IEC IECEE CB SCHEME

Ref. Certif. No.

JPTUV-019195

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE CERTIFICATS D'ESSAIS DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE
CERTIFICAT D'ESSAI OC

Product Produit	Window Type Air Conditioner
Name and address of the applicant Nom et adresse du demandeur	Electra Consumer Products 21 Aminadav St., Tel-Aviv 67067, Israel
Name and address of the manufacturer Nom et adresse du fabricant	Electra Consumer Products 21 Aminadav St., Tel-Aviv 67067, Israel
Name and address of the factory Nom et adresse de l'usine	See additional page(s)
Rating and principal characteristics Valeurs nominales et caractéristiques principales	AC 220-230V; 50Hz; 1100W; Class I IP24 (outdoor part only) Refrigerant : R407C
Trade mark (if any) Marque de fabrique (si elle existe)	ELECTRA
Model/type Ref. Ref. de type	KC-25M/B1 R407C
Additional information (if necessary) Information complémentaire (si nécessaire)	
A sample of the product was tested and found to be in conformity with Un échantillon de ce produit a été essayé et a été considéré conforme à la	IEC 60335-2-40:2002 IEC 60335-1:2001+A1
As shown in the Test Report Ref. No.which forms part of this Certificate Comme indiqué dans le Rapport d'essais numéro de référence qui constitue une partie de ce Certificat	16009949 001

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme National de Certification

TÜV **TÜV Rheinland Group**

TÜV Rheinland Japan Ltd.
German Technology Assessment Center
4-25-2 Kita-Yamata, Tsuzuki-ku
Yokohama 224-0021 Japan
Phone + 81 45 470-3888
Fax + 81 45 470-5221
Mail: info@jpn.tuv.com
Web: www.tuv.com

Date: 15.06.2007

Signature: Dipl. Ing. M. Giagla

Ref. Certif. No.

Appendix to CB Certificate JPTUV-019195 PAGE 1 OF 1
Report Number: 16009949 001

Name and address of the manufacturer
Electra Consumer Products
21 Aminadav St., Tel-Aviv
67067
Israel

Name and address of the factory(ies)
Electra Air-conditioning (Shenzhen) Co., Ltd.

2 WUHE AVENUE S.,
BANTIAN, BUJI
Shenzhen,Guangdong, P.R. China

Electra Consumer Products Ltd.

Saphir St.1
75143 Rishon Lezion
Israel

Additional information (if necessary)
Information complémentaire (si nécessaire)

Date: 15.06.2007

Dipl. Ing. M. Glagla

Date: Signature:

10/061a 8.06

Test Report issued under the responsibility of

TÜVRheinland®

TEST REPORT
IEC 60335-2-40
Safety of household and similar electrical appliances
Part 2: Particular requirements for electrical heat pumps, air conditioners and dehumidifier

Report Reference No. ..... :	16009949 001	
Tested by (name + signature)..... :	Leon Tan	.....
Witnessed by (name + signature)..... :	N/A	.....
Supervised by (name + signature)..... :	N/A	
Approved by (name + signature) ..... :	Stone Shi	Stone Shi .....
Contents ..... :	64 pages	
Date of issue..... :	2007-05-24	
CB Testing Laboratory ..... :	TÜV Rheinland (Guangdong) Ltd.	
Address..... :	43/F, Metro Plaza, 183 Tianhe Rd. North, Guangzhou 510620, P. R. China	
Testing location / procedure ..... :	CBTL ☒ RMT ☐ SMT ☐ WMT ☐ TMP ☐	
Testing location / address..... :	Unit C-101, No.11 Caipin Road, GZ Science City, Guangzhou 510663 P. R. China	
Applicant's name ..... :	ELECTRA CONSUMER PRODUCTS	
Address..... :	21 Aminadav St, Tel-Aviv, 67067 Israel	
Test specification:		
Standard ..... :	IEC 60335-2-40:2002, used in conjunction with IEC 60335-1:2001 (incl. Corrigendum 1:2002) + A1:2004	
Test procedure..... :	CB Scheme	
Non-standard test method..... :	N/A	
Test Report Form No. ..... :	IEC60335_2_40E	
TRF Originator..... :	PSB Corporation Pte. Ltd.	
Master TRF..... :	Dated 2005-11	

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.

Test item description ..... :	Window Type Air Conditioner
Trademark ..... :	ELECTRA
Model and/or type reference ..... .:	KC-25M/B1 R407C
Manufacturer……..:	Same as applicant
Factory……..:	See page 3
Rating(s) ..... :	AC220-230V~ 50Hz Refrigerant: R407C Rated power input:1100W

Copy of marking plate :

ELECTRA	**KC-25M/B1 R407C**		
Prod No.:	Fuse: 10A (aM)	Pe: 1060W	Cooling capacity: 2550W(8700Btu/h)
Type:	COSφ=0.95	Prated:1100W	
220-230V~ 50Hz	IP24(OU)	Pi/Po: 0.6/2.4 MPa	Dehumidification: 1.3 l/h
		Ps/Pd: 0.6/2.6 MPa	Temp.Class: T1
R407C: 510g		Sound power:56dB	Weight: 37kg

SUMMARY OF TESTING

1. The test samples were prototype samples without serial numbers.
2. The constructions of alternate components (in table 24.1) were considered in this report.

Test item particulars ..... :

Serial Number ..... : Prototype samples without serial numbers.

Additional information:

Supply connection..... : Type Y attachment (Power cord with plug)
Type of mounting ..... : Fixed appliance
Switch ..... : Yes
Thermostat ..... : Yes
Thermal cut-out ..... : Yes, built in fan motor and compressor
Electronic circuit ..... : Yes
Programmer controller ..... : No
Timer ..... : No
Motor with capacitor in auxiliary winding ..... : Yes
Drain hole provided ..... : Yes
Supplementary heater ..... : No
PTC heating element..... : No
Pressure relief device ..... : No
Container…….. : No

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 ..... : 2007-04-10
Date(s) of performance of tests ..... : 2007-04-10—2007-05-23

General remarks:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the issuing testing laboratory.
"(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 is used as the decimal separator.

Factory information:

Factory 1: Electra Air-Conditioning (Shenzhen) Co., Ltd.
Address: 2 Wuhe Avenue S., Bantian, Buji, Shenzhen, Guangdong, P. R. China

Factory 2: ELECTRA CONSUMER PRODUCTS LTD.
Address: Sapir 1, Rishon Lezion, 75704, Israel.

General product information

The appliance is window type room air conditioner. The range of working temperature is listed below:

	Indoor (°C)		Outdoor (°C)	
--	DB	WB	DB	WB
Cooling	21-32	15-23	10-46	N/A

The filter installed under the front frame at the factory can be reused after cleaning and drying by the end user.

The water-proof level specified on the label of the outdoor part is IP24.

The main power is supplied via the indoor part by a single-phase, 3-pole power cord with plug.

