN 61558-1	TUV PS
Choke (T4)	--	--	Class A	--	--
Choke (K3)	--	--	Class A	--	--
Relay (K2)	--	--	240Vac, 5A	--	VDE
[1)] An asterisk indicates a mark which assures the agreed level of surveillance					

28.1	TABLE: Threaded part torque test		N
Threaded part identification	Diameter of thread (mm)	Column number (I, II, or III)	Applied torque (Nm)

Clause	Requirement - Test	Result - Remark	Verdict

29.1	TABLE: Clearances		N
	Overvoltage category ... :		—

		Type of insulation:				
Rated impulse voltage (V):	Min. cl (mm)	Basic	Functional	Supplementary	Reinforced	Verdict / Remark
330	0,5					
500	0,5					
800	0,5					
1 500	1,0					
2 500	2,0					
4 000	3,5					
6 000	6,0					
8 000	8,5					
10 000	11,5					

29.2	TABLE: Creepage distances, basic, supplementary and reinforced insulation										N
Working voltage (V)	Creepage distance (mm) Pollution degree										
	1	2			3			Type of insulation			
		Material group			Material group						
		I	II	IIIa/IIIb	I	II	IIIa/IIIb	B*)	S*)	R*)	Verdict
=50	0,2	0,6	0,9	1,2	1,5	1,7	1,9		—	—	
=50	0,2	0,6	0,9	1,2	1,5	1,7	1,9	—		—	
=50	0,4	1,2	1,8	2,4	3,0	3,4	3,8	—	—		
>50 and = 125	0,3	0,8	1,1	1,5	1,9	2,1	2,4		—	—	
>50 and = 125	0,3	0,8	1,1	1,5	1,9	2,1	2,4	—		—	
>50 and = 125	0,6	1,6	2,2	3,0	3,8	4,2	4,8	—	—		
>125 and = 250	0,6	1,3	1,8	2,5	3,2	3,6	4,0		—	—	
>125 and = 250	0,6	1,3	1,8	2,5	3,2	3,6	4,0	—			
>125 and = 250	1,2	2,6	3,6	5,0	6,4	7,2	8,0	—	—		

Clause	Requirement - Test	Result - Remark	Verdict

>250 and = 400	1,0	2,0	2,8	4,0	5,0	5,6	6,3		—	—	
>250 and = 400	1,0	2,0	2,8	4,0	5,0	5,6	6,3	—		—	
>250 and = 400	2,0	4,0	5,6	8,0	10,0	11,2	12,6	—	—		
>400 and = 500	1,3	2,5	3,6	5,0	6,3	7,1	8,0		—	—	
>400 and = 500	1,3	2,5	3,6	5,0	6,3	7,1	8,0	—		—	
>400 and = 500	2,6	5,0	7,2	10,0	12,6	14,2	16,0	—	—		
>500 and = 800	1,8	3,2	4,5	6,3	8,0	9,0	10,0		—	—	
>500 and = 800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	—		—	
>500 and = 800	3,6	6,4	9,0	12,6	16,0	18,0	20,0	—	—		
>800 and = 1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5		—	—	
>800 and = 1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	—		—	
>800 and = 1000	4,8	8,0	11,2	16,0	20,0	22,0	25,0	—	—		
>1000 and = 1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0		—	—	
>1000 and = 1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	—		—	
>1000 and = 1250	6,4	10,0	14,2	20,0	25,0	28,0	32,0	—	—		
>1250 and = 1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0		—	—	
>1250 and = 1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	—		—	
>1250 and = 1600	8,4	12,6	18,0	25,0	32,0	36,0	40,0	—	—		
>1600 and = 2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0		—	—	
>1600 and = 2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	—		—	
>1600 and = 2000	11,2	16,0	22,0	32,0	40,0	44,0	50,0	—	—		
>2000 and = 2500	7,5	10,0	14,0	20,0	25, 0	28,0	32,0		—	—	
>2000 and = 2500	7,5	10,0	14,0	20,0	25, 0	28,0	32,0	—		—	
>2000 and = 2500	15,0	20,0	28,0	40,0	50,0	56,0	64,0	—	—		
>2500 and = 3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0		—	—	

Clause	Requirement - Test	Result - Remark	Verdict

>2500 and = 3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	—		—	
>2500 and = 3200	20,0	25,0	36,0	50,0	64,0	72,0	80,0	—	—		
>3200 and = 4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0		—	—	
>3200 and = 4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	—		—	
>3200 and = 4000	25,0	32,0	44,0	64,0	80,0	90,0	100,0	—	—		
>4000 and = 5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0		—	—	
>4000 and = 5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	—		—	
>4000 and = 5000	32,0	40,0	56,0	80,0	100,0	112,0	126,0	—	—		
>5000 and = 6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0		—	—	
>5000 and = 6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	—		—	
>5000 and = 6300	40,0	50,0	72,0	100,0	126,0	142,0	160,0	—	—		
>6300 and = 8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0		—	—	
>6300 and = 8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	—		—	
>6300 and = 8000	50,0	64,0	90,0	126,0	160,0	180,0	200,0	—	—		
>8000 and = 10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0		—	—	
>8000 and = 10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	—			
>8000 and = 10000	64,0	80,0	112,0	160,0	200,0	220,0	250,0	—	—		
>10000 and = 12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0		—	—	
>10000 and = 12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	—		—	
>10000 and = 12500	80,0	100,0	142,0	200,0	250,0	280,0	320,0	—	—		
*), B=Basic, S=Supplementary and R=Reinforced											

Clause	Requirement - Test	Result - Remark	Verdict

29.2	TABLE: Creepage distances, functional insulation							N
Working voltage (V)	Creepage distance (mm) Pollution degree							
	1	2			3			
		Material group			Material group			
		I	II	IIIa/IIIb	I	II	IIIa/IIIb	Verdict / Remark
=50	0,2	0,6	0,8	1,1	1,4	1,6	1,8	
>50 and = 125	0,3	0,7	1,0	1,4	1,8	2,0	2,2	
>125 and = 250	0,4	1,0	1,4	2,0	2,5	2,8	3,2	
>250 and = 400	0,8	1,6	2,2	3,2	4,0	4,5	5,0	
>400 and = 500	1,0	2,0	2,8	4,0	5,0	5,6	6,3	
>500 and = 800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	
>800 and = 1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	
>1000 and = 1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	
>1250 and = 1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	
>1600 and = 2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	
>2000 and = 2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	
>2500 and = 3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	
>3200 and = 4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	

Clause	Requirement - Test	Result - Remark	Verdict

>4000 and = 5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	
>5000 and = 6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	
>6300 and = 8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	
>8000 and = 10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	
>10000 and = 12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	

30.1	TABLE: Ball pressure		N
Part	Test temperature (°C)	Impression diameter (mm)	Allowed impression diameter (mm)

ASIA SAFETY LINK INC.

Test Results and Calculations

93-0929-12

See Report

Asia Safety Link Inc.

***Measuring and Test Instruments**

Applied For Safety Inspection

Company/Test Institute: Product Safety Engineering, Inc.

Address of Test Site .: 9Fl-1.,No. 80,Sec.2, Kuang Fu , Road, San Chung City, Taipei Hsien, Taiwan, R.O.C.

Person responsible for

Maintenance & Calibration : Roger Huang

Division/Department : Testing Department Leader

Date and Signature :

Date : 31. AUG. 04

CALIBRATION RECORD

NO	MANUF.	DESCRIPTION	MODEL NO.	SERIAL NO.	CAL. DATE	DUE DATE
1	IDRC	Power Meter	CP-350	355920	02-JUN-04	01-JUN-05
2	CHROMA	Electronic Load	6312	63120271	05-JUN-04	04-JUN-05
3	MULTI	AC/DC Clamp Meter	230	96834	16-JUL-03	15-JUL-04
4	ED&D	Test Wire	TRP-02	20915	15-DEC-03	14-DEC-04
5	Vibration Source	Reactive type vibration test	VS-5060M	2090	17-JUN-04	16-JUN-05
6	SEW	DC Ammeter	ST-2000	PSE 6	02-APR-04	01-APR-05
7	SEW	DC Ammeter	ST-2000	PSE 7	02-APR-04	01-APR-05
8	EXTECH	HIPOT, GND, INSULATION	7440	E190075	18-MAR-04	17-MAR-05
9	SEW	DC Ammeter	ST-2000	PSE 9	02-APR-04	01-APR-05
10	YOKOGAWA	Thermocouple Meter	UR1000	12V510639	08-SEP-03	07-SEP-04
11	FLUKE	Dual Display Meter	45	5865114	24-OCT-03	23-OCT-04
12	YOKOGAWA	Thermocouple Meter	UR1000	12V510633	08-SEP-03	07-SEP-04
13	FLUKE	DMM	77	40000838	02-APR-04	01-APR-05
14	FLUKE	DMM	77	53611260	11-DEC-03	10-DEC-04
15	SIMPSON	Leakage Current Meter	228	PSE 15	18-NOV-03	17-NOV-04
16	YOKOGAWA	Thermocouple Meter	UR1000	12V510637	31-AUG-04	30-AUG-05
17	SEW	DC Ammeter	ST-2000	PSE 17	02-APR-04	01-APR-05
18	ED&D	Test Hook	TH-01	20918	15-DEC-03	14-DEC-04
19	SEW	DC Ammeter	ST-2000	PSE 19	02-APR-04	01-APR-05
20	ISUZU	Thermo-Hygrograph	3-3122-01	10160772	12-AUG-04	11-AUG-05
21	YOKOGAWA	Thermocouple Meter	UR1000	12V510638	31-AUG-04	30-AUG-05
22	TOYOTA	DC Ammeter	SPC	880953	26-FEB-04	25-FEB-05
23	ED&D	Test Pin	HLP-01	20916	15-DEC-03	14-DEC-04
24	TOYOTA	DC Ammeter	SPC	880958	26-FEB-04	25-FEB-05
25	TEKTRONIX	Oscilloscope	TDS 320	B020889	04-DEC-03	03-DEC-04
26	YOKOGAWA	Thermocouple Mater	DR130	12W512516	01-JUN-04	31-MAY-05
27	PSE	Test Finger	PSE-TF01	PSE 27	28-MAY-04	27-MAY-05
28	TOYOTA	DC Ammeter	SPC	880957	02-APR-04	01-APR-05
29	ED&D	Test Rod	TRP-01	20917	15-DEC-03	14-DEC-04
30	CHROMA	Electronic Load	6314	63141170	03-JUN-04	02-JUN-05
31	TOHNICHI	TORQUE DRIVER	RTD260CN	413344N	25-JUN-04	24-JUN-05
32	IDRC	Power Meter	CP-350	355918	02-JUN-04	01-JUN-05
33	IDRC	Power Meter	CP-350	355919	03-JUN-04	02-JUN-05
34	SEW	DC Ammeter	ST-2000	PSE 34	02-APR-04	01-APR-05
35	CHROMA	Electronic Load	6314	63141173	05-JUN-04	04-JUN-05
36	SEW	DC Ammeter	ST-2000	PSE 36	02-APR-04	01-APR-05
37	PRODIGIT	Electronic Load	3301A	40601A037	21-JUL-04	20-JUL-05
38	SEW	DC Ammeter	ST-2000	PSE 38	26-FEB-04	25-FEB-05
39	PTL	Impact-Test Apparatus	F 22.50	5021025	28-JAN-04	27-JAN-05
40	SEW	DC Ammeter	ST-2000	PSE 40	26-FEB-04	25-FEB-05
41	YOKOGAWA	Thermocouple Meter	DR231-00-32-1D	12B823473	08-SEP-03	07-SEP-04
42	ED&D	Test Finger	ULP-01	20920	15-DEC-03	14-DEC-04
43	SEW	AC Ammeter	ST-2000	PSE 43	21-NOV-03	20-NOV-04
44	SEW	AC Ammeter	ST-2000	PSE 44	21-NOV-03	20-NOV-04
45	SEW	AC Ammeter	ST-2000	PSE 45	21-NOV-03	20-NOV-04

Asia Safety Link Inc.