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
5	GENERAL CONDITIONS FOR THE TESTS		P
	Tests performed according to cl. 5, e.g. nature of supply, sequence of testing, etc.		P
5.6	Appropriate controls rendered inoperative during the test (IEC 60335-2-40:2002)		P
5.101	Motor-compressor comply with IEC 60335-2-34 (IEC 60335-2-40:2002)	Approved motor compressor	P
	Motor-compressor subjected to the relevant test (IEC 60335-2-40:2002)		N/A
6	CLASSIFICATION		P
6.1	Protection against electric shock: Class I, II, III (IEC 60335-2-40:2002).....	Class I	P
6.2	Protection against harmful ingress of water, IP degree in accordance with IEC 60529 (IEC 60335-2-40:2002)		N/A
	Appliance for outdoor use (IEC 60335-2-40:2002)	IP24 for outdoor part	P
	Appliance for indoor use (IEC 60335-2-40:2002)		P
	Appliance for laundry rooms (IEC 60335-2-40:2002)	“Warning: the appliance shall not be installed in the laundry” is stated on user manual	N/A
6.101	Degree of accessibility (accessible/not accessible to the general public) (IEC 60335-2-40:2002)	Accessible to general public, but intended to be technically maintained only by qualified service personnel.(except for air-filter cleaning)	P
7	MARKING AND INSTRUCTIONS		P
7.1	Rated voltage or voltage range (V).....	220-230V~	P
	Symbol for nature of supply including number of phases, unless for single phase operation (IEC 60335-2-40:2002)	~	P
	Rated frequency (Hz).....	50Hz	P
	Rated power input (W).....	1100W	P
	Rated current (A)	Not marked	N/A
	Manufacturer's or responsible vendor's name, trademark or identification mark	ELECTRA	P
	Model or type reference	KC-25M/B1 R407C	P
	Symbol 5172 of IEC 60417, for Class II appliances	Class I	N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	Symbol IEC 60417-5036, for the enclosure of electrically-operated water valves in external hose-sets for connection of an appliance to the water mains		N/A
	Mass of the refrigerant or of each refrigerant in a blend (except for azeotropic type) (IEC 60335-2-40:2002)	R407C: 510g	P
	Refrigerant identification (IEC 60335-2-40:2002) ..	R407C	P
	Permissible excessive operating pressure for sanitary hot water heat pumps (IEC 60335-2-40:2002)		N/A
	Excessive operating pressure of the refrigerant circuit for suction and discharge, if they differ (IEC 60335-2-40:2002)	See rating label	P
	Symbol for degree of protection against ingress of water, other than IPX0 (IEC 60335-2-40:2002).....	IP24(for outdoor part)	P
	Separate marking of the appliances with all the rated characteristics of the supplementary heaters (IEC 60335-2-40:2002)	No supplementary heater	N/A
	Marking of the direction of the fluid flow (IEC 60335-2-40:2002)		N/A
7.2	Warning for stationary appliances for multiple supply	Single supply	N/A
	Warning placed in vicinity of terminal cover	Single supply	N/A
7.3	Range of rated values marked with the lower and upper limits separated by a hyphen	220-230V	P
	Different rated values marked with the values separated by an oblique stroke		N/A
7.4	Appliances adjustable for different rated voltages, the voltage setting is clearly discernible	Single voltage supply range.	N/A
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		N/A
	the power input is related to the mean value of the rated voltage range		P
	Relation between marking for upper and lower limits of rated power input or rated current and voltage is clear		N/A
7.6	Correct symbols used		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
7.7	Connection diagram fixed to appliances to be connected to more than two supply conductors and appliances for multiple supply		P
7.8	Except for type Z attachment, terminals for connection to the supply mains indicated as follows:		P
	- marking of terminals exclusively for the neutral conductor (N)	Neutral conductor terminal marked with letter 'N'.	P
	- marking of protective earthing terminals (symbol 5019 of IEC 60417)	Protective earthing terminal is marked with symbol IEC 60417 No. 5019 next to the terminals.	P
	- marking not placed on removable parts		P
7.9	Marking or placing of switches which may cause a hazard	Marked on the switch.	P
7.10	Indications of switches on stationary appliances and controls on all appliances by use of figures, letters or other visual means.....		P
	The figure 0 indicates only OFF position, unless no confusion with the OFF position		P
7.11	Indication for direction of adjustment of controls	Marked.	P
7.12	Instructions for safe use provided	Provided. See Sub-clause 7.12.1.	P
	Classification of 6.101 included, for appliances not accessible to general public (IEC 60335-2-40:2002)		N/A
7.12.1	Sufficient details for installation or maintenance supplied (IEC 60335-2-40:2002):		P
	- national wiring regulations for installation	Stated in user manual.	P
	- dimensions of space for installation	Stated in user manual.	P
	- minimum clearance from appliances with supplementary heaters to combustible surfaces	Stated in user manual.	P
	- wiring diagram	Provided	P
	- range of external static pressures (only heat pumps and appliances with electric resistance heaters)	No static pressure required	N/A
	- method of connection to the electrical supply and interconnection of separate components		P
	- indication of suitable parts for outdoor use		N/A
	- type and rated characteristics of fuses	No fuse involved.	N/A
	- details of supplementary heating elements, including fitting instructions	No supplementary heating elements.	N/A
	- maximum and minimum water or brine operating temperatures	No water or brine used.	N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	- maximum and minimum water or brine operating pressures		N/A
	- indication of open water storage tanks		N/A
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		N/A
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		N/A
7.12.4	Instructions for built-in appliances:		N/A
	- dimensions of space	Not built in appliance.	N/A
	- dimensions and position of supporting means		N/A
	- distances between parts and surrounding structure		N/A
	- dimensions of ventilation openings and arrangement		N/A
	- connection to supply mains and interconnection of separate components		N/A
	- allow disconnection of the appliance after installation, by accessible plug or a switch in the fixed wiring, unless		N/A
	a switch complying with 24.3		N/A
7.12.5	Replacement cord instructions, type X attachment with a specially prepared cord		N/A
	Replacement cord instructions, type Y attachment	Type Y attachment.	P
	Replacement cord instructions, type Z attachment		N/A
7.12.6	Caution in the instructions for heating appliances with a non-self resetting thermal cut-out		N/A
7.12.7	Instructions for fixed appliances stating how the appliance is to be fixed		N/A
7.12.8	Instructions for appliances connected to the water mains:		N/A
	- max. inlet water pressure (Pa)		N/A
	- min. inlet water pressure, if necessary (Pa)		N/A
	Instructions concerning new and old hose-sets for appliances connected to the water mains by detachable hose-sets		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
7.13	Instructions and other texts in an official language	English	P
7.14	Marking clearly legible and durable	Polyester film labels are used for rating label. Other labeling/marking also provided in a reliable manner.	P
7.15	Marking on a main part		P
	Marking clearly discernible from the outside, if necessary after removal of a cover	Rating labels are applied on enclosure.	P
	For portable appliances, cover can be removed or opened without a tool		N/A
	For stationary appliances, name, trademark or identification mark and model or type reference visible after installation	Rating labels are applied on enclosure, and visible after installation.	P
	For fixed appliances, name, trademark or identification mark and model or type reference visible after installation according to the instructions		P
	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		P
	Marking on panel allowed, provided panel in place for intended operation of appliance (IEC 60335-2-40:2002)		P
7.16	Marking of a possible replaceable thermal link or fuse link clearly visible with regard to replacing the link		N/A
7.101	Marking of fuses and overload protective devices, if replaceable (IEC 60335-2-40:2002):		N/A
	- fuse rated current in amperes, type and rated voltage (IEC 60335-2-40:2002)		N/A
	- manufacturer and model of the overload protective device (IEC 60335-2-40:2002)		N/A
7.102	Marking for connection with aluminium wire, if necessary (IEC 60335-2-40:2002)	The use of aluminium wire is not intended.	P
8	PROTECTION AGAINST ACCESS TO LIVE PARTS		P
8.1	Adequate protection against accidental contact with live parts		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
8.1.1	Requirement applies for all positions, detachable parts removed	Installation only by authorized service personnel. Basic insulation is provided before installation is carried out. Test finger and test pin applied to all openings of the appliance after equipment was installed as described in installation manual. Insulation System: - No bare live parts accessible through openings in the enclosure. - Basic insulation provided between earthed metal electrical box and live parts inside	P
	Insertion or removal of lamps, protection against contact with live parts of the lamp cap	No lamp.	N/A
	Use of test probe B of IEC 61032: no contact with live parts		P
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	No bare live parts are accessible with the test pin.	N/A
	Test probe 13 also applied through openings in earthed metal enclosures having a non-conductive coating: no contact with live parts		N/A
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	No live parts of visible glowing heating elements	N/A
8.1.4	Accessible part not considered live if:		N/A
	- safety extra-low a.c. voltage: peak value not exceeding 42.4 V	No SELV circuits.	N/A
	- safety extra-low d.c. voltage: not exceeding 42.4 V		N/A
	- or separated from live parts by protective impedance		N/A
	If protective impedance: d.c. current not exceeding 2 mA, and		N/A
	a.c. peak value not exceeding 0.7 mA		N/A
	- for peak values over 42.4 V up to and including 450 V, capacitance not exceeding 0,1 μF		N/A
	- for peak values over 450 V up to and including 15 kV, discharge not exceeding 45 μC		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
8.1.5	Live parts protected at least by basic insulation before installation or assembly:		N/A
	- built-in appliances		N/A
	- fixed appliances		P
	- appliances delivered in separate units		N/A
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	Neither bare live parts nor basic insulated live parts are touchable with the test finger through openings in the enclosure. Internal basic insulation wires are well-fixed and supplementary insulation from accessible screw.	P
	Only possible to touch parts separated from live parts by double or reinforced insulation		P
9	STARTING OF MOTOR-OPERATED APPLIANCES		N/A
	Not applicable (IEC 60335-2-40:2002)		N/A
10	POWER INPUT AND CURRENT		P
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	(see appended table)	P
10.2	Current at normal operating temperature, rated voltage and normal operation not deviating from rated current by more than shown in table 2		N/A
11	HEATING		P
11.1	No excessive temperatures in normal use (IEC 60335-2-40:2002)		P
	Compliance is checked by the tests of Annex C, if (IEC 60335-2-40:2002):		N/A
	- temperature of motor winding exceeds values shown in Table 3 (IEC 60335-2-40:2002)		N/A
	- there is no doubt about the classification of the insulation system of the motor (IEC 60335-2-40:2002)	The insulation material used in the motors is UL approved.	P
11.2	Placing and mounting of appliance (IEC 60335-2-40:2002):		P
	- clearances to adjacent surfaces		P
	- flows		N/A
	- static pressures		N/A
	- adjustable limit controls set at the maximum cut-out setting and the minimum differential		P
	For appliances with supplementary heaters, use test casing of 11.9 (IEC 60335-2-40:2002)		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
11.2.1	For appliances with supplementary heaters, an inlet duct is connected to the inlet air opening (IEC 60335-2-40:2002)	No air inlet duct.	N/A
11.2.2	Air outlet duct if necessary (IEC 60335-2-40:2002)		N/A
11.3	Temperature rise determine by thermocouples or resistance method (IEC 60335-2-40:2002)	Temperature rise of fan motors were determined by the resistance method. For all other parts the thermocouple method was used.	P
11.4	Test performed at supply voltage between 0,94 and 1.06 times the rated voltage (IEC 60335-2-40:2002)	1,06x230=243,8V is considered to be the most unfavourable voltage.	P
	Heating appliances operated under normal operation at 1.15 times rated power input (IEC 60335-2-40:2002)	Not heating appliance	N/A
11.5	Test conducted in the heating mode and in the cooling mode, if both exist (IEC 60335-2-40:2002)	Cooling mode only	N/A
	All supplementary heating elements operative simultaneously (IEC 60335-2-40:2002)	No heating elements	N/A
11.6	Defrost test in the most unfavourable conditions, if needed (IEC 60335-2-40:2002)		N/A
11.7	Appliances operated continuously until steady conditions except for defrost tests (IEC 60335-2-40:2002)		P
11.8	Monitored temperatures not exceeding the values of Table 3 (IEC 60335-2-40:2002)	(See appended table)	P
	Protective devices do not operate (IEC 60335-2-40:2002)		P
	Sealing compound not flowing out (IEC 60335-2-40:2002)		P
	Temperature of the air in the outlet duct not exceeding 90°C (IEC 60335-2-40:2002)		P
11.9	Test casing and installation of the rest of the appliances in accordance with the manufacturer's instructions (IEC 60335-2-40:2002)		P
	Glass fibre insulation for appliances without indication of minimum clearances according to the manufacturer; the thermocouple in contact with the enclosure (IEC 60335-2-40:2002)		N/A
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
13.1	Leakage current not excessive and electric strength adequate		P
	Heating appliances operated at 1.15 times rated power input.....		P
	Motor-operated appliances and combined appliances supplied at 1.06 times rated voltage	1,06x230=243,8V	P
	Protective impedance and radio interference filters disconnected before carrying out the tests		N/A
13.2	Leakage current measured by means of the circuit described in figure 4 of IEC 60990		P
	Leakage current measurements	(see appended table)	P
13.3	The appliance is disconnected from the supply		P
	Electric strength tests according to table 4	(see appended table)	P
	No breakdown during the tests		P
14	TRANSIENT OVERVOLTAGES		N/A
	Appliances withstand the transient overvoltages to which they may be subjected		N/A
	Clearances having a value less than specified in table 16 subjected to an impulse voltage test, the test voltage specified in table 6		N/A
	No flashover during the test, unless of functional insulation		N/A
	In case of flashover of functional insulation, the appliance complies with clause 19 with the clearance short circuited		N/A
15	MOISTURE RESISTANCE		P
15.1	Enclosure provides the degree of moisture protection against the ingress of water (rain, overflow from the drain pan or defrosting, tests of 15.2, 15.3, 11.6 and Cl. 16) (IEC 60335-2-40:2002)	IP24 for outdoor part.	P
	After test, water inside the enclosure has not reduced the creepage distances and clearances below the values of Cl. 29 (IEC 60335-2-40)		P
	Motor-compressor not operated during 15.2 and 15.3 (IEC 60335-2-40:2002)		P
15.2	Tests in accordance with IEC 60529 in appliances other than IPX0, as specified (IEC 60335-2-40:2002)	Outdoor part	P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
15.3	Drain pan filled to brim and subjected to continuous overflow and fan(s) switched on (IEC 60335-2-40:2002)		P
16	LEAKAGE CURRENT AND ELECTRIC STRENGTH		P
16.1	Leakage current not excessive and electric strength adequate		P
	Protective impedance disconnected from live parts before carrying out the tests		N/A
16.2	Single-phase appliances: test voltage 1.06 times rated voltage.....	1,06X230=243,8V	P
	Three-phase appliances: test voltage 1.06 times rated voltage divided by √3		N/A
	Leakage current measurements	(see appended table)	P
16.3	Electric strength tests according to table 7	(see appended table)	P
	No breakdown during the tests		P
17	OVERLOAD PROTECTION OF TRANSFORMERS AND ASSOCIATED CIRCUITS		N/A
	No excessive temperatures in transformer or associated circuits in event of short-circuits likely to occur in normal use	No transformer	N/A
	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.....		N/A
	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		N/A
	Temperature of the winding not exceeding the value specified in table 8,		N/A
	however limits do not apply to fail-safe transformers complying with sub-clause 15.5 of IEC 61558-1		N/A
18	ENDURANCE		N/A
	Not applicable (IEC 60335-2-40:2002)		N/A
19	ABNORMAL OPERATION		P
19.1	The risk of fire or mechanical damage under abnormal or careless operation obviated (tests 19.2-19.13) (IEC 60335-2-40:2002)		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	Electronic circuits so designed and applied that a fault will not render the appliance unsafe (electric shock, fire or mechanical hazard, dangerous malfunction) (test 19.11 and 19.12) (IEC 60335-2-40:2002)		P
19.2	Test of appliance with motor rotors, other than motor-compressors, operated for 15 days (360h) or until a protection device opens the circuit (IEC 60335-2-40:2002)	Fan motors are approved type. Swing motor tested with appliance. (see appended table)	P
	Insulation of motor windings (IEC 60335-2-40:2002)	(see appended table)	P
	Temperature of enclosure does not exceed (°C) (IEC 60335-2-40:2002)	(see appended table)	P
	Temperature of the windings does not exceed the values shown in the table ; temperature (°C) (IEC 60335-2-40:2002)	(see appended table)	P
	Electric strength test as specified in 16.3, 72h after the beginning of the test (IEC 60335-2-40:2002)		P
	A 30mA residual current device does not open (IEC 60335-2-40:2002)		P
	At the end, the leakage current between the windings and the enclosure does not exceed 2mA (IEC 60335-2-40:2002)	(see appended table)	P
19.3	Motor-compressor complies with IEC 60335-2-34 (IEC 60335-2-40:2002)	Approved motor compressor.	P
	Test of the motor-compressor with the rotor locked as specified in 19.101 of IEC 60335-2-34 (IEC 60335-2-40:2002)		N/A
19.4	Test of three-phase motors operated under the conditions of Cl. 11 with one phase disconnected until steady conditions (IEC 60335-2-40:2002)	Single phase.	N/A
19.5	Test of appliance with heat transfer medium flow of the outdoor heat exchanger restricted or shut off when reaching steady conditions (IEC 60335-2-40:2002)	Restricted the airflow inlet.	P
	Test of appliance with heat transfer flow of the indoor heat exchanger restricted or shut off when reaching steady conditions (IEC 60335-2-40:2002)	Restricted the airflow inlet.	P
	Disconnection of the motor common to both the outdoor and the indoor heat exchangers when reaching steady conditions (IEC 60335-2-40:2002)		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
19.6	Test of appliances using water as heat transfer medium (IEC 60335-2-40:2002)		N/A
19.7	The test of air to air appliances at rated voltage or at the upper limit of the rated voltage range. The dry-bulb temperature is 5K below the values specified by the manufacturer (IEC 60335-2-40:2002)		P
	Test with the dry-bulb temperature 10K over the values specified by the manufacturer (IEC 60335-2-40:2002)	42 °C (indoor part) 56 °C (outdoor part) Appliance worked normally with input power increased.	P
19.8	Test of appliances with supplementary electric heaters (IEC 60335-2-40:2002)		N/A
19.9	Test at a temperature permitting continuous operation of the motor-compressor and the electric heating elements at the same time (IEC 60335-2-40:2002)		N/A
19.10	Test of the appliance with any defect which may be expected during normal use (IEC 60335-2-40:2002)	Different faults as mentioned in the standard were considered. Starting and stopping in any mode did not result in an abnormal situation. For short-circuits and open-circuits of electronic components see sub-clause 19.11.2	P
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 (IEC 60335-2-40:2002)		P
	Windings temperature not exceeding values shown in Table 6 (IEC 60335-2-40:2002)		P
	Appliance shall comply with the conditions of 19.14 (IEC 60335-2-40:2002)		P
	Appliance withstands the test : a conductor becomes open circuited and three conditions are met (IEC 60335-2-40:2002)		P
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 (IEC 60335-2-40:2002):		P
	- the electronic circuit is a low-power circuit, that is, the maximum power at low-power points does not exceed 15W according to the tests specified (IEC 60335-2-40:2002)		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	- 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 (IEC 60335-2-40:2002)		N/A
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 (IEC 60335-2-40:2002):		P
	a) short circuit of creepage distances and clearances between live parts of different potential, if these distances are less than the values specified in 29.1, unless the relevant part is adequately encapsulated (IEC 60335-2-40:2002)	Creepage distances and clearances measured on the appliance are met the requirements of 29.1.	N/A
	b) open circuit at the terminals of any component (IEC 60335-2-40:2002)		P
	c) short circuit if capacitors, unless they comply with IEC 60384-14 (IEC 60335-2-40:2002)	(see appended table 19.10)	P
	d) short circuit of any two terminals of an electronic component, other than integrated circuits. This fault condition is not applied between the circuits of an optocoupler (IEC 60335-2-40:2002)		P
	e) failure of triacs in the diode mode (IEC 60335-2-40:2002)		N/A
	f) failure of an integrated circuit. In this case the possible hazardous situations of the appliance are assessed to ensure that safety does not rely on the correct functioning of such a component (IEC 60335-2-40:2002)		N/A
	Short-circuit of low-power circuits (IEC 60335-2-40:2002)		N/A
	The duration of the tests (IEC 60335-2-40:2002) :		P
	- as specified in 11.7 but only for one operating cycle (in case the fault cannot be recognised by user) (IEC 60335-2-40:2002)		P
	- as specified in 19.2, if fault can be recognised by user (IEC 60335-2-40:2002)		P
	- until steady conditions are established (IEC 60335-2-40:2002)		P
	Test ended if interruption of supply occurs within the appliance (IEC 60335-2-40:2002)		P
	Fault condition f) applied to encapsulated or similar components (IEC 60335-2-40:2002)		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	PTC's, NTC's and VDR's resistors not short-circuited if used as specified by manufacturer (IEC 60335-2-40:2002)		N/A
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 but with fuse-link replaced by an ammeter (IEC 60335-2-40:2002)		N/A
	Current ≤ 2,1 times rated current of fuse-link, circuit not adequately protected (fuse-link short-circuited) (IEC 60335-2-40:2002)		N/A
	Current ≥ 2,75 times rated current of fuse-link, circuit adequately protected (IEC 60335-2-40:2002)		N/A
	Current ≥ 2,1 and ≤ 2,75 times rated current, fuse-link short-circuited and test carried out during specified time (IEC 60335-2-40:2002)		N/A
19.13	Test of appliances with PTC heating elements (IEC 60335-2-40:2002)		N/A
19.14	No flames, molten metal, poisonous or ignitable gas or deformed enclosures (IEC 60335-2-40:2002)		P
	Temperature rise shall not exceed the values shown in Table 9 (IEC 60335-2-40:2002)	(See appended table)	P
	Electric strength test, the test voltage as specified in Table 4 (IEC 60335-2-40:2002)		P
20	STABILITY AND MECHANICAL HAZARDS		P
20.1	Adequate stability	Fixed appliance	N/A
	Tilting test through an angle of 10° (appliance placed on an inclined plane/horizontal plane); appliance does not overturn		N/A
	Tilting test repeated on appliances with heating elements, angle of inclination increased to 15°		N/A
	Possible heating test in overturned position; temperature rise does not exceed values shown in table 9		N/A
20.2	Moving parts adequately arranged or enclosed as to provide protection against personal injury	Access to fan motor of the appliance is prevented by a grill, which is not removable without using a tool. The test finger can not enter with 5N force	P
	Protective enclosures, guards and similar parts are non-detachable		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	Adequate mechanical strength and fixing of protective enclosures		P
	Self-resetting thermal cut-outs and overcurrent protective devices not causing a hazard, by unexpected reclosure		P
	Not possible to touch dangerous moving parts with test probe	Test finger can not touch fan blade	P
21	MECHANICAL STRENGTH		P
21.1	Appliance has adequate mechanical strength and is constructed as to withstand rough handling	3 blows applied to remote control window, and grill for fan blade.	P
	Safety requirements of ISO 5149 applied (IEC 60335-2-40:2002)		P
	Checked by applying blows to the appliance in accordance with test Ehb of IEC 60068-2-75, spring hammer test, impact energy 0.5J		P
	If necessary, supplementary or reinforced insulation subjected to the electric strength test of 16.3		P
	If necessary, repetition of groups of three blows on a new sample		N/A
21.2	Accessible parts of solid insulation having strength to prevent penetration by sharp implements		P
	The insulation is tested as specified, unless		N/A
	the thickness of supplementary insulation is at least 1mm and reinforced insulation is at least 2mm		P
22	CONSTRUCTION		P
22.1	Appliance marked with the first numeral of the IP system, relevant requirements of IEC 60529 are fulfilled	IP24 for outdoor part.	P
22.2	Stationary appliance: means to provide all-pole disconnection from the supply provided, the following means being available:		P
	- a supply cord fitted with a plug		P
	- a switch complying with 24.3		N/A
	- a statement in the instruction sheet that a disconnection incorporated in the fixed wiring is to be provided		N/A