NO	MANUF.	DESCRIPTION	MODEL NO.	SERIAL NO.	CAL. DATE	DUE DATE
46	SEW	AC Ammeter	ST-2000	PSE 46	02-APR-04	01-APR-05
47	TOHNICHI	TORQUE DRIVER	RTD60CN	433336Q	25-JUN-04	24-JUN-05
48	ED&D	Test Probe	TTP-01	20919	15-DEC-03	14-DEC-04
49	SEW	DC Ammeter	ST-2000	PSE 49	26-FEB-04	25-FEB-05
50	SEW	DC Ammeter	ST-2000	PSE 50	25-JUN-04	24-JUN-05
51	IDRC	Power Meter	CP-350	355921	03-JUN-04	02-JUN-05
52	CHROMA	Electronic Load	6312	63120244	02-JUN-04	01-JUN-05
53	SEW	DC Ammeter	ST-2000	PSE 53	26-FEB-04	25-FEB-05
54	PSE	Steel Ball	PSE-BO1	PSE-54	28-MAY-04	27-MAY-05
55	CHROMA	Electronic Load	6312	63120268	01-JUN-04	31-MAY-05
56	CHUYI	IMPULSE	IEC-950	91005	26-FEB-04	25-FEB-05
57	PLT	SURGE	H 06e	5011395	08-JUL-04	07-JUL-05
58	ALGOL	Push Pull Gauge	HF-50	HF-104872	16-JUN-04	15-JUN-05
59	CHROMA	Electronic Load	6314	63141181	11-JUN-04	10-JUN-05
60	GIANT FORCE	Chamber	GTH-225-40-1P-U	MAA0406-19	27-MAY-04	26-MAY-05
61	TEKTRONIX	Oscilloscope	TDS-3032B	B015275	28-NOV-03	27-NOV-04
62	SIMPSON	Leakage Current Meter	229-2	PSE 62	01-DEC-03	30-NOV-04
63	CHROMA	Electronic Load	6312	63120269	01-JUN-04	31-MAY-05
64	YOKOGAWA	Thermocouple Meter	DR130	47JE0095	01-JUN-04	31-MAY-05
65	LUTRON	Milliohm Meter	MO-2001	L093865	10-MAR-04	09-MAR-05
66	CHROMA	Electronic Load	6314	63141179	01-JUN-04	31-MAY-05
67	SEW	DC Ammeter	ST-2000	PSE 67	07-JUL-04	06-JUL-05
68	PSE	Ball-Pressure apparatus	PSE-B02	PSE 68	28-MAY-04	27-MAY-05
69	CHROMA	Electronic Load	6304	63042081	02-JUN-04	01-JUN-05
70	PSE	Test Pin	PSE-TP01	PSE 70	02-JUN-04	01-JUN-05
71	CHROMA	Electronic Load	6312	63120257	05-JUN-04	04-JUN-05
72	OSK	Caliper	DC-6”	060286	08-SEP-03	07-SEP-04
73	CHROMA	Electronic Load	6314	63141184	01-JUN-04	31-MAY-05
74	YOKOGAWA	Thermocouple Meter	DR130	7700GC390	24-OCT-03	23-OCT-04
75	YOKOGAWA	Thermocouple Meter	DR130	7700GC387	10-NOV-03	09-NOV-04
76	POLYCAST	Pitch Angle Calculator	PATENT 4125490	PSE 76	27-JAN-04	26-JAN-05
77	CHROMA	Electronic Load	6304	63042076	02-JUN-04	01-JUN-05
78	YOKOGAWA	Power Meter	2433	69LD0026	17-AUG-04	16-AUG-05
79	PRODIGIT	Electronic Load	3302	108020118	26-AUG-04	25-AUG-05
80	PRODIGIT	Electronic Load	3301A	10701A071	04-SEP-03	03-SEP-04
81	PRODIGIT	Electronic Load	3301A	10701A074	26-AUG-04	25-AUG-05
82	PRODIGIT	Electronic Load	3302	108020107	26-AUG-04	25-AUG-05
83	PRODIGIT	Electronic Load	3302	108020106	26-AUG-04	25-AUG-05
84	PRODIGIT	Electronic Load	3302	108020104	26-AUG-04	25-AUG-05
85	PRODIGIT	Electronic Load	3302	108020105	26-AUG-04	25-AUG-05
86	PRODIGIT	Electronic Load	3302	108020099	27-AUG-04	26-AUG-05
87	PRODIGIT	Electronic Load	3301A	10801A078	15-SEP-03	14-SEP-04
88	PRODIGIT	Electronic Load	3301A	10801A079	08-SEP-03	07-SEP-04
89	PRODIGIT	Electronic Load	3301A	10801A077	15-SEP-03	14-SEP-04
90	PRODIGIT	Electronic Load	3301A	10801A076	08-SEP-03	07-SEP-04
91	CASIO	Timekeeper	HS-5	1B02P291	05-NOV-03	04-NOV-04
92	YOKOGAWA	THERMQ RECORDER	DR 130	12W512515	26-JUN-04	25-JUN-05
93	PSE	Over Voltage Machine	CS90104	IJ-0354,IJ-0434	28-APR-04	27-APR -05
94	YOKOGAWA	THERMQ RECORDER	DR 130	27D518761	16-JUN-04	15-JUN-05
95	YOKOGAWA	THERMQ RECORDER	DR 130	27D236826	16-JUN-04	15-JUN-05
96	YOKOGAWA	THERMQ RECORDER	DR 130	27D236828	16-JUN-04	15-JUN-05
97	PRODIGIT	Electronic Load	3302	406020122	02-JUL-04	01-JUL-05
98	PRODIGIT	Electronic Load	3302	406020129	02-JUL-04	01-JUL-05
99	PRODIGIT	Electronic Load	3302	406020125	02-JUL-04	01-JUL-05
100	PRODIGIT	Electronic Load	3302	406020119	02-JUL-04	01-JUL-05
101	PRODIGIT	Electronic Load	3301A	40201A027	02-JUL-04	01-JUL-05
102	YOKOGAWA	THERMQ RECORDER	DR230	27D631525	02-JUL-04	01-JUL-05
103	PRODIGIT	Electronic Load	3301A	40601A035	21-JUL-04	20-JUL-05
104	PRODIGIT	Electronic Load	3301A	40601A036	21-JUL-04	20-JUL-05
105	PRODIGIT	Electronic Load	3301A	40601A038	21-JUL-04	20-JUL-05
106	PRODIGIT	Electronic Load	3302	405020066	21-JUL-04	20-JUL-05
107	PRODIGIT	Electronic Load	3302	405020080	21-JUL-04	20-JUL-05

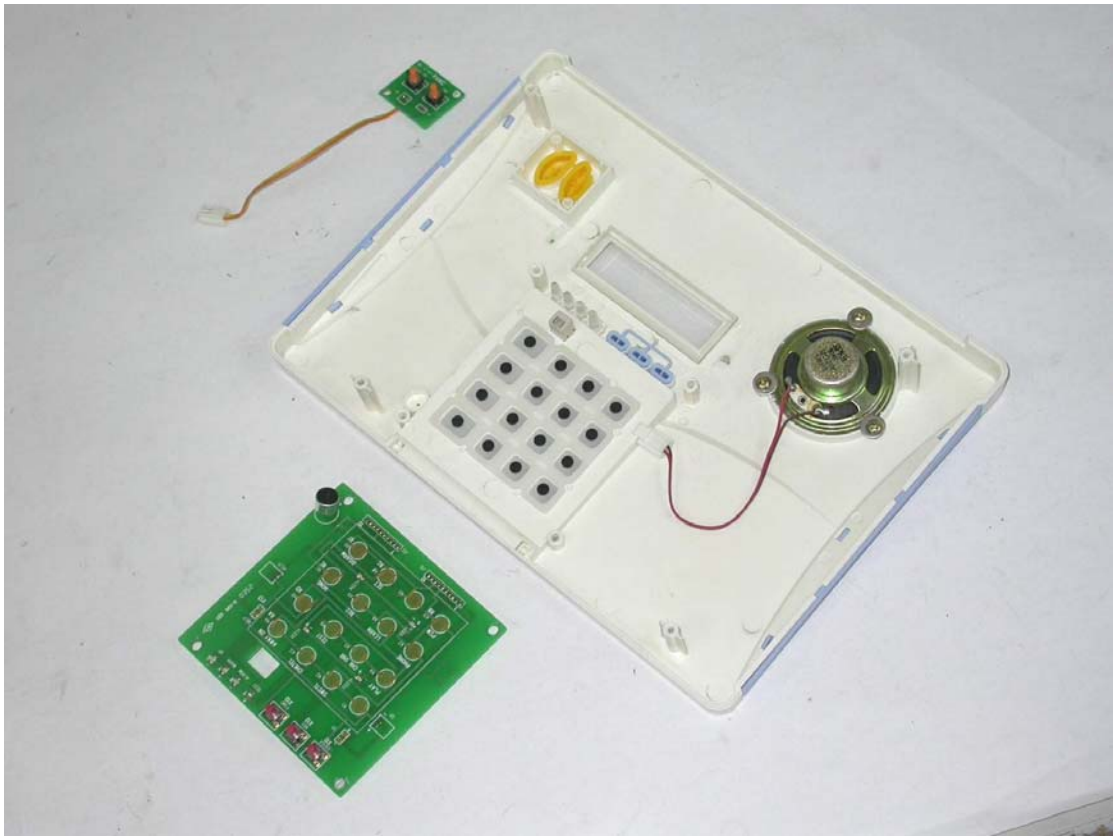
ASIA SAFETY LINK INC.