	- an appliance inlet		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	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		N/A
22.3	Appliance provided with pins: no undue strain on socket-outlets		N/A
	Applied torque not exceeding 0.25 Nm		N/A
	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		N/A
	Each pin subjected to a torque of 0.4Nm; the pins are not rotating unless rotating does not impair compliance with the standard		N/A
22.4	Appliance for heating liquids and appliance causing undue vibration not provided with pins for insertion into socket-outlets		N/A
22.5	No risk of electric shock when touching the pins of the plug, the appliance being disconnected from the supply at the instant of voltage peak		N/A
22.6	Electrical insulation not affected by condensing water or leaking liquid	Checked by clause 15.	P
	Electrical insulation of Class II appliances not affected in case of a hose rupture or seal leak	Class I appliance	N/A
	Electrical insulation not affected by snow penetration to the appliance enclosure (IEC 60335-2-40:2002)		P
22.7	Adequate safeguards against the risk of excessive pressure in appliances provided with steam-producing devices	No over-pressure expected, which could lead to a hazardous situation. Refrigerant circuit is intrinsic pressure safe according to ISO 5149. See also clause 21.	N/A
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	When replacing the filter, the construction prevent incorporated electrical connection to be accessible.	P
22.9	Insulation, internal wiring, windings, commutators and slip rings not exposed to oil, grease or similar substances		N/A
	Adequate insulating properties of oil or grease to which insulation is exposed	Oil in the compressors is compatible with the insulation.	P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
22.10	Not possible to reset voltage-maintained non-self-resetting thermal cut-outs by the operation of an automatic switching device incorporated within the appliance	No non-self-resetting controls used.	N/A
	Non-self resetting thermal motor protectors have a trip-free action, unless		N/A
	they are voltage maintained		N/A
	Location or protection of reset buttons of non-self-resetting controls is so that accidental resetting is unlikely		N/A
22.11	Reliable fixing of non-detachable parts that provide the necessary degree of protection against electric shock, moisture or contact with moving parts		P
	Obvious locked position of snap-in devices used for fixing such parts	No snap-in device provided.	N/A
	No deterioration of the fixing properties of snap-in devices used in parts that are likely to be removed during installation or servicing		N/A
	Tests as described		P
22.12	Handles, knobs etc. fixed in a reliable manner	Knobs are fixed properly, and unlikely become loose in normal use.	P
	Fixing in wrong position of handles, knobs etc. indicating position of switches or similar components not possible		P
	Axial force 15 N applied to parts, the shape being so that an axial pull is unlikely to be applied		N/A
	Axial force 30 N applied to parts, the shape being so that an axial pull is likely to be applied	30N applied, the test passed.	P
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		N/A
22.14	No ragged or sharp edges creating a hazard for the user in normal use, or during user maintenance	No sharp edges. Corners are well rounded.	P
	No exposed pointed ends of self tapping screws etc., liable to be touched by the user in normal use or during user maintenance	Checked	P
22.15	Storage hooks and the like for flexible cords smooth and well rounded		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
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 automatic cord reels.	N/A
	Cord reel tested with 6000 operations, as specified		N/A
	Electric strength test of 16.3, voltage of 1000 V applied		N/A
22.17	Spacers not removable from the outside by hand or by means of a screwdriver or a spanner	No spacers.	N/A
22.18	Current-carrying parts and other metal parts resistant to corrosion under normal conditions of use		P
22.19	Driving belts not used as electrical insulation		N/A
22.20	Direct contact between live parts and thermal insulation effectively prevented, unless material used is non-corrosive, non-hygroscopic and non-combustible		N/A
	Compliance is checked by inspection and, if necessary, by appropriate test		N/A
22.21	Wood, cotton, silk, ordinary paper and fibrous or hygroscopic material not used as insulation, unless impregnated	No such materials used.	P
22.22	Appliances not containing asbestos	No asbestos	P
22.23	Oils containing polychlorinated biphenyl (PCB) not used	No oils containing polychlorinated biphenyl (PCB)	P
22.24	Bare heating elements adequately supported to prevent contact with accessible metal parts in case of rupture or sagging (IEC 60335-2-40:2002)	No bare heating elements.	N/A
	Bare heating elements only used with metal enclosures (wood or composite enclosures not allowed) (IEC 60335-2-40:2002)		N/A
22.25	Sagging heating conductors cannot come into contact with accessible metal parts		N/A
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		N/A
22.27	Parts connected by protective impedance separated by double or reinforced insulation	No protective impedance.	N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
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		N/A
22.29	Class II appliances permanently connected to fixed hwiring so constructed that the required degree of access to live parts is maintained after installation		N/A
22.30	Parts serving as supplementary or reinforced insulation fixed so that they cannot be removed without being seriously damaged, or		P
	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		P
22.31	Clearances and creepage distances over supplementary and reinforced insulation not reduced below values specified in clause 29 as a result of wear		P
	Clearances and creepage distances between live parts and accessible parts not reduced below values for supplementary insulation, if wires, screws etc. become loose		P
22.32	Supplementary and reinforced insulation designed or protected against deposition of dirt or dust		P
	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		N/A
	Ceramic material not tightly sintered, similar material or beads alone not used as supplementary or reinforced insulation		N/A
	Oxygen bomb test at 70 °C for 96 h and 16 h at room temperature		N/A
22.33	Conductive liquids that are or may become accessible in normal use are not in direct contact with live parts		P
	Electrodes not used for heating liquids		N/A
	For class II constructions, conductive liquids that are or may become accessible in normal use, not in direct contact with basic or reinforced insulation	Condensed water may contact earthed metal pipe, but does not contact basic or reinforced insulation	P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	For class II constructions, conductive liquids which are in contact with live parts, not in direct contact with reinforced insulation		P
22.34	Shafts of operating knobs, handles, levers etc. not live, unless the shaft is not accessible when the part is removed		N/A
22.35	Handles, levers and knobs, held or actuated in normal use, not becoming live in the event of an insulation fault		N/A
	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		N/A
	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		N/A
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 handles, which are continuously held.	N/A
22.37	Capacitors in Class II appliances not connected to accessible metal parts, unless complying with 22.42	Class I appliance.	N/A
	Metal casings of capacitors in Class II appliances separated from accessible metal parts by supplementary insulation, unless complying with 22.42		N/A
22.38	Capacitors not connected between the contacts of a thermal cut-out		P
22.39	Lamp holders used only for the connection of lamps	No lamp holder	N/A
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	Fixed and stationary appliance	N/A
22.41	No components, other than lamps, containing mercury	No mercury switches.	P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
22.42	Protective impedance consisting of at least two separate components	No protective impedance.	N/A
	Values specified in 8.1.4 not exceeded if any one of the components are short-circuited or open-circuited		N/A
22.43	Appliances adjustable for different voltages, accidental changing of the setting of the voltage unlikely to occur		N/A
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		P
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		P
22.46	Software used in protective electronic circuits is software class B or C		N/A
22.47	Appliances connected to the water mains withstand the water pressure expected in normal use		N/A
	No leakage from any part, including any inlet water hose		N/A
22.48	Appliances connected to the water mains constructed to prevent backsiphonage of non-potable water		N/A
22.101	Appliances intended to be fixed, securely fixed (IEC 60335-2-40:2002)		P
22.102	Double thermal cut-out in appliances with supplementary heating elements (the first one shall be a self-resetting and the other a non-self-resetting thermal cut-out) (IEC 60335-2-40:2002)	No heating elements.	N/A
	Thermal cut-outs of the capillary type open in the event of leakage of the capillary tube (IEC 60335-2-40:2002)	No capillary type thermal cut-out used.	N/A
	Thermal cut-outs comply with 24.3 (switches) (IEC 60335-2-40:2002)		N/A
	Thermal cut-outs operating in Cl. 19 shall be of the non-self-resetting type (IEC 60335-2-40:2002)		N/A
22.103	Non-self-resetting cut-outs independent of other control devices (IEC 60335-2-40:2002)		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
22.104	Containers of sanitary hot water heat pumps withstand twice the permissible pressure in closed containers of 0,15MPa in open containers, without leakage or rupture (IEC 60335-2-40:2002)	No water heat pump	N/A
22.105	Air or vapour cushion in closed containers not exceeding the 10% (IEC 60335-2-40:2002)		N/A
22.106	Pressure relief devices operating at 0,1MPa over the permissible pressure (IEC 60335-2-40:2002)		N/A
22.107	Water outlet systems of open containers free from obstruction causing over-pressure (IEC 60335-2-40:2002)		N/A
	Vented containers of sanitary hot water heat pumps always open to the atmosphere through appropriate aperture (IEC 60335-2-40:2002)		N/A
22.108	Not vented open containers are subjected to a test in accordance with 22.104 to a vacuum of 33kPa for 15 min (IEC 60335-2-40:2002)		N/A
22.109	Replacement of non-self-resetting thermal cut-outs does not damage other connections (IEC 60335-2-40:2002)	No non-self-resetting thermal cut-outs.	N/A
22.110	Non-self-resetting thermal cut-outs operate without short-circuiting live parts of different potential and without causing contact between live parts and the enclosure (IEC 60335-2-40:2002)		N/A
	Test repeated five times without blowing a 3 A fuse which connects the appliance to earth (IEC 60335-2-40:2002)		N/A
	Electric strength test as specified in 16.3 for supplementary heating elements (IEC 60335-2-40:2002)		N/A
22.111	Manual resetting of thermostats not necessary after power supply interruption (IEC 60335-2-40:2002)		N/A
23	INTERNAL WIRING		P
23.1	Wireways smooth and free from sharp edges	No sharp edges in wireway.	P
	Wires protected against contact with burrs, cooling fins etc.		P
	Wire holes in metal well rounded or provided with bushings		P
	Wiring effectively prevented from coming into contact with moving parts		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
23.2	Beads etc. on live wires cannot change their position, and are not resting on sharp edges or corners		N/A
	Beads inside flexible metal conduits contained within an insulating sleeve		N/A
23.3	Electrical connections and internal conductors movable relatively to each other not exposed to undue stress	Wires are fixed well and not movable during operation.	N/A
	Flexible metallic tubes not causing damage to insulation of conductors		N/A
	Open-coil springs not used		N/A
	Adequate insulating lining provided inside a coiled spring, the turns of which touch one another		N/A
	No damage after 10 000 flexings for conductors flexed during normal use or 100 flexings for conductors flexed during user maintenance		N/A
	Electric strength test, 1000 V between live parts and accessible metal parts		N/A
23.4	Bare internal wiring sufficiently rigid and fixed		P
23.5	The insulation of internal wiring withstanding the electrical stress likely to occur in normal use		P
	No breakdown when a voltage of 2000 V is applied for 15 min between the conductor and metal foil wrapped around the insulation		P
23.6	Sleeving used as supplementary insulation on internal wiring retained in position by positive means		P
23.7	The colour combination green/yellow used only for earthing conductors		P
23.8	Aluminium wires not used for internal wiring	No used	P
23.9	No lead-tin soldering of stranded conductors where they are subject to contact pressure, unless	No soldering of stranded wires	P
	clamping means so constructed that there is no risk of bad contact due to cold flow of the solder		P
23.10	The insulation and sheath of internal wiring, incorporated in external hoses for the connection of an appliance to the water mains, at least equivalent to that of light polyvinyl chloride sheathed flexible cord (60227 IEC 52)		N/A
24	COMPONENTS		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
24.1	Components comply with safety requirements in relevant IEC standards		P
	List of components	(see appended table)	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		N/A
	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		P
	Motor-compressors not tested according to IEC 60335-2-34 (not necessary to meet all requirements of IEC 60335-2-34) (IEC 60335-2-40:2002)	Approved motor compressor.	N/A
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		N/A
	tested according to annex F		N/A
24.1.2	Safety isolating transformers complying with IEC 61558-2-6, or	No safety isolating transformer used.	N/A
	tested according to annex G		N/A
24.1.3	Switches complying with IEC 61058-1, the number of cycles of operation being at least 10 000, or		N/A
	tested according to annex H		P
	If the switch operates a relay or contactor, the complete switching system is subjected to the test		N/A
24.1.4	Automatic controls complying with IEC 60730-1 with relevant part 2. The number of cycles of operation being:		P
	- thermostats: 10 000		P
	- temperature limiters: 1 000		N/A
	- self-resetting thermal cut-outs (IEC 60335-2-40:2002): 3 000		N/A
	- voltage maintained non-self-resetting thermal cut-outs: 1000		N/A
	- other non-self-resetting thermal cut-outs: (IEC 60335-2-40:2002): 300		N/A
	- timers: 3 000		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	- energy regulators: 10 000		N/A
	- thermostats which control motor-compressor (IEC 60335-2-40:2002): 100 000		P
	- motor-compressor starting relays (IEC 60335-2-40:2002): 100 000	No relay	N/A
	- automatic thermal motor-protectors for hermetic and semi-hermetic type motor-compressors (IEC 60335-2-40:2002): Min 2 000	Approved motor compressor	P
	- manual reset thermal motor-protectors for hermetic and semi-hermetic type motor-compressors (IEC 60335-2-40:2002): 50		N/A
	- other automatic thermal motor protectors (IEC 60335-2-40:2002): 2 000	Built in fan motor	P
	- other manual reset thermal motor protectors (IEC 60335-2-40:2002): 30		N/A
	Thermal motor protectors are tested in combination with their motor under the conditions specified in Annex D		N/A
	For water valves containing live parts and that are incorporated in external hoses for connection of an appliance to the water mains, the degree of protection declared for subclause 6.5.2 of IEC 60730-2-8 is IPX7		N/A
24.1.5	Appliance couplers complying with IEC 60320-1		N/A
	However, appliances classified higher than IPX0, the appliance couplers complying with IEC 60320-2-3		N/A
	Interconnection couplers complying with IEC 60320-2-2		N/A
24.1.6	Small lamp holders similar to E10 lampholders complying with IEC 60238, the requirements for E10 lampholders being applicable	No lamp holder.	N/A
24.2	No switches or automatic controls in flexible cords		P
	No devices causing the protective device in the fixed wiring to operate in the event of a fault in the appliance		P
	No thermal cut-outs that can be reset by soldering		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
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		N/A
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		N/A
24.5	Capacitors in auxiliary windings of motors marked with their rated voltage and capacitance and used accordingly	Rated voltage of all capacitors is AC 450V.	P
	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	All capacitors used within their ratings. IU motor capacitor: 466V OU motor capacitor: 349V Motor compressor capacitor: 356V.	P
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.		N/A
	In addition, the motors are complying with the requirements of Annex I		N/A
24.7	Hose-sets for connection of appliances to the water mains, complying with IEC 61770 and supplied with the appliance		N/A
24.101	Replaceable parts of thermal control devices identified by marking (IEC 60335-2-40:2002)		P
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS		P
25.1	Appliance not intended for permanent connection to fixed wiring, means for connection to the supply:		P
	- pins for insertion into socket-outlets		N/A
	- supply cord fitted with a plug may be provided, if (IEC 60335-2-40:2002):		P
	• the appliance is only for indoor use		P
	• it is marked with a rating of 25 A or less		P
	• it complies with the code requirements of the country where it will be used		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	Appliance inlet not allowed (IEC 60335-2-40:2002)	No appliance inlet	N/A
25.2	Appliance not provided with more than one means of connection to the supply mains		P
	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		N/A
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		P
	Appliance provided with a set of terminals for the connection of cables or fixed wiring, cross-sectional areas specified in 26.6		P
	Appliance provided with a set of terminals allowing the connection of a flexible cord		P
	Appliance provided with a set of supply leads accommodated in a suitable compartment		N/A
	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		N/A
25.4	Cable and conduit entries, rated current of appliance not exceeding 16 A, dimensions according to table 10		P
	Introduction of conduit or cable does not reduce clearances or creepage distances below values specified in 29		N/A
25.5	Method for assemble supply cord with the appliance:		P
	- type X attachment		N/A
	- type Y attachment		P
	- type Z attachment, if allowed in part 2		N/A
	Type X attachment, other than those with a specially prepared cord, not used for flat twin tinsel cords		N/A
25.6	Plugs fitted with only one flexible cord		P
25.7	Supply cord not lighter than:		P
	- braided cord (60245 IEC 51)		N/A
	- ordinary tough rubber sheathed cord (60245 IEC 53)		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	- ordinary polychloroprene sheathed flexible cord (60245 IEC 57)		N/A
	- flat twin tinsel cord (60227 IEC 41)		N/A
	- light polyvinyl chloride sheathed cord (60227 IEC 52), appliance not exceeding 3 kg		N/A
	- ordinary polyvinyl chloride sheathed cord (60227 IEC 53), appliance exceeding 3 kg	H05VV-F	P
	Temperature rise of external metal parts exceeding 75 K, PVC cord not used, unless		N/A
	appliance so constructed that the supply cord is not likely to touch external metal parts in normal use, or		N/A
	the supply cord is appropriate for higher temperatures, type Y or type Z attachment used		N/A
	Supply cords for outdoor use not lighter than polychloroprene sheathed flexible cord (60245 IEC 57) (IEC 60335-2-40:2002)		N/A
25.8	Nominal cross-sectional area of supply cords according to table 11; rated current (A); cross-sectional area (mm²).....	1,5mm^2 or 1,0mm^2	P
25.9	Supply cord not in contact with sharp points or edges		P
25.10	Green/yellow core for earthing purposes in Class I appliance		P
25.11	Conductors of supply cords not consolidated by lead-tin soldering where they are subject to contact pressure, unless	No soldering used.	P
	clamping means so constructed that there is no risk of bad contacts due to cold flow of the solder		N/A
25.12	Moulding the cord to part of the enclosure does not damage the insulation of the supply cord		N/A
25.13	Inlet opening so shaped as to prevent damage to the supply cord	Inlet opening is well rounded.	P
	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		P
	If unsheathed supply cord, a similar additional bushing or lining is required, unless		P
	the appliance is class 0		N/A
25.14	Supply cords adequately protected against excessive flexing	Fixed and stationary appliance.	N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	Flexing test:		N/A
	- applied force (N)		N/A
	- number of flexings		N/A
	The test does not result in:		N/A
	- short circuit between the conductors		N/A
	- breakage of more than 10% of the strands of any conductor		N/A
	- separation of the conductor from its terminal		N/A
	- loosening of any cord guard		N/A
	- damage, within the meaning of the standard, to the cord or the cord guard		N/A
	- broken strands piercing the insulation and becoming accessible		N/A
25.15	Conductors of the supply cord relieved from strain, twisting and abrasion by use of cord anchorage		P
	The cord cannot be pushed into the appliance to such an extent that the cord or internal parts of the appliance can be damaged		P
	Pull and torque test of supply cord, values shown in table 10: pull (N); torque (not on automatic cord reel) (Nm)	100N pull force, 25 times, 0,35Nm	P
	Max. 2 mm displacement of the cord, and conductors not moved more than 1 mm in the terminals	Measurement: 0,2mm for the power cord and terminal.	P
	Creepage distances and clearances not reduced below values specified in 29.1		P
25.16	Cord anchorages for type X attachments constructed and located so that:		N/A
	- replacement of the cord is easily possible		N/A
	- it is clear how the relief from strain and the prevention of twisting are obtained		N/A
	- they are suitable for different types of cord		N/A
	- cord cannot touch the clamping screws of cord anchorage if these screws are accessible, unless separated from accessible metal parts by supplementary insulation		N/A
	- the cord is not clamped by a metal screw which bears directly on the cord		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	- at least one part of the cord anchorage securely fixed to the appliance, unless part of a specially prepared cord		N/A
	- screws which have to be operated when replacing the cord do not fix any other component, if applicable		N/A
	- if labyrinths can be bypassed the test of 25.15 is nevertheless withstood		N/A
	- 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		N/A
	- for Class II appliances: they are of insulating material, or if of metal, they are insulated from accessible metal parts by supplementary insulation		N/A
25.17	Adequate cord anchorages for type Y and Z attachment		P
25.18	Cord anchorages only accessible with the aid of a tool, or		P
	so constructed that the cord can only be fitted with the aid of a tool		P
25.19	Type X attachment, glands not used as cord anchorage in portable appliances		N/A
	Tying the cord into a knot or tying the cord with string not used		N/A
25.20	Conductors of the supply cord for type Y and Z attachment adequately additionally insulated		P
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.		N/A
	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		N/A
25.22	Appliance inlet:		N/A
	- live parts not accessible during insertion or removal		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	- connector can be inserted without difficulty		N/A
	- the appliance is not supported by the connector		N/A
	- 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		N/A
25.23	Interconnection cords comply with the requirements for the supply cord, except as specified	Stated in the user manual	P
	If necessary, electric strength test of 16.3		N/A
25.24	Interconnection cords not detachable without the aid of a tool if compliance with the standard is impaired when they are disconnected		P
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		N/A
26	TERMINALS FOR EXTERNAL CONDUCTORS		P
26.1	Appliances provided with terminals or equally effective devices for connection of external conductors		P
	Terminals only accessible after removal of a non-detachable cover		P
	However, earthing terminals may be accessible if a tool is required to make the connections and means are provided to clamp the wire independently from its connection		N/A
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		N/A
	Screws and nuts serve only to clamp supply conductors, except		N/A
	internal conductors, if so arranged that they are unlikely to be displaced when fitting the supply conductors		N/A
	If soldered connections used, the conductor so positioned or fixed that reliance is not placed on soldering alone		N/A
	Soldering alone used, barriers provided, clearances and creepage distances satisfactory if the conductor becomes free at the soldered joint		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
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		N/A
	Terminals for type X attachment and those for connection to fixed wiring so fixed that when tightening or loosening the clamping means:		N/A
	- the terminal does not loosen		N/A
	- internal wiring is not subjected to stress		N/A
	- clearances and creepage distances are not reduced below the values in 29		N/A
	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)		N/A
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		N/A
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		N/A
	Stranded conductor test, 8 mm insulation removed		N/A