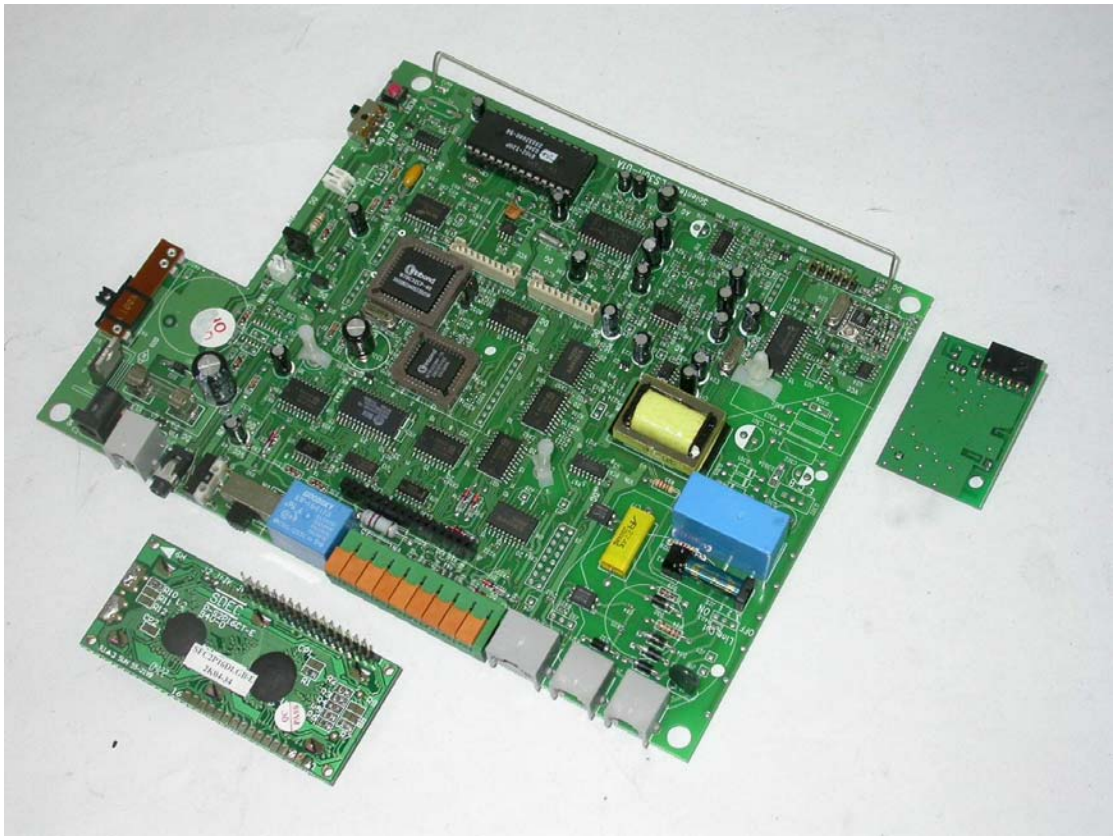
User's Instruction and Photos

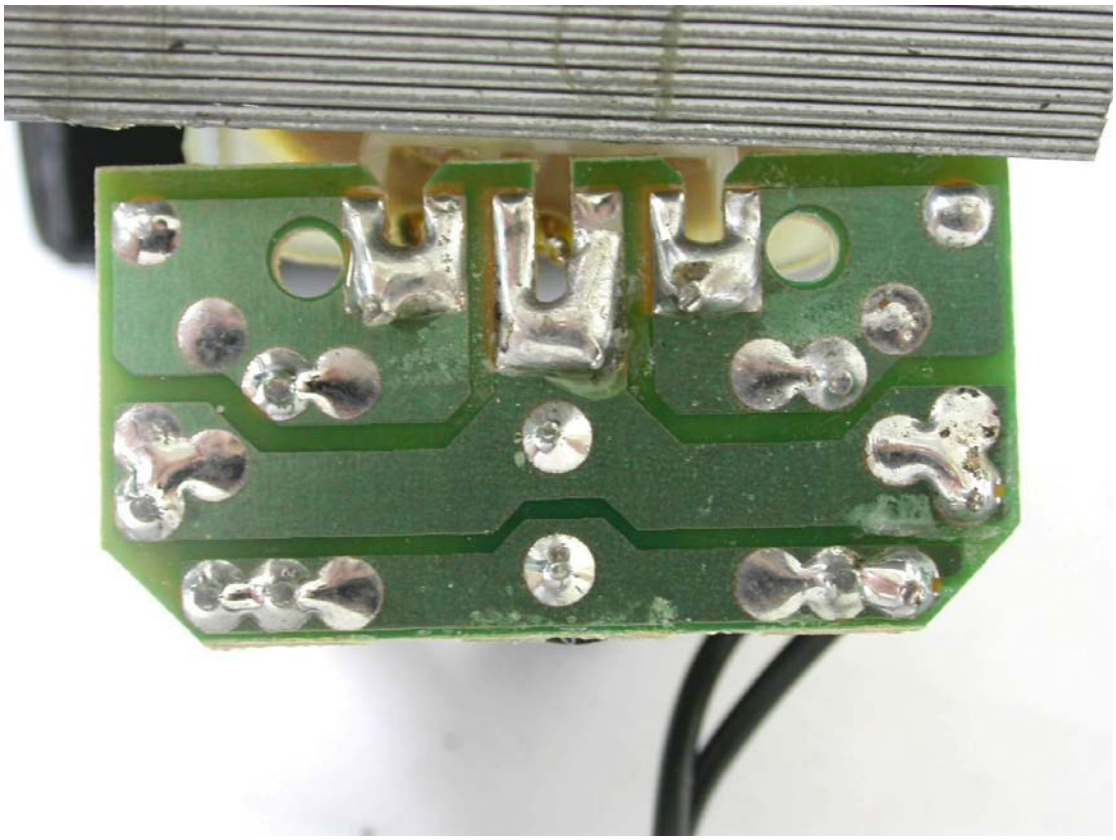
93-0929-12

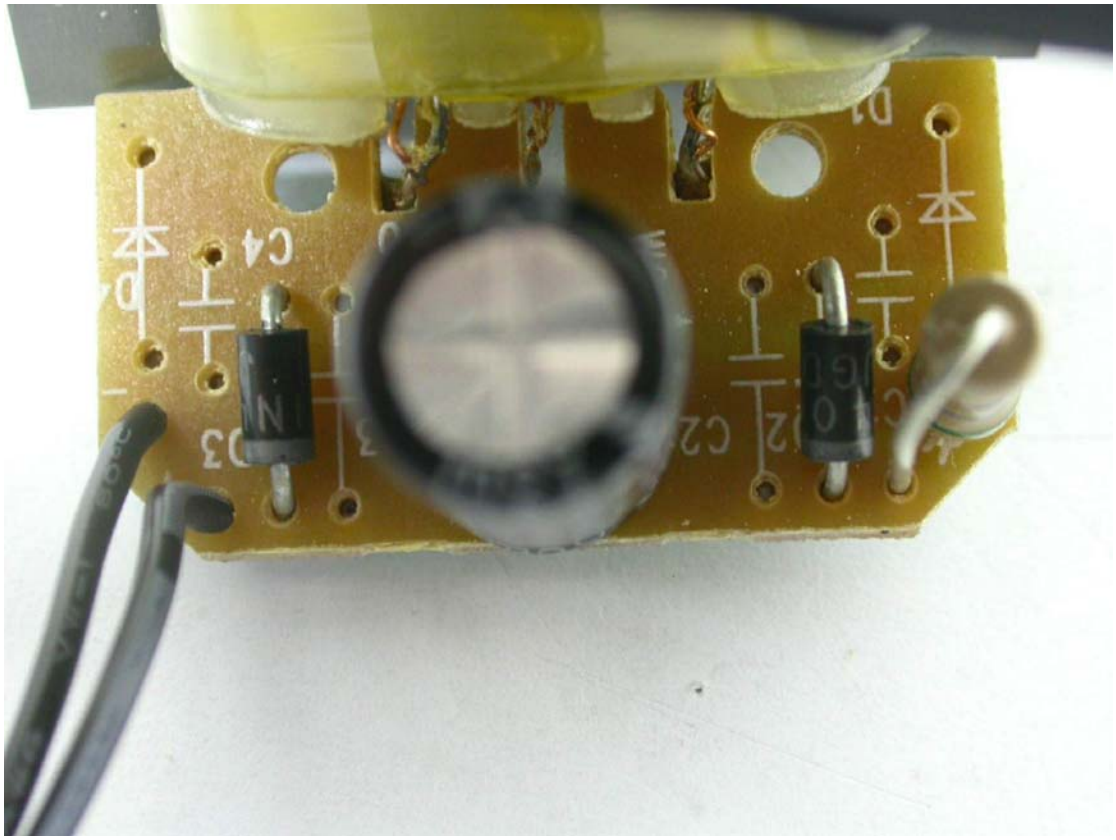

YES
NO
FUNC
ESC
LifeSOS

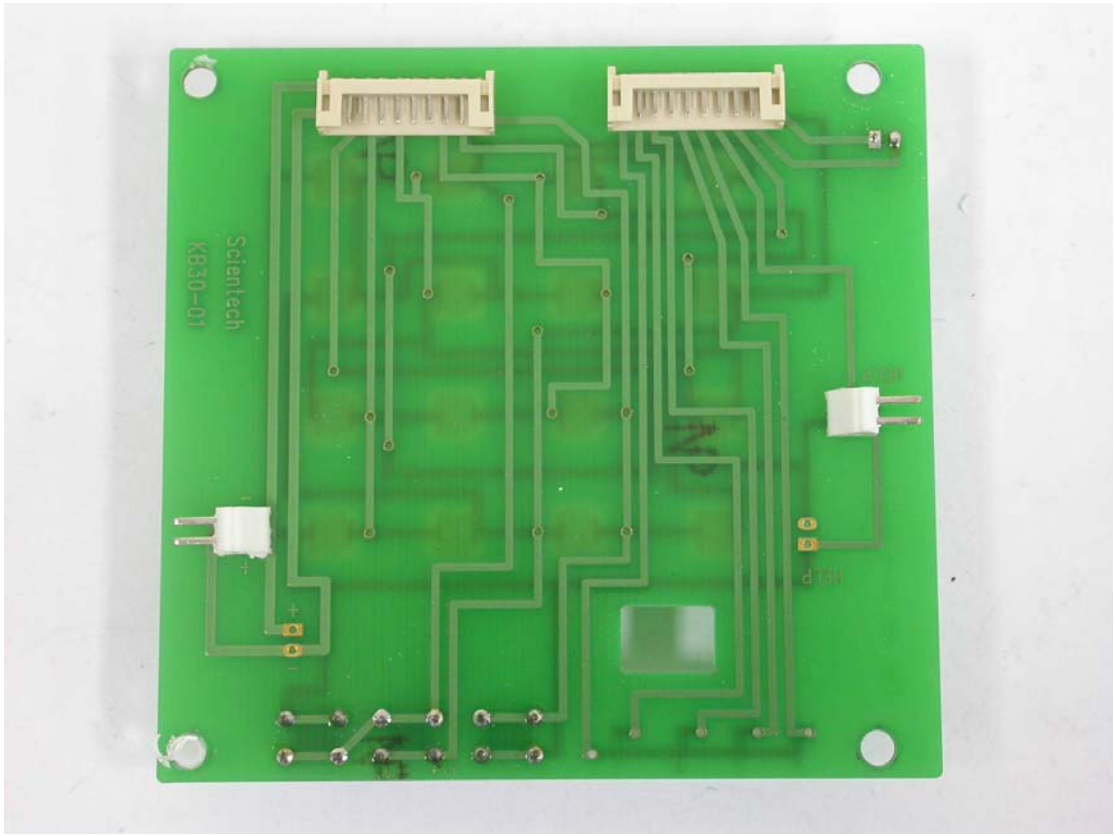

DC 12V
COM1
AUX
Audio
DRY
CONTACT
+12V
O/P
+12V
DC
RELAY
OUT
GND
IN
AUX
OUT
COM2
PHONE
TEL LINE

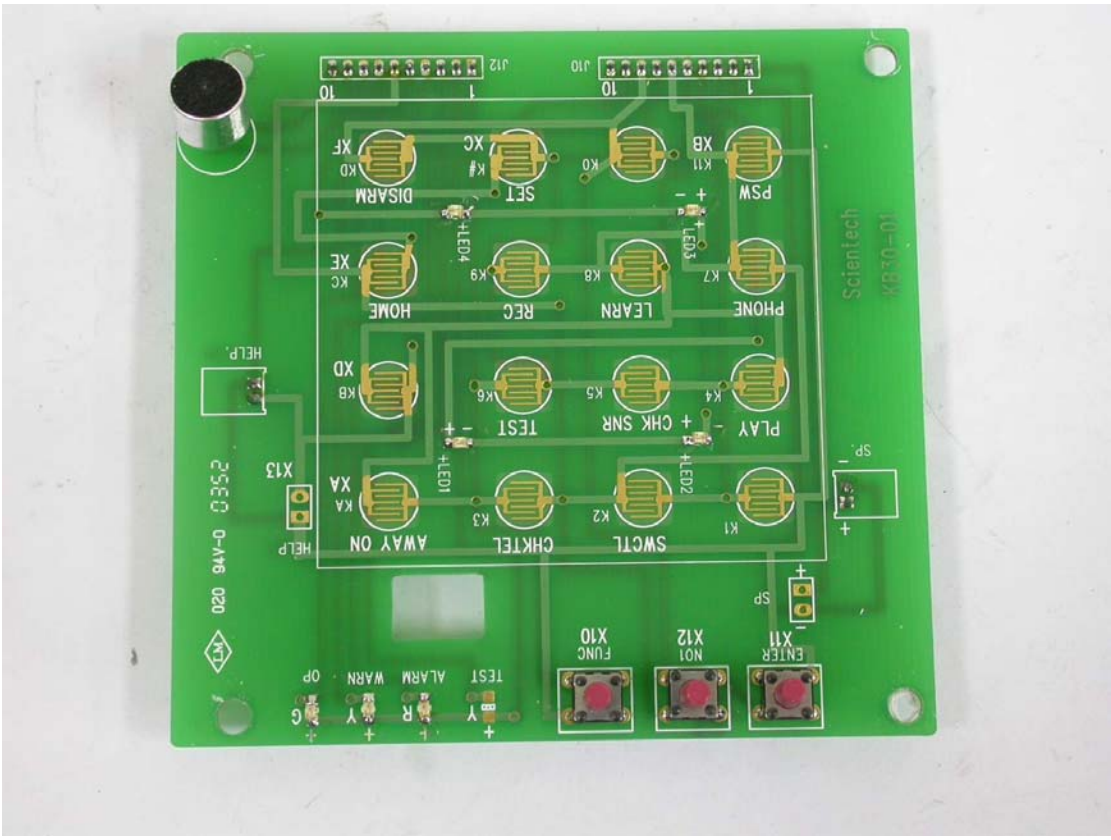