	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		N/A
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 (mm²).....		N/A
	Terminals only suitable for a specially prepared cord		N/A
26.7	Terminals for type X attachment accessible after removal of a cover or part of the enclosure		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
26.8	Terminals for the connection to fixed wiring, including the earthing terminal, located close to each other		N/A
26.9	Terminals of the pillar type constructed and located as specified		N/A
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		P
	Pull test of 5 N to the connection	5N pull force.	P
26.11	For type Y and Z attachment: soldered, welded, crimped and similar connections may be used		P
	For Class II appliances: the conductor so positioned or fixed that reliance is not placed on soldering, welding or crimping alone		N/A
	For Class II appliances: soldering, welding or crimping alone used, barriers provided, clearances and creepage distances satisfactory if the conductor becomes free		N/A
27	PROVISION FOR EARTHING		P
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	All conductive and accessible metal parts, which could become live in the event of an insulation fault, are reliable earthed, using only metal-to-metal connections.	P
	Earthing terminals not connected to neutral terminal		P
	Class 0, II and III appliance have no provision for earthing	Class I	N/A
	Safety extra-low voltage circuits not earthed, unless protective extra-low voltage circuits		N/A
27.2	Clamping means adequately secured against accidental loosening	Spring washer used	P
	Terminals used for the connection of external equipotential bonding conductors allow connection of conductors of 2.5 to 6 mm², and		N/A
	do not provide earthing continuity between different parts of the appliance		N/A
	Conductors cannot be loosened without the aid of a tool		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
27.3	For detachable parts that are plugged into another part of the appliance, and having an earth connection, the earth connection made before and separated after current-carrying connections when removing the part		N/A
	For appliances with supply cord, current-carrying conductors become taut before earthing conductor, if the cord slips out of the cord anchorage	Protected earthed wires longer than current-carrying conductors	P
27.4	No risk of corrosion resulting from contact between metal of earthing terminal and other metal		P
	Adequate resistance to corrosion of coated or uncoated parts providing earthing continuity, other than parts of a metal frame or enclosure		P
	Parts of steel providing earthing continuity provided at the essential areas with an electroplated coating, thickness at least 5 µm		P
	Adequate protection against rusting of parts of coated or uncoated steel, only intended to provide or transmit contact pressure		P
	In case of aluminium alloys precautions taken to avoid risk of corrosion	No aluminium alloys.	N/A
27.5	Low resistance of connection between earthing terminal and earthed metal parts		P
	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		N/A
	Resistance not exceeding 0,1 Ω at the specified low-resistance test	The highest measured value among all test samples is 0,06Ω	P
27.6	The printed conductors of printed circuit boards not used to provide earthing continuity in hand held appliances	No PCB.	N/A
	They may be used in other appliances if:		N/A
	- at least two tracks are used with independent soldering points and the appliance complies with requirements of 27.5 for each circuit		N/A
	- the material of the printed circuit board complies with IEC 60249-2-4 or IEC 60249-2-5		N/A
28	SCREWS AND CONNECTIONS		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
28.1	Fixings, electrical connections and connections providing earthing continuity withstand mechanical stresses		P
	Screws not of soft metal liable to creep, such as zinc or aluminium	Steel screws	P
	Diameter of screws of insulating material min. 3 mm	No screws of insulating material.	N/A
	Screws of insulating material not used for any electrical connection or connections providing earthing continuity		P
	Screws used for electrical connections or connections providing earthing continuity screw into metal		P
	Screws not of insulating material if their replacement by a metal screw can impair supplementary or reinforced insulation	No screws of insulating material.	P
	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		N/A
	For screws and nuts; test as specified	(See appended table)	P
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		P
	This requirement does not apply to electrical connections in circuits carrying a current not exceeding 0.5A		N/A
28.3	Space-threaded (sheet metal) screws only used for electrical connections if they clamp the parts together	No sheet metal screws used for electrical connections	N/A
	Thread-cutting (self-tapping) screws only used for electrical connections if they generate a full form standard machine screw thread		N/A
	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		N/A
	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	Two self-tapping screws used for earthing continuity.	P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
28.4	Screws and nuts that make mechanical connection secured against loosening if they also make electrical connections or connections providing earthing continuity		P
	Rivets for electrical connections or connections providing earthing continuity secured against loosening if subjected to torsion	No rivet provided	N/A
29	CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION		P
	Clearances, creepage distances and solid insulation withstand electrical stress		P
	For coatings used on printed circuits boards to protect the microenvironment (Type A) or to provide basic insulation (Type B), annex J applies		N/A
	The microenvironment is pollution degree 1 under Type A coating		N/A
	No creepage distance or clearance requirements under Type B coating		N/A
	For motor-compressor complies with IEC 60335-2-34, parts related not checked (IEC 60335-2-40:2002)	Approved motor compressor.	P
	For motor-compressor not complying with IEC 60335-2-34, additions and modifications as specified (IEC 60335-2-40:2002)		N/A
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, unless	(See appended table)	P
	for basic insulation and functional insulation, they comply with the impulse voltage test of clause 14	The impulse voltage in clause 14 is not applicable.	N/A
	However, if construction is affected by wear, distortion, movement of the parts or during assembly, the clearances for rated impulse voltages of 1500V and above are increased by 0.5mm and the impulse voltage test is not applicable		P
	Impulse voltage test not applicable:		N/A
	- when the microenvironment is pollution degree 3		N/A
	- for basic insulation of class 0 and class 0I appliances		N/A
	Appliances are in overvoltage category II		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	Compliance is checked by inspection and measurements as specified		P
29.1.1	Clearances of basic insulation withstand the overvoltages, taking into account the rated impulse voltage	(See appended table)	P
	Clearance at the terminals of tubular sheathed heating elements may be reduced to 1mm if the microenvironment is pollution degree 1		N/A
	Lacquered conductors of windings considered to be bare conductors		P
29.1.2	Clearances of supplementary insulation not less than those specified for basic insulation in table 16	(See appended table)	P
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	(See appended table)	P
29.1.4	For functional insulation, the values of table 16 are applicable, unless	(See appended table) All functional insulation fulfills table 16	P
	the appliance complies with clause 19 with the functional insulation short-circuited		P
	Lacquered conductors of windings considered to be bare conductors		P
	However, clearances at crossover points are not measured		N/A
	Clearance between surfaces of PTC heating elements may be reduced to 1mm		P
	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		P
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	The highest working voltage of the capacitor is AC 466V, so 2500+(466-230)x1,414= 2833V	P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	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		N/A
	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		P
29.2	Creepage distances not less than those appropriate for the working voltage, taking into account the material group and the pollution degree		P
	Pollution degree 2 applies, unless		P
	precautions taken to protect the insulation; pollution degree 1		N/A
	insulation subjected to conductive pollution; pollution degree 3		N/A
	Compliance is checked by inspection and measurements as specified		P
	Insulation located in airflow, pollution degree 3 unless (IEC 60335-2-40:2002)		N/A
	Insulation enclosed or located so that unlikely to be exposed to pollution due to normal use (IEC 60335-2-40:2002)		P
29.2.1	Creepage distances of basic insulation not less than specified in table 17	(See appended table)	P
	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		N/A
29.2.2	Creepage distances of supplementary insulation at least as specified for basic insulation in table 17	(See appended table)	P
29.2.3	Creepage distances of reinforced insulation at least double as specified for basic insulation in table 17	(See appended table)	P
29.2.4	Creepage distances of functional insulation not less than specified in table 18	(See appended table)	P
	Creepage distances may be reduced if the appliance complies with clause 19 with the functional insulation short-circuited		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
29.3	Supplementary and reinforced insulation having adequate thickness, or a sufficient number of layers, to withstand the electrical stresses	(See appended table)	P
	Compliance checked by:		P
	- measurement, in accordance with 29.3.1, or		P
	- an electric strength test in accordance with 29.3.2, or		P
	- an assessment of the thermal quality of the material combined with an electric strength test, in accordance with 29.3.3		P
29.3.1	Supplementary insulation having a thickness of at least 1mm		P
	Reinforced insulation having a thickness of at least 2mm		P
29.3.2	Each layer of material withstand the electric strength test of 16.3 for supplementary insulation		P
	Supplementary insulation consisting of at least 2 layers		N/A
	Reinforced insulation consisting of at least 3 layers		N/A
29.3.3	The insulation is subjected to the dry heat test Bb of IEC 60068-2-2, followed by		N/A
	the electric strength of 16.3		N/A
	If the temperature rise during the tests of Clause 19 does not exceed the value specified in Table 3, the test of IEC 60068-2-2 is not carried out		N/A
30	RESISTANCE TO HEAT AND FIRE		P
30.1	External parts of non-metallic material,	Enclosure	P
	parts supporting live parts, and	Switch enclosure.	P
	thermoplastic material providing supplementary or reinforced insulation,		P
	sufficiently resistant to heat		P
	Ball-pressure test according to IEC 60695-10-2		P
	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)	75°C for enclosure	P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	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)	Switch enclosure.	P
	Parts of thermoplastic material providing supplementary or reinforced insulation, 25°C plus the maximum temperature rise determined during clause 19, if higher; temperature (°C)	(See appended table)	P
30.2	Relevant parts of non-metallic material adequately resistant to ignition and spread of fire		P
30.2.1	Glow-wire test of IEC 60695-2-11 at 550 °C, unless	(See appended table)	P
	the material is classified at least HB40 according to IEC 60695-11-10		N/A
	Parts for which the glow-wire test cannot be carried out meet the requirements in ISO9772 for category HBF material		N/A
30.2.2	Not applicable (IEC 60335-2-40:2002)		N/A
30.2.3	Appliances operated while unattended, tested as specified in 30.2.3.1 and 30.2.3.2		P
	Test not applicable to conditions as specified		P
30.2.3.1	Parts of insulating material supporting connections carrying a current exceeding 0.2A during normal operation, and		P
	parts of insulating material within a distance of 3mm,		P
	having a glow-wire flammability index of at least 850°C according to IEC 60695-2-12	(See appended table)	P
30.2.3.2	Parts of insulating material supporting current-carrying connections, and		P
	parts of insulating material within a distance of 3mm,		P
	subjected to glow-wire test of IEC 60695-2-11		P
	Test not carried out on material having a glow-wire ignition temperature according to IEC 60695-2-13 as specified		N/A
	Glow-wire test of IEC 60695-2-11, the temperature being:		P
	-750°C, for connections carrying a current exceeding 0,2A during normal operation		P
	-650°C, for other connections		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	Parts that during the test produce a flame persisting longer than 2 s, tested as specified		N/A
	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		N/A
	the material is classified as V-0 or V-1 according to IEC 60695-11-10		N/A
30.2.4	Base material of printed circuit boards subjected to needle-flame test of annex E		N/A
	Test not applicable to conditions as specified		N/A
31	RESISTANCE TO RUSTING		P
	Relevant ferrous parts adequately protected against rusting	Zincified steel board for electrical control assembly.	P
	Salt mist test of IEC 60068-2-52, severity 2 (IEC 60335-2-40:2002)		P
	Before test, coatings are scratched by means of a harden steel pin as specified (IEC 60335-2-40:2002)		P
	Five scratches made at least 5mm apart and at least 5mm from the edges (IEC 60335-2-40:2002)		P
	Appliance not deteriorated to such an extent that compliance with cl. 8 and cl. 27 is impaired (IEC 60335-2-40:2002)		P
	Coating not be broken and not loosened from the metal surface (IEC 60335-2-40:2002)		P
32	RADIATION, TOXICITY AND SIMILAR HAZARDS		N/A
	Appliance does not emit harmful radiation		N/A
	Appliance does not present a toxic or similar hazard		N/A
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/A
	The following modifications to this standard are applicable for appliances powered by batteries that are recharged in the appliance		N/A
	This annex does not apply to battery chargers		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
3.1.9	Appliance operated under the following conditions:		N/A
	-the appliance, supplied by its fully charged battery, operated as specified in relevant part 2		N/A
	-the battery is charged, the battery being initially discharged to such an extent that the appliance cannot operate		N/A
	-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		N/A
	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		N/A
3.6.2	Part to be removed in order to discard the battery is not considered to be detachable		N/A
5.101	Appliances supplied from the supply mains tested as specified for motor-operated appliances		N/A
7.1	Battery compartment for batteries intended to be replaced by the user, marked with battery voltage and polarity of the terminals		N/A
7.12	The instructions for appliances incorporating batteries intended to be replaced by the user includes required information		N/A
	Details about how to remove batteries containing materials hazardous to the environment given		N/A
7.15	Markings placed on the part of the appliance connected to the supply mains		N/A
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		N/A
	If the appliance can be operated without batteries, double or reinforced insulation required		N/A
11.7	The battery is charged for the period described		N/A
19.1	Appliances subjected to tests of 19.101, 19.102 and 19.103		N/A
19.101	Appliances supplied at rated voltage for 168 h, the battery being continually charged		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
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		N/A
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		N/A
21.101	Appliances having pins for insertion into socket-outlets have adequate mechanical strength, checked according to procedure 2 of IEC 68-2-32		N/A
	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/A
	- 100, the mass of part does not exceed 250 g		N/A
	- 50, the mass of part exceeds 250 g		N/A
	After the test, the requirements of 8.1, 15.1.1, 16.3 and clause 29 are met		N/A
22.3	Appliances having pins for insertion into socket-outlets tested as fully assembled as possible		N/A
25.13	An additional lining or bushing not required for interconnection cords operating at safety extra-low voltage		N/A
30.2	For parts of the appliance connected to the supply mains during the charging period, 30.2.3 applies		N/A
	For other parts, 30.2.2 applies		N/A
C	ANNEX C (NORMATIVE) AGEING TEST ON MOTORS		N/A
	Tests, as described, carried out when doubt with regard to the temperature classification of the insulation of a motor winding		N/A
D	ANNEX D (NORMATIVE) THERMAL MOTOR PROTECTORS		N/A
	Applicable to appliances having motors that incorporate thermal motor protectors		N/A
E	ANNEX E (NORMATIVE) NEEDLE-FLAME TEST		N/A
	Needle-flame test carried out in accordance with IEC 60695-2-2, with the following modifications:		N/A
5	Severities		N/A
	The duration of application of the test flame is 30 s ± 1 s		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
8	Test procedure		N/A
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		N/A
8.4	The first paragraph does not apply		N/A
	If possible, the flame is applied at least 10 mm from a corner		N/A
8.5	The test is carried out on one specimen		N/A
	If the specimen does not withstand the test, the test may be repeated on two further specimens, both withstanding the test		N/A
10	Evaluation of test results		N/A
	The duration of burning not exceeding 30 s		N/A
	However, for printed circuit boards, the duration of burning not exceeding 15 s		N/A
F	ANNEX F (NORMATIVE) CAPACITORS		N/A
	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:		N/A
1.5	Terminology		N/A
1.5.3	Class X capacitors tested according to subclass X2		N/A
1.5.4	This subclause is applicable		N/A
1.6	Marking		N/A
	Items a) and b) are applicable		N/A
3.4	Approval testing		N/A
3.4.3.2	Table II is applicable as described		N/A
4.1	Visual examination and check of dimensions		N/A
	This subclause is applicable		N/A
4.2	Electrical tests		N/A
4.2.1	This subclause is applicable		N/A
4.2.5	This subclause is applicable		N/A
4.2.5.2	Only table IX is applicable		N/A
	Values for test A apply		N/A
	However, for capacitors in heating appliances the values for test B or C apply		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
4.12	Damp heat, steady state		N/A
	This subclause is applicable		N/A
	Only insulation resistance and voltage proof are checked		N/A
4.13	Impulse voltage		N/A
	This subclause is applicable		N/A
4.14	Endurance		N/A
	Subclauses 4.14.1, 4.14.3, 4.14.4 and 4.14.7 applicable		N/A
4.14.7	Only insulation resistance and voltage proof are checked		N/A
	Visual examination, no visible damage		N/A
4.17	Passive flammability test		N/A
	This subclause is applicable		N/A
4.18	Active flammability test		N/A
	This subclause is applicable		N/A
G	ANNEX G (NORMATIVE) SAFETY ISOLATING TRANSFORMERS		N/A
	The following modifications to this standard are applicable for safety isolating transformers:		N/A
7	Marking and instructions		N/A
7.1	Transformers for specific use marked with:		N/A
	-name, trademark or identification mark of the manufacturer or responsible vendor		N/A
	-model or type reference		N/A
17	Overload protection of transformers and associated circuits		N/A
	Fail-safe transformers comply with subclause 15.5 of IEC 61558-1		N/A
22	Construction		N/A
	Subclauses 19.1 and 19.1.2 of IEC 61558-2-6 are applicable		N/A
29	Clearances, creepage distances and solid insulation		N/A
29.1, 29.2 and 29.3	The distances specified in items 2a, 2c and 3 in table 13 of IEC 61558-1 apply		N/A
H	ANNEX H (NORMATIVE) SWITCHES		P
	Switches comply with the following clauses of IEC 61058-1, as modified:		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	-The tests of IEC 61058-1 carried out under the conditions occurring in the appliance		P
	-Before being tested, switches are operated 20 times without load		P
8	Marking and documentation		P
	Switches are not required to be marked		N/A
	However, switches that can be tested separately from the appliance marked with the manufacturer's name or trade mark and the type reference	KCD3, 250V 6A	P
13	Mechanism		P
	The tests may be carried out on a separate sample		P
15	Insulation resistance and dielectric strength		P
15.1	Not applicable		N/A
15.2	Not applicable		N/A
15.3	Applicable for full disconnection and micro-disconnection		P
17	Endurance		P
	Compliance is checked on three separate appliances or switches		P
	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		P
	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		P
	Subclause 17.2.2 and 17.2.5.2 are not applicable		P
	The ambient temperature during the test is that occurring in the appliance during the test of Clause 11 in IEC 60335-1		P
	Temperature rise of the terminals not more than 30 K above the temperature rise measured in clause 11 of IEC 60335-1	Temperature rise: (32,4-29,6)=2,8K	P
20	Clearances, creepage distances, solid insulation and coatings of rigid printed board assemblies		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	This clause is applicable to clearances and creepage distances for functional insulation, across full disconnection and micro-disconnection, as stated in table 24	Micro disconnection. Functional insulation: Cr=6mm, Cl=4mm.	P
I	ANNEX I (NORMATIVE) MOTORS HAVING BASIC INSULATION THAT IS INADEQUATE FOR THE RATED VOLTAGE OF THE APPLIANCE		N/A
	The following modifications to this standard are applicable for motors having basic insulation that is inadequate for the rated voltage of the appliance:		N/A
8	Protection against access to live parts		N/A
8.1	Metal parts of the motor are considered to be bare live parts		N/A
11	Heating		N/A
11.3	Temperature rise of the body of the motor is determined instead of the temperature rise of the windings		N/A
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		N/A
16	Leakage current and electric strength		N/A
16.3	Insulation between live parts of the motor and its other metal parts not subjected to the test		N/A
19	Abnormal operation		N/A
19.1	The tests of 19.7 to 19.9 not carried out		N/A
19.101	Appliance operated at rated voltage with each of the following fault conditions:		N/A
	- short circuit of the terminals of the motor, including any capacitor incorporated in the motor circuit		N/A
	- short circuit of each diode of the rectifier		N/A
	- open circuit of the supply to the motor		N/A
	- open circuit of any parallel resistor, the motor being in operation		N/A
	Only one fault simulated at a time, the tests carried out consecutively		N/A
22	Construction		N/A
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		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
	Compliance checked by the tests specified for double and reinforced insulation		N/A
J	ANNEX J (NORMATIVE) COATED PRINTED CIRCUIT BOARDS		N/A
	Testing of protective coatings of printed circuit boards carried out in accordance with IEC 60664-3 with the following modifications:		N/A
6.6	Climatic sequence		N/A
	When production samples are used, three samples of the printed circuit board are tested		N/A
6.6.1	Cold		N/A
	The test is carried out at -25°C		N/A
6.6.3	Rapid change of temperature		N/A
	Severity 1 is specified		N/A
6.8.6	Partial discharge extinction voltage		N/A
	Type A coatings not subjected to a partial discharge test		N/A
6.9	Additional tests		N/A
	This subclause is not applicable		N/A
K	ANNEX K (NORMATIVE) OVERVOLTAGE CATEGORIES		P
	The information on overvoltage categories is extracted from IEC 60664-1		P
	Overvoltage category is a numeral defining a transient overvoltage condition		P
	Equipment of overvoltage category IV is for use at the origin of the installation		N/A
	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		N/A
	Equipment of overvoltage category II is energy consuming equipment to be supplied from the fixed installation		P
	If such equipment is subjected to special requirements with regard to reliability and availability, overvoltage category III applies		N/A
	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		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
L	ANNEX L (INFORMATIVE) GUIDANCE FOR THE MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES		P
	Sequences for the determination of clearances and creepage distances		P
M	ANNEX M (NORMATIVE) POLLUTION DEGREE		P
	The information on pollution degrees is extracted from IEC 60664-1		P
	Pollution		P
	The microenvironment determines the effect of pollution on the insulation, taking into account the microenvironment		P
	Means may be provided to reduce pollution at the insulation by effective enclosures or similar		P
	Minimum clearances specified where pollution may be present in the microenvironment		P
	Degrees of pollution in the microenvironment		P
	For evaluating creepage distances, the following degrees of pollution in the microenvironment are established:		P
	- pollution degree 1: no pollution or only dry, non-conductive pollution occurs. The pollution has no influence		N/A
	- pollution degree 2: only non-conductive pollution occurs, except that occasionally a temporary conductivity caused by condensation is to be expected		P
	- pollution degree 3: conductive pollution occurs or dry non-conductive pollution occurs that becomes conductive due to condensation that is to be expected		N/A
	- pollution degree 4: the pollution generates persistent conductivity caused by conductive dust or by rain or snow		N/A
N	ANNEX N (NORMATIVE) PROOF TRACKING TEST		P
	The proof tracking test is carried out in accordance with IEC 60112 with the following modifications:		P
7	Test apparatus		P
7.3	Test solutions		P
	Test solution A is used		P

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
10	Determination of proof tracking index (PTI)		P
10.1	Procedure		P
	Proof voltage is 100V, 175V, 400V or 600V.....	175V on swing motor switch enclosure.	P
	Last paragraph of clause 3 applies		P
	The test is carried out on five specimens		P
	In case of doubt, additional test with proof voltage reduced by 25V, the number of drops increased to 100		N/A
10.2	Report		P
	The report stating if the PTI value was based on a test using 100 drops with a test voltage of (PTI-25) V		P
O	ANNEX O (INFORMATIVE) SELECTION AND SEQUENCE OF THE TESTS OF CLAUSE 30		P
	Description of tests for determination of resistance to heat and fire		P
P	ANNEX P (INFORMATIVE) GUIDANCE FOR THE APPLICATION OF THIS STANDARD TO APPLIANCES USED IN WARM DAMP EQUABLE CLIMATES		N/A
	Modifications applicable for class 0 and 0I appliances having a rated voltage exceeding 150V, intended to be used in countries having a warm damp equable climate and that are marked WDaE		N/A
	Modifications may also be applied to class I appliances having a rated voltage exceeding 150V, intended to be used in countries having a warm damp equable climate and that are marked WdaE, if liable to be connected to a supply mains that excludes the protective earthing conductor		N/A
5	General conditions for the tests		N/A
5.7	The ambient temperature for the tests of Clauses 11 and 13 is $40\ ^{+3}_{0}$ °C		N/A
7	Marking and instructions		N/A
7.1	The appliance marked with the letters WdaE		N/A
7.12	The instructions state that the appliance is to be supplied through a RCD having a rated residual operating current not exceeding 30mA		N/A
	The instructions state that the appliance is considered to be suitable for use in countries having a warm damp equable climate, but may also be used in other countries		N/A
11	Heating		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict
11.8	The values of Table 3 are reduced by 15K		N/A
13	Leakage current and electric strength at operating temperature		N/A
13.2	The leakage current for class I appliances not exceeding 0.5mA		N/A
15	Moisture resistance		N/A
15.3	The value of t is 37°C		N/A
16	Leakage current and electric strength		N/A
16.2	The leakage current for class I appliances not exceeding 0.5mA		N/A
19	Abnormal operation		N/A
19.13	The leakage current test of 16.2 is applied in addition to the electric strength test of 16.3		N/A
Q	ANNEX Q (INFORMATIVE) SEQUENCE OF TESTS FOR THE EVALUATION OF ELECTRONIC CIRCUITS		N/A
	Description of tests for appliances incorporating electronics circuits		N/A
R	ANNEX R (NORMATIVE) SOFTWARE EVALUATION		N/A
	Software evaluated in accordance with the following clauses of Annex H of IEC 60730-1, as modified:		N/A
H.2	Definitions		N/A
	Only definitions H.2.16 to H.2.20 applicable		N/A
H.7	Information		N/A
	Only footnotes 12) to 18) of Table 7.2, as modified, applicable		N/A
H.11.12	Controls using software		N/A
	All the subclauses of H.11.12, as modified, except H.11.12.6 and H.11.12.6.1, applicable		N/A
H.11.12.7	Delete text		N/A
H.11.12.7.1	For appliances using software class C having a single channel with self-test and monitoring structure, the manufacturer provides the measures necessary to address the fault/errors in safety related segments and data		N/A
H.11.12.8	Software fault/error detection occurs before compliance with 19.13 of IEC 60335-1 is impaired		N/A
H.12.8.1	Replace text		N/A
H.12.13	Software and safety related hardware under its control initializes and terminates before compliance with 19.13 of IEC 60335-1 is impaired		N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict