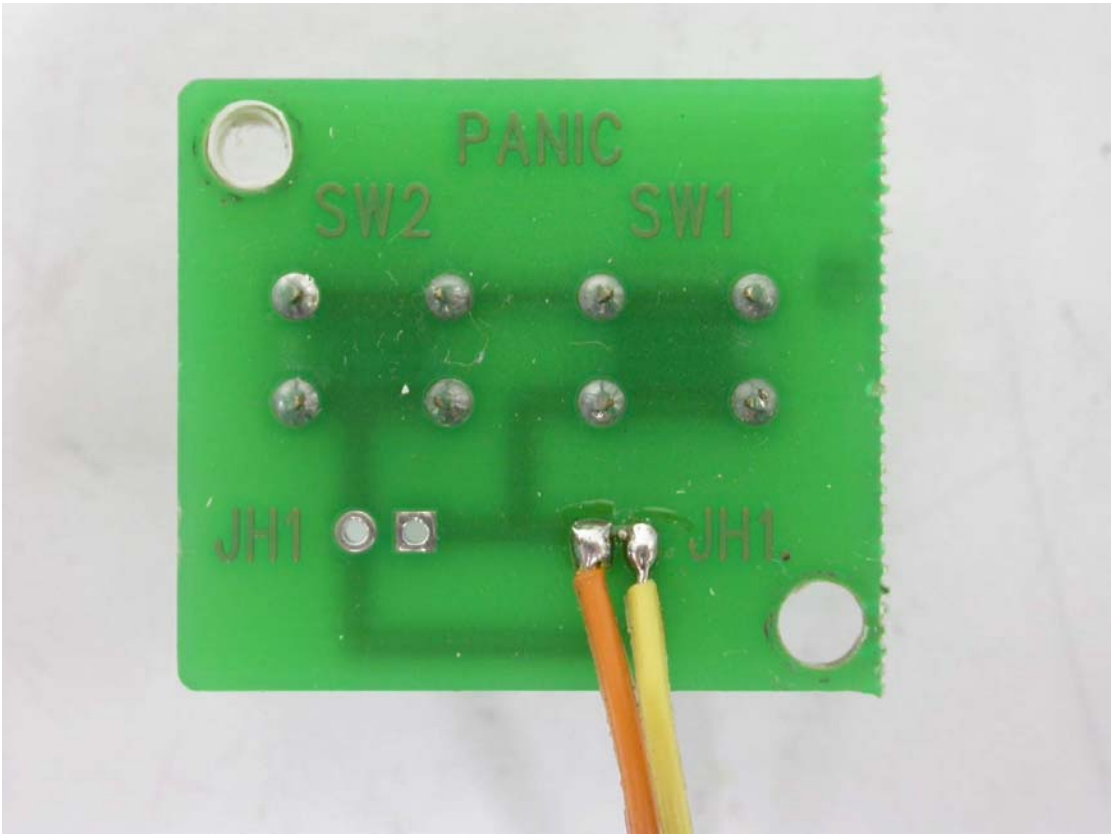


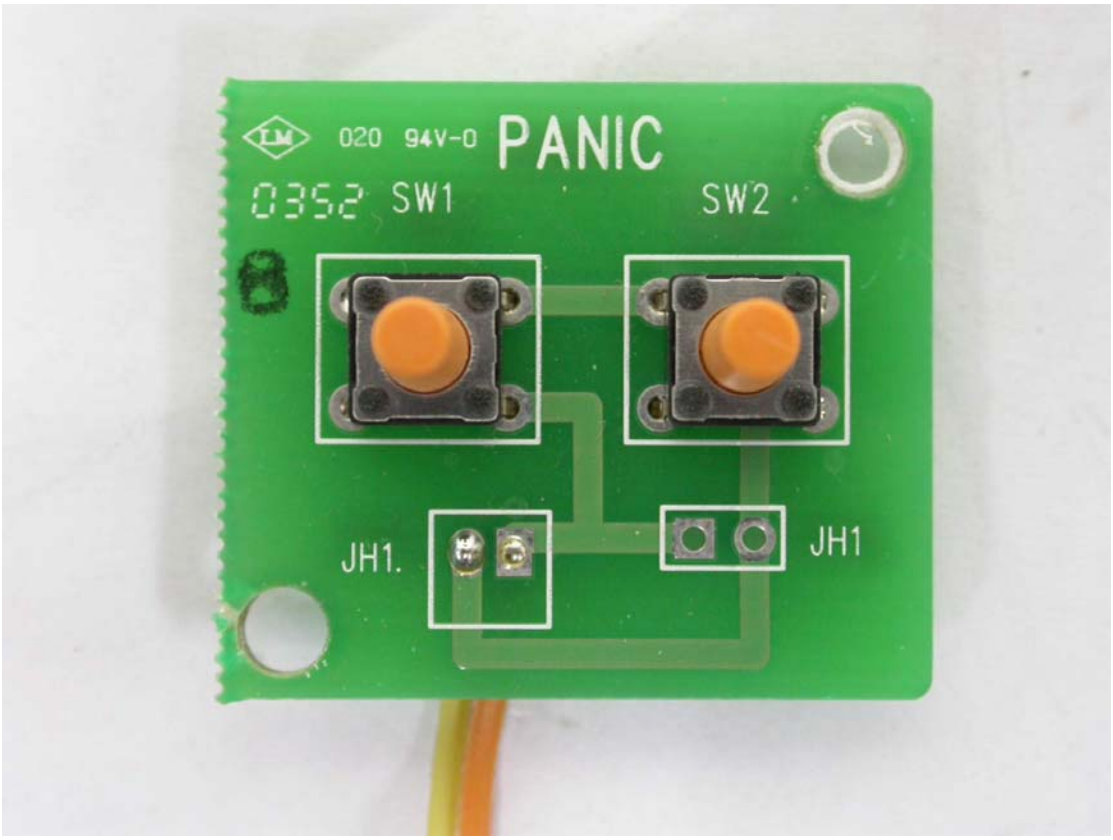




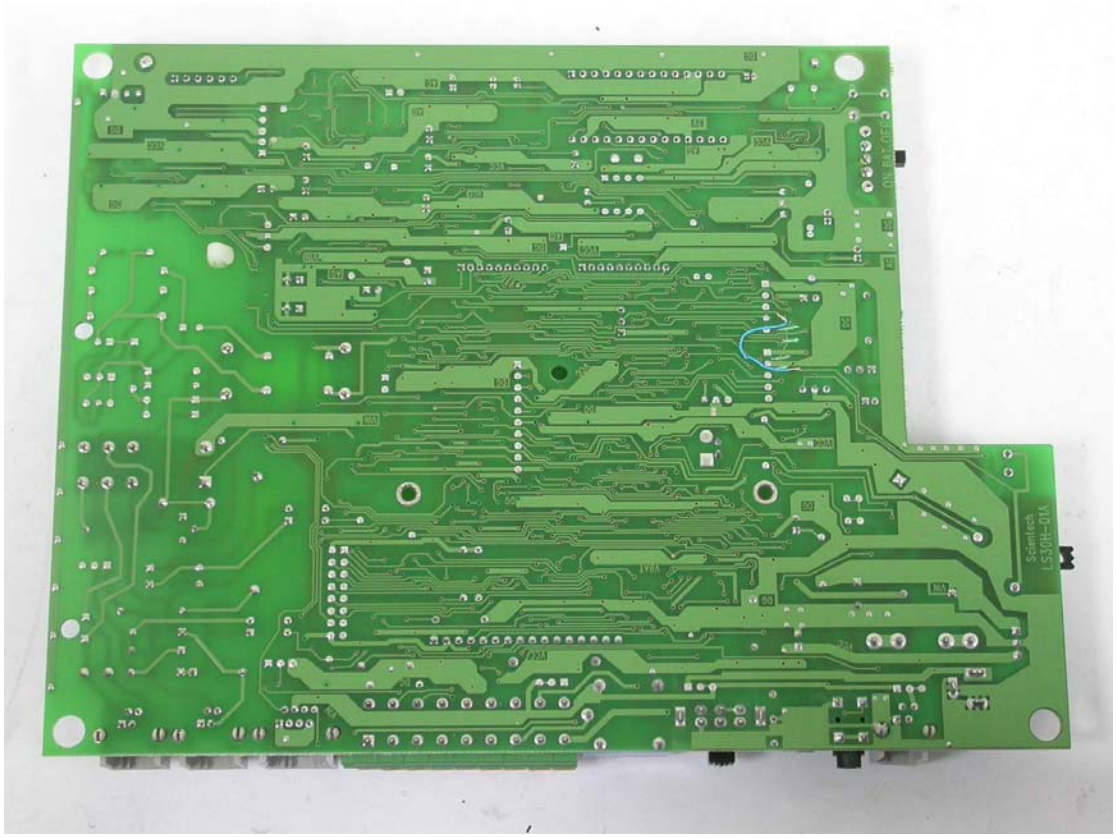

Scientech
KB30-01

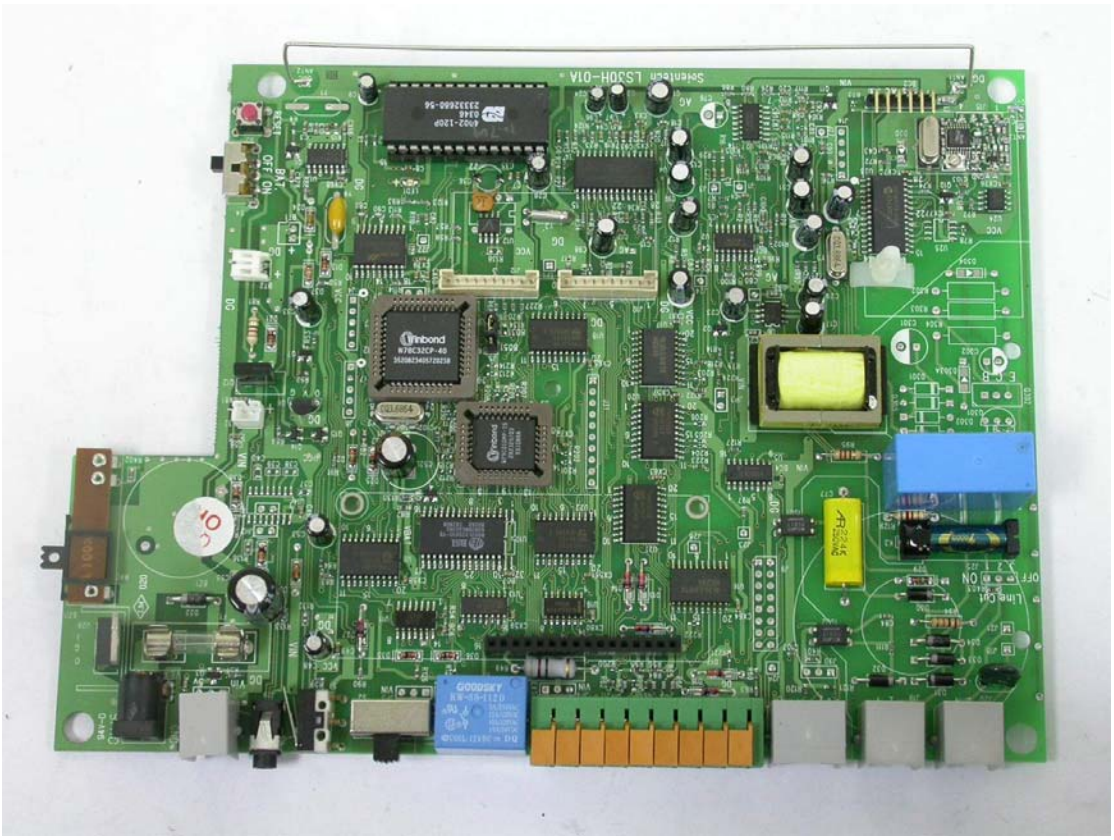

PSW
PHONE
LEARN
REC
HOME
SET
DISARM
PLAY
CHK SNR
TEST
SWCTL
CHKTEL
AWAY ON
FUNC
NO1
ENTER
TEST
ALARM
WARN
OP
Scientech
KB30-01