10.1	TABLE: Power input deviation				P
Input deviation of/at:	P rated (W)	P measured (W)	dP	Required dP	Remark
KC-25M/B1 R407C	1100	1251	13,7%	+15%	--
Remark: The test was performed in condition: 32/23(IU); 46/26(OU) with voltage 225V.					

11.8	TABLE: TEMPERATURE RISE MEASUREMENTS		P
KC-25M/B1 R407C	Operation mode:	Cooling	P
	t1 (°C)	25	—
	t2 (°C)	Cooling mode: 32/23(IU); 46/26(OU)	—
	Test voltage (V):	230x1,06=243,8V	—

Temperature rise dT of part/at:	Channel	Measured Cooling T (ºC)	Limit T (ºC)
Power cord	1	31,58	75
Compressor shell	2	89,4	150
Indoor fan motor enclosure	3	63,9	150
Outdoor fan motor enclosure	4	56,4	150
Indoor fan motor capacitor	5	30,4	T70
Outdoor fan motor capacitor	6	30,5	T70
Compressor capacitor	7	30,9	T70
Swing motor enclosure	8	26,7	150
Ambient 5mm of thermostat	9	30,1	T55
Ambient 5mm of main switch	10	29,7	T55
Ambient 5mm of step motor switch	11	28,2	T55
Internal wire to compressor	12	69,9	105
Terminal of swing motor switch	13	29,2	Reference
Test corner	14	29,9	90

Remark:
1) The heating test was conducted with different operation mode. The highest temperature result was considered.

	winding temperature rise measurements:		P
	K = 234,5 for copper windings ..... :	copper windings	--
	K = 225 for aluminium windings ..... :	n.a.	--
	insulation class ..... :	See below	--

Temperature rise dT of winding:	R_1 (Ω)	R_2 (Ω)	T(°C)	required T(°C)	insulation class

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict

YDK14-6A	344/549	390/621	62,0/61,3	120	B
YDK22-4A	345/166	391/189	61,9/63,2	120	B

13.2	TABLE: LEAKAGE CURRENT MEASUREMENTS AT OPERATING TEMPERATURE		P
	Heating appliances: at 1,15 times rated input (W) . :	n.a	-
	Motor-operated and combined appliances: at 1,06 times rated voltage (V) ..... :	230x1,06=243,8V	-

Leakage current I between:	I (mA)	Required I (mA)
L/N – earthed metal part	0,017	0,25
L/N- main switch enclosure	1,081	3,5

13.3	TABLE: ELECTRIC STRENGTH MEASUREMENTS AT OPERATING TEMPERATURE		P

Test voltage applied between:	Test voltage (V)	Breakdown
L/N – earthed metal part	1000	No
L/N- main switch enclosure	3000	No

16.2	TABLE: LEAKAGE CURRENT MEASUREMENTS		P
	At 1,06 times rated voltage (V):	230x1,06=243,8V	-

Leakage current I between:	I (mA)	Required I (mA)
L/N – earthed metal part	0,631	3,5
L/N- main switch enclosure	0,016	0,25

16.3	TABLE: ELECTRIC STRENGTH MEASUREMENTS		P

Test voltage applied between:	Test voltage (V)	Breakdown
L/N – earthed metal part	1250	No
L/N- main switch enclosure	3000	No

19.2	TABLE: LOCK MOTOR TEST, TEMPERATURE RISE MEASUREMENTS	P
Abnormal conditions:	Lock motor rotor	-
Duration:	15 days, after 3 days HV test performed	-
Test voltage:	230VAC	-
T1(°C)	25	-
T2(°C)	25	-
Model	SM020	-

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict

Temperature of part/at (°C)	Temperature(°C)	Required temperature(°C)
Enclosure temperature	47	150
Winding temperature	58	165(Class E)

Result:			
Protective device operated?		Impedance protected	
If yes ,what was the protective device?		No	
How long was the operation until protective device operated?		No	
Deformation of enclosure, which affect the compliance of cl.8?		No	
Poisonous or ignitable gas?		No	
Emit flames?		No	
Molten metal?		No	
Leakage current measurement			P
	at 2 times rated voltage (V) ..... :	2x230=460V	--
leakage current I between:		I (mA)	required I (mA)
L/N – enclosure		0,036	2,0

19.11.2	TABLE: FAULT CONDITION TESTS		P
	Ambient temperature (°C)	Cooling: 32/23(IU); 46/26(OU)	-
	Test voltage (V)	230	-

Fault condition	Test result	Hazard
1.SC indoor fan capacitor (cooling)	Appliance stopped one minute later.	No
2.OC indoor fan capacitor (cooling)	Appliance stopped after two minutes.	No
3.SC outdoor fan capacitor (cooling)	Outdoor fan motor stopped and overload protector operated, motor compressor stopped, appliance stopped.	No
4.OC outdoor fan capacitor (cooling)	The motor compressor's protector operated.	No
5. SC motor compressor capacitor (cooling)	The motor compressor's protector operated.	No
6. OC motor compressor capacitor (cooling)	The motor compressor's protector operated.	No
Remark: the "SC" means "short-circuited" ,"OC" means " open-circuited"		

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict

19.14	TABLE: Abnormal operation		P
	t_1 (°C)	23/-°C(IU) (Clause: 19.5)	-
	t_2 (°C)	42/-°C (IU) (clause 19.7)	
	t_3 (°C)	32/23°C(IU) (clause 19.10)	-

Temperature T of part / at :	T (°C)	Required T (°C)
Enclosure (clause 19.5)	22,5	175
Supply cord (clause 19.5)	25,4	175
Test corner(clause 19.5)	24,2	175
Enclosure (clause 19.7)	42,2	175
Supply cord (clause 19.7)	42,6	175
Test corner(clause 19.7)	40,9	175
Enclosure (clause 19.10)	30,7	175
Supply cord (clause 19.10)	33,7	175
Test corner (clause 19.10)	30,8	175
Remark : all alternate fan motors and compressors were considered, and the highest values were listed.		

24.1	TABLE: COMPONENTS				P
object/part No.	manufacturer/ trademark	type/model	technical data	standard	mark(s) of conformity
Remark 1: For thermal cut-outs, thermal links of compressors, fan motors and transformers which have been approved according to relevant IEC standards, the manufacturer, types and characters not listed in the CDF but should be in this scope authorized by original certification bodies.					
Built-in components with windings: (motors, transformers, magnetic coils etc.)					
Compressor	Guangdong Meizhi	PG170X1C-4DZDE3	Main :3,33±5%Ω aux.3,78±5%Ω Synthetic	IEC 60335-2-34	TUV R 50062621
Fan motor for indoor part	Welling	YDK14-6A	M：330±10% Ω A1：163, 5±10% Ω A2：380±10%Ω Class B	IEC 60335-2-40	TUV (R50023106)
Fan motor for oudoor part	Welling	YDK22-4A	M：336±10% Ω A1：63,5±10% Ω A2：100±10% Ω Class B	IEC 60335-2-40	TUV (R50023106)
Swing motor	Huayang	SM020	220-240VAC 15KΩ±10% Class E	IEC 60335-2-40	Test with Appliance
Built-in components : (switches, thermostats, heater, plugs, wires, capacitors, sockets, rfi-filters etc.)					
Plug	Optional	Optional	250VAC 10-16A	IEC 60884	TUV or any CENELEC

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict

Power cord	Optional	H05VV-F	3G1,5mm^2 3G1,0mm^2	IEC 60227	TUV or any CENELEC
Internal wire	Optional	AWM1015	18AWG, 20AWG	--	UL
Wire with fan motor	Optional	AWM1015	18AWG, 20AWG, 22AWG	--	UL
Terminal with fan motor Wire	Korea Electric Terminal	(ST)730135-2	300V, 20A	IEC 60998	VDE 40020818
Capacitor for Compressor	TongFeng	CBB65	AC450V, 30μF T mark: 70°C	IEC 60252	TUV R 50048041
Alternate	Jin xin	CBB65 SH	AC450V, 30μF T mark: 70°C	IEC 60252	VDE 128580
Alternate	HAO YE	MK 256 (CBB65A-1)	AC450V, 30μF T mark: 70°C	IEC 60252	TUV R 50037189
Alternate	FeiDa	CBB65A-1	AC450V, 30μF T mark: 70°C	IEC 60252	TUV R 50042636
Capacitor for Motor YDK14-6A	DaHua	CBB6-1	AC450V, 1μF T mark: 70°C	IEC 60252	TUV R 50033889
Alternate	HaoYe	MKPS105 (CBB65D)	AC450V, 1μF T mark: 70°C	IEC 60252	TUV R 50035566
Capacitor for Motor YDK22-4A	DaHua	CBB6-1	AC450V, 2μF T mark: 70°C	IEC 60252	TUV R 50033889
Alternate	HaoYe	MKPS205 (CBB65D)	AC450V, 2μF T mark: 70°C	IEC 60252	TUV R 50035566
Main Switch	Changheng	XK20/5 07L -1	250VAC, 20A T55	IEC 61058	TUV R 50066664
Switch for Swing motor	BaiYueKang	KCD3	250VAC, 6A,T55	IEC 60335-2-40	Test with appliance
Thermostat	Jiangsu Changheng	WP15H-L	250VAC, 20A, T55 50/60Hz 100,000 cycles	IEC 60730	VDE 40015337

28.1	TABLE: Threaded part torque test		P
Threaded part identification	Diameter of thread (mm)	Column number (I, II, or III)	Applied torque (Nm)
Screws for enclosure of unit	4,0	II	1,2
Screws for earthing terminal	4,0	II	1,2
Screws for cord anchorage	4,0	II	1,2

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict

29.1	TABLE: CLEARANCES					P
	Overvoltage category: ..	II				—
		Type of insulation:				
Rated impulse voltage (V):	Min. cl (mm)	Basic	Functional	Supplementary	Reinforced	Verdict / Remark
330	0,5	--	--	--	--	N/A
500	0,5	--	--	--	--	N/A
800	0,5	--	--	--	--	N/A
1 500	0,5	--	--	--	--	N/A
2 500	1,5	**1,5**[1)]	**1,5**[2)]	**1,5**[3)]	**3,0**[4)]	**P**
4 000	3,0	**3,0**[5)]	--	--	--	**P**
6 000	5,5	--	--	--	--	N/A
8 000	8,0	--	--	--	--	N/A
10 000	11,0	--	--	--	--	N/A

Remark:

- Basic [1)]: Between pin of main switch to earthed metal part: Cl=8mm.
- Function[2)]: Between terminals in swing motor switch: Cl=4,0mm.
- Supplementary[3)]: Between internal wire and accessible part/openings, Cl=20mm.
- Reinforced[4)]: Between the live part of the switch to switch enclosure: Cl=10mm.
- Basic[5)]: between capacitor terminal to earthed metal part: Cl=8mm

29.2	TABLE: CREEPAGE DISTANCES, BASIC, SUPPLEMENTARY AND REINFORCED INSULATION	P

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		—	—	N/A
>50	0,2	0,6	0,9	1,2	1,5	1,7	1,9	—		—	N/A
>50	0,4	1,2	1,8	2,4	3,0	3,4	3,8	—	—		N/A
>50 and ≤125	0,3	0,8	1,1	1,5	1,9	2,1	2,4		—	—	N/A
>50 and ≤125	0,3	0,8	1,1	1,5	1,9	2,1	2,4	—		—	N/A
>50 and ≤125	0,6	1,6	2,2	3,0	3,8	4,2	4,8	—	—		N/A
>125 and ≤250	0,6	1,3	1,8	**2,5**[1)]	3,2	3,6	4,0	**20,0**	—	—	**P**

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict

>125 and ≤250	0,6	1,3	1,8	**2,5**[2)]	3,2	3,6	4,0	—	**20,0**	—	**P**
>125 and ≤250	1,2	2,6	3,6	**5,0**[3)]	6,4	7,2	8,0	—	—	**10,0**	**P**
>250 and ≤400	1,0	2,0	2,8	4,0	5,0	5,6	6,3		—	—	N/A
>250 and ≤400	1,0	2,0	2,8	4,0	5,0	5,6	6,3	—		—	N/A
>250 and ≤400	2,0	4,0	5,6	8,0	10,0	11,2	12,6	—	—		N/A
>400 and ≤500	1,3	2,5	3,6	**5,0**[4)]	6,3	7,1	8,0	**10,0**	—	—	**P**
>400 and ≤500	1,3	2,5	3,6	5,0	6,3	7,1	8,0	—		—	N/A
>400 and ≤500	2,6	5,0	7,2	10,0	12,6	14,2	16,0	—	—		N/A
>500 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0		—	—	N/A
>500 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	—		—	N/A
>500 and ≤800	3,6	6,4	9,0	12,6	16,0	18,0	20,0	—	—		N/A
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5		—	—	N/A
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	—		—	N/A
>800 and ≤1000	4,8	8,0	11,2	16,0	20,0	22,0	25,0	—	—		N/A
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0		—	—	N/A
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	—		—	N/A
>1000 and ≤1250	6,4	10,0	14,2	20,0	25,0	28,0	32,0	—	—		N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0		—	—	N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	—		—	N/A
>1250 and ≤1600	8,4	12,6	18,0	25,0	32,0	36,0	40,0	—	—		N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0		—	—	N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	—		—	N/A
>1600 and ≤2000	11,2	16,0	22,0	32,0	40,0	44,0	50,0	—	—		N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25, 0	28,0	32,0		—	—	N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25, 0	28,0	32,0	—		—	N/A
>2000 and ≤2500	15,0	20,0	28,0	40,0	50,0	56,0	64,0	—	—		N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0		—	—	N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	—		—	N/A
>2500 and ≤3200	20,0	25,0	36,0	50,0	64,0	72,0	80,0	—	—		N/A
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0		—	—	N/A
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	—		—	N/A
>3200 and ≤4000	25,0	32,0	44,0	64,0	80,0	90,0	100,0	—	—		N/A
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0		—	—	N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict

>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	—		—	N/A
>4000 and ≤5000	32,0	40,0	56,0	80,0	100,0	112,0	126,0	—	—		N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0		—	—	N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	—		—	N/A
>5000 and ≤6300	40,0	50,0	72,0	100,0	126,0	142,0	160,0	—	—		N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0		—	—	N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	—		—	N/A
>6300 and ≤8000	50,0	64,0	90,0	126,0	160,0	180,0	200,0	—	—		N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0		—	—	N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	—		—	N/A
>8000 and ≤10000	64,0	80,0	112,0	160,0	200,0	220,0	250,0	—	—		N/A
>10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0		—	—	N/A
>10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	—		—	N/A
>10000 and ≤12500	80,0	100,0	142,0	200,0	250,0	280,0	320,0	—	—		N/A

*), B=Basic, S=Supplementary and R=Reinforced

Remark: Pollution degree 2 and material group IIIa/IIIb was applied.

- Basic[1)]: between main switch terminal to earthed metal part.
- Supplementary[2)]: between internal wire to accessible part.
- Reinforced[3)]: between live part of swing motor switch to accessible part.
- Basic[4)]: between the capacitor terminals and earthed metal part.

29.2	TABLE: CREEPAGE DISTANCES, FUNCTIONAL INSULATION							P
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	N/A
>50 and ≤125	0,3	0,7	1,0	1,4	1,8	2,0	2,2	N/A
>125 and ≤250	0,4	1,0	1,4	2,0	2,5	2,8	**3,2**	P
>250 and ≤400	0,8	1,6	2,2	3,2	4,0	4,5	5,0	N/A
>400 and ≤500	1,0	2,0	2,8	4,0	5,0	5,6	6,3	N/A
>500 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	N/A
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	N/A

IEC 60335-2-40			
Clause	Requirement – Test	Result	Verdict

>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	N/A
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	N/A
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	N/A
>10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	N/A

Pollution degree 2 and material group IIIa/IIIb was applied.

1: Functional creepage between different polarity on the thermostat measured: 4,0mm

2. Functional creepage between terminals in swing motor switch: Cr=6mm.

30.1	TABLE: ball-pressure tests		P
Part	test temperature (°C)	Impression diameter (mm)	Limit (mm)
Enclosure	75	1,1	2,0
Swing motor switch enclosure	125	1,1	2,0

30.2	Table: resistance to heat, fire and tracking, glow-wire test							P
	Tracking test (V)		Glow-wire test(ºC)					--
Part	175	250	Test temperature (ºC)	Result				
				Ti=	Te=	Max high of flame	Ignition of tissue paper	Other observation
Enclosure	--	--	550	--	--	--	--	Not burning
Swing motor switch enclosure	175	--	750	--	--	--	--	Not burning