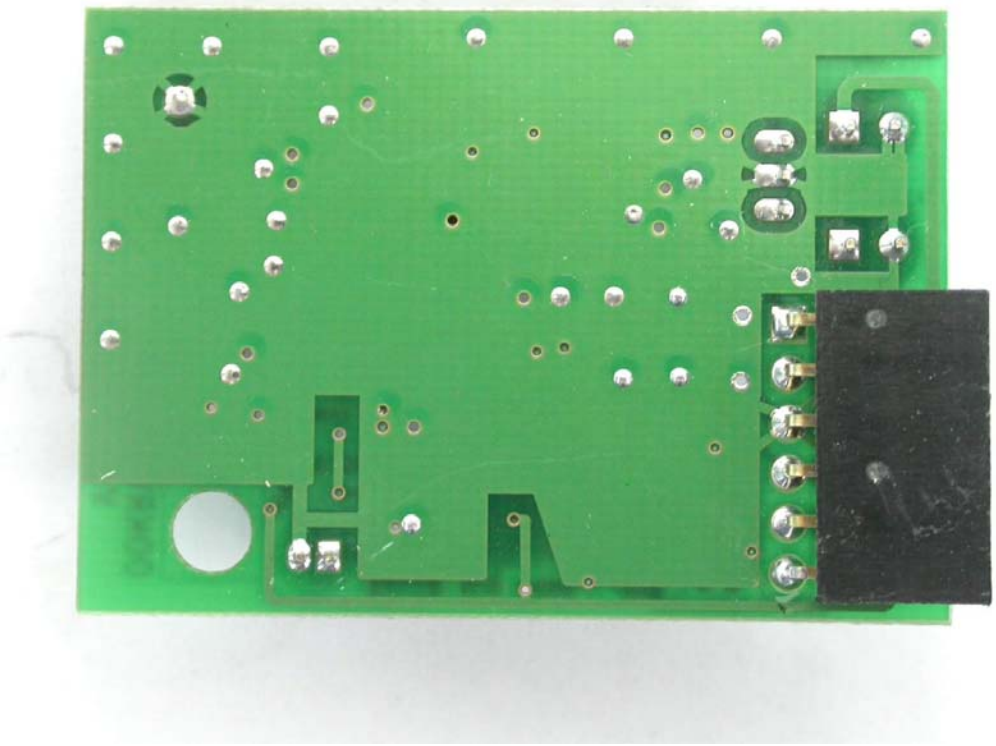

PANIC
SW2
SW1
JH1
JH1


020 94V-0
PANIC
0352
SW1
SW2
JH1.
JH1


SDEC
P-S2P16CT-E
94V-0
SFC2P16DLGB-E
2K04-34
PASS
R10
R11
R12
CP2
CP1
R1
R2
R3
R4
R5
R6
R7
R8
R9








ANT
V+
GND
DATA
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94V-0
CQ6.774
00KRV3A
V3.0


AC ADAPTER
MODEL: T41-12-300C-3
PRI: 230 ~ 50Hz 41mA
SEC: 12V ⎓ 300mA
TÜV GS
PRODUCT SERVICE
17627
EIA 363
MADE IN TAIWAN


AC ADAPTER
MODEL: T41-12-300C-3
PRI: 230 ~ 50Hz 41mA
SEC: 12V ⎓ 300mA
TUV GS
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Test Results and Calculations

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User's Instruction and Photos

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