--End of report--

Picture 1

Picture 2

Picture 3

Picture 4

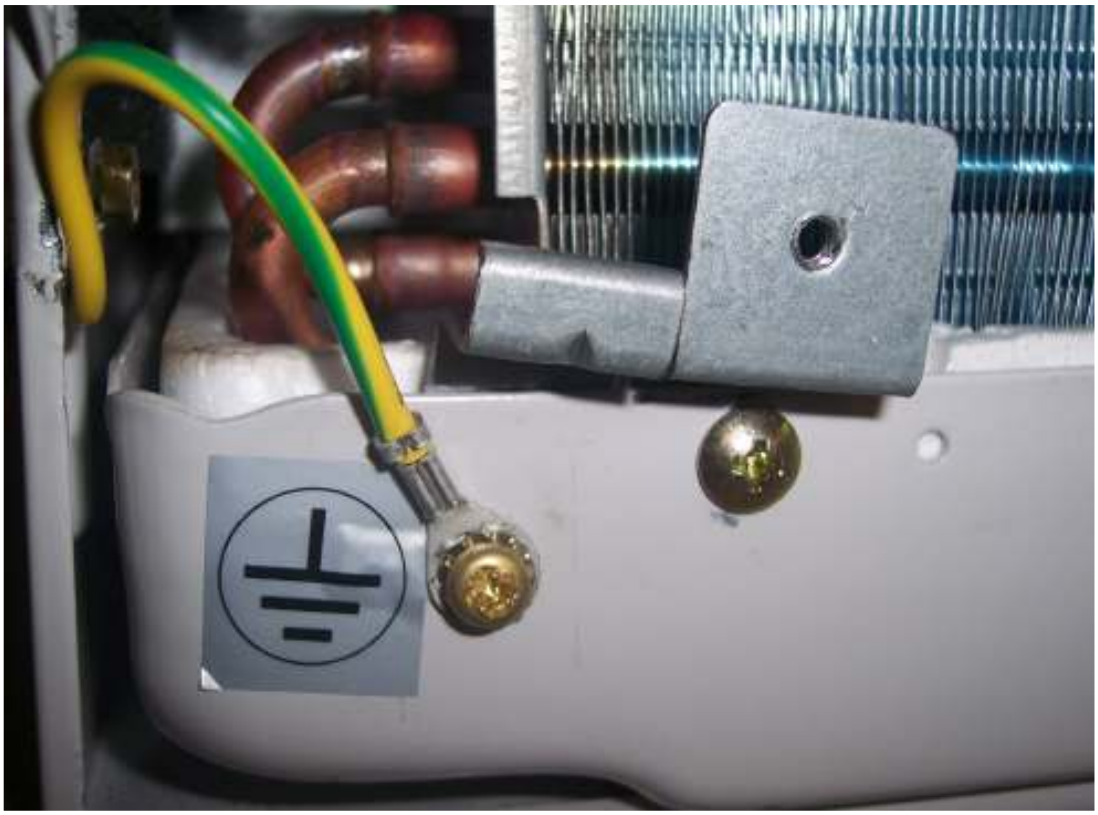
Picture 5

Picture 6

Picture 7

Picture 8

Picture 9



Picture 10

Picture 11

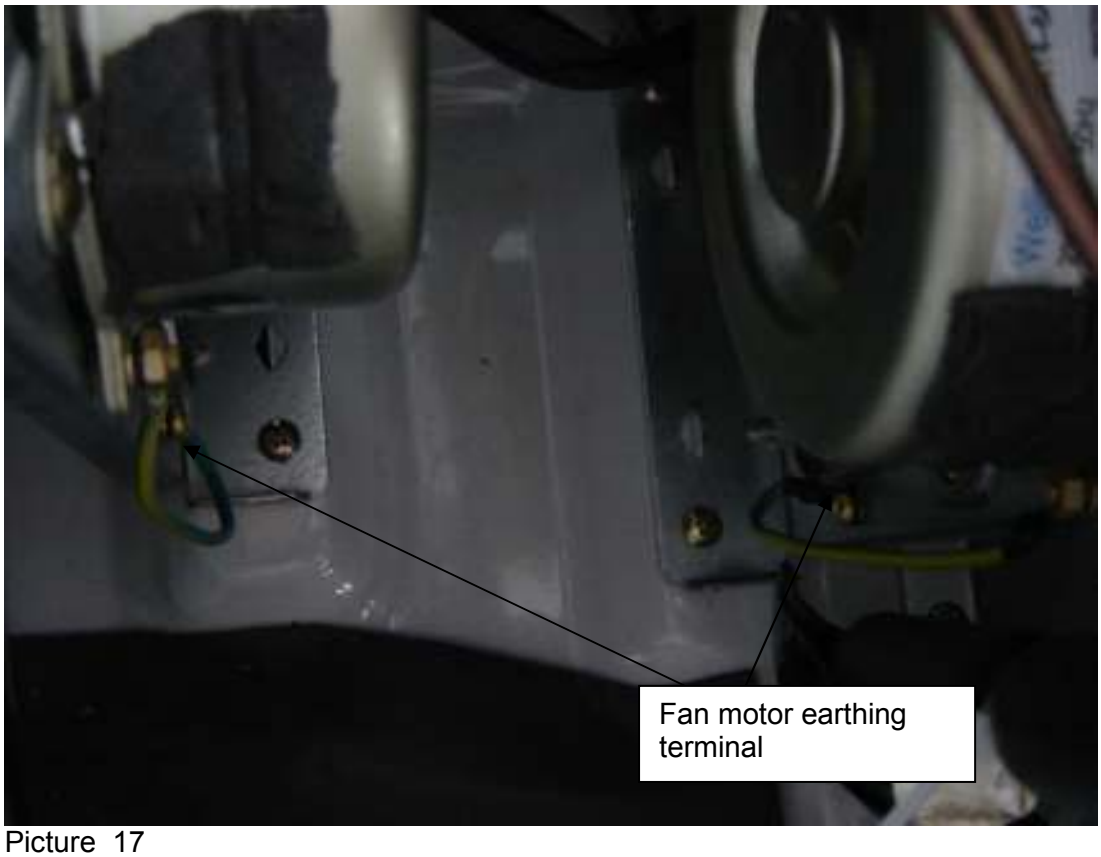
Picture 12

Picture 13

Picture 14

Picture 15

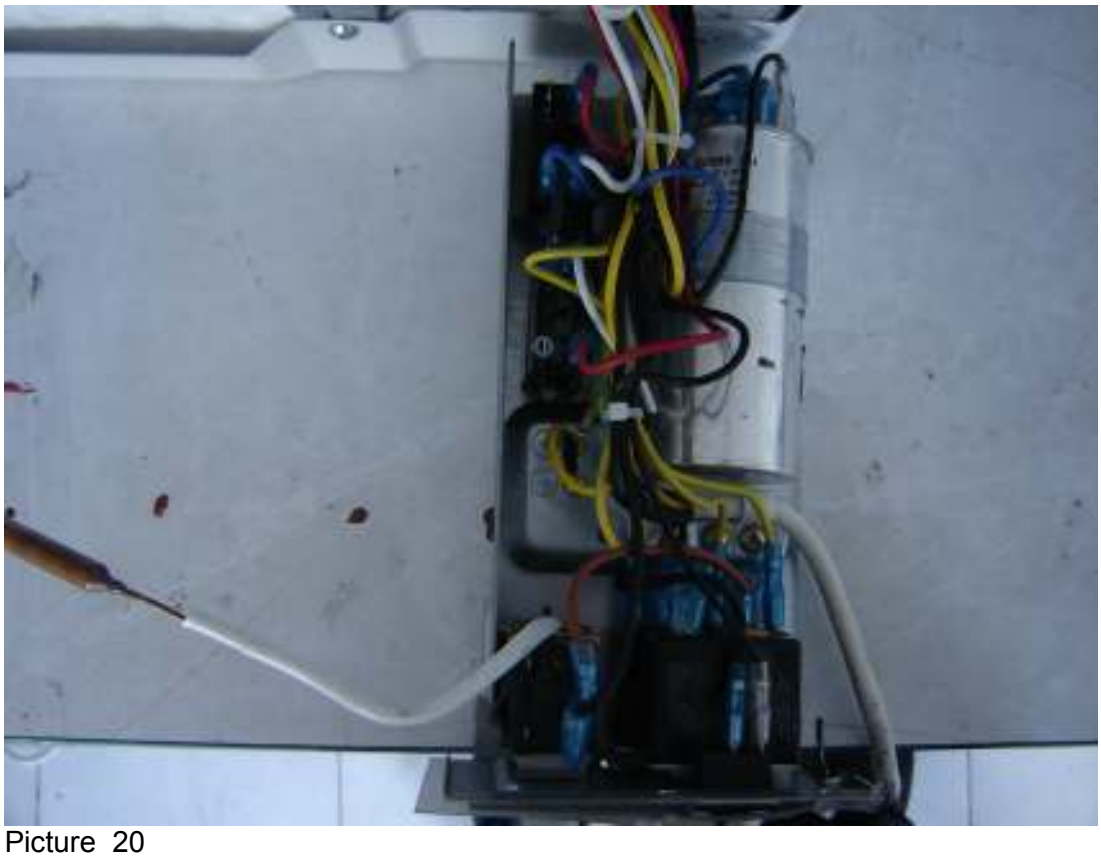
Picture 16



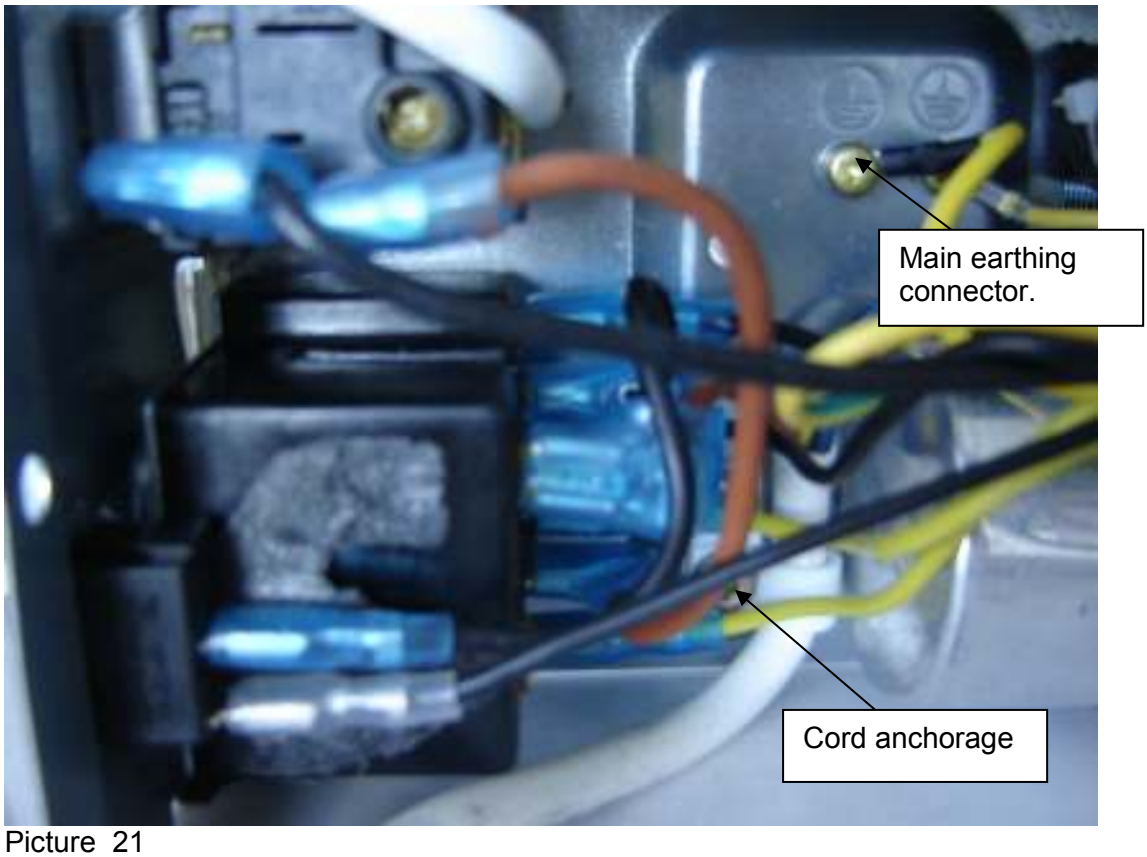
Picture 17

Picture 18

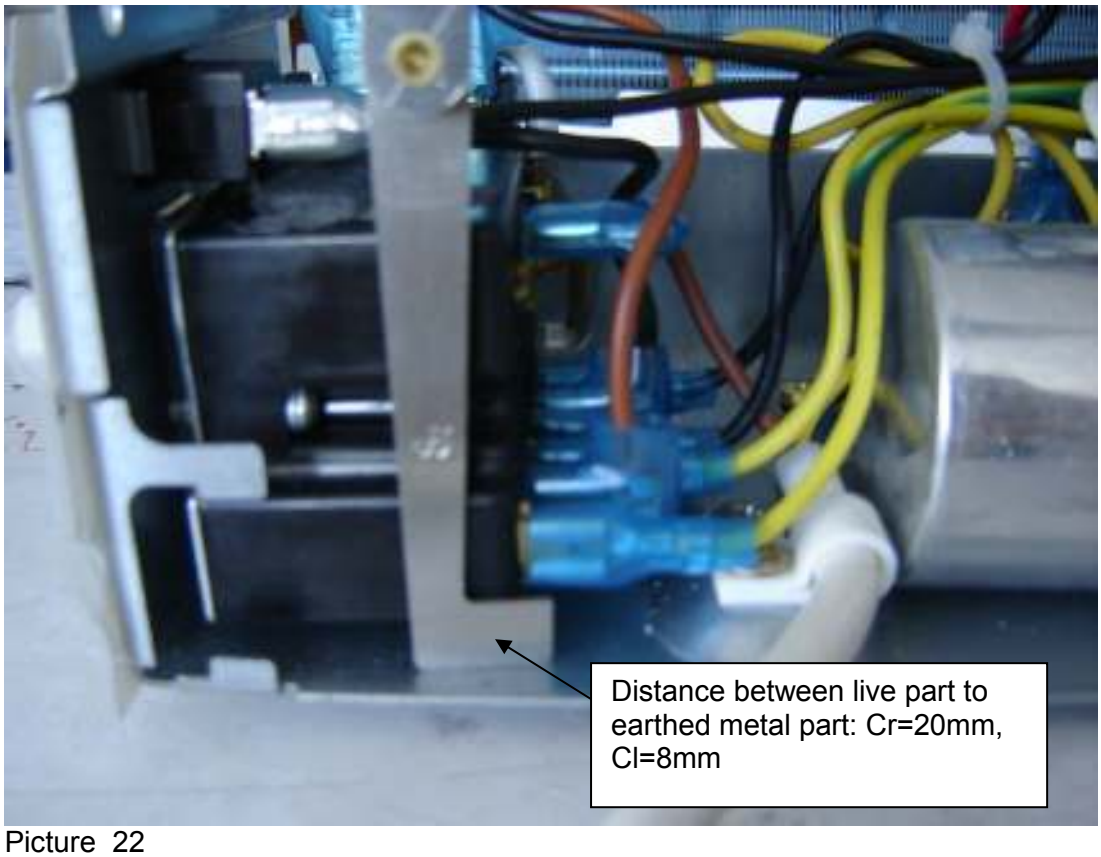
Picture 19



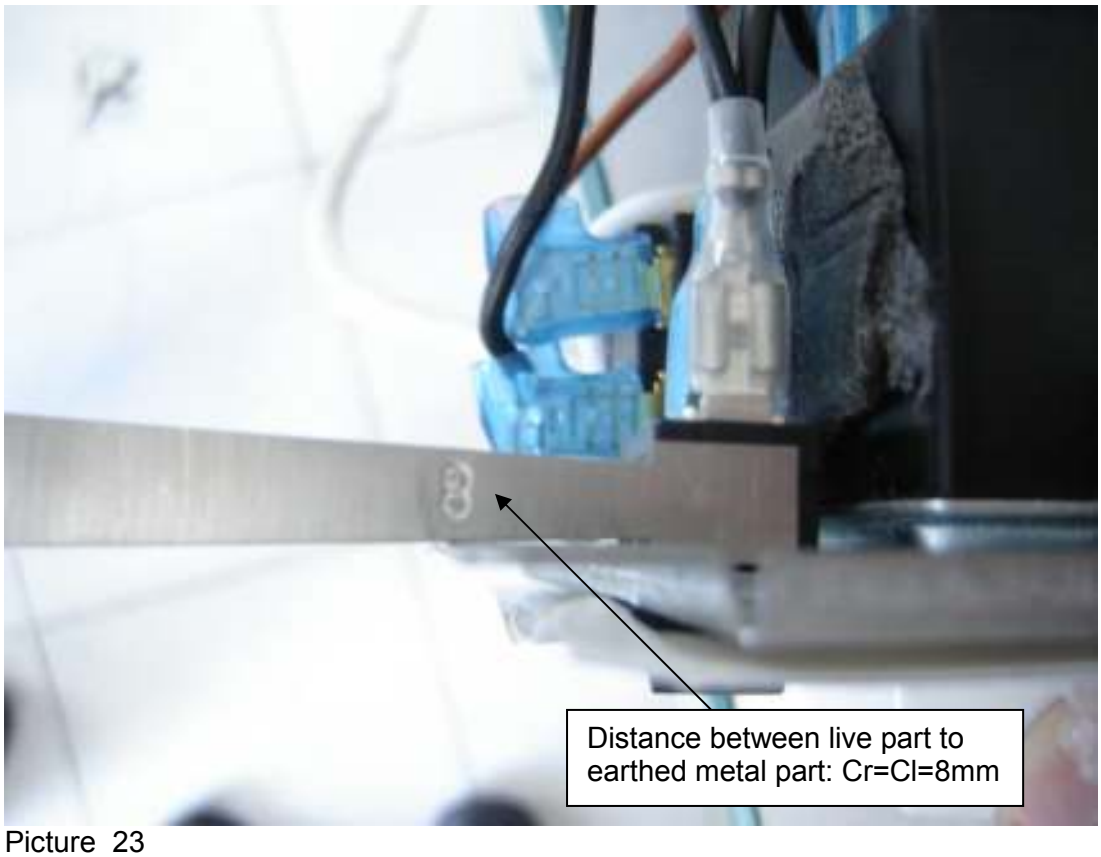
Picture 20



Picture 21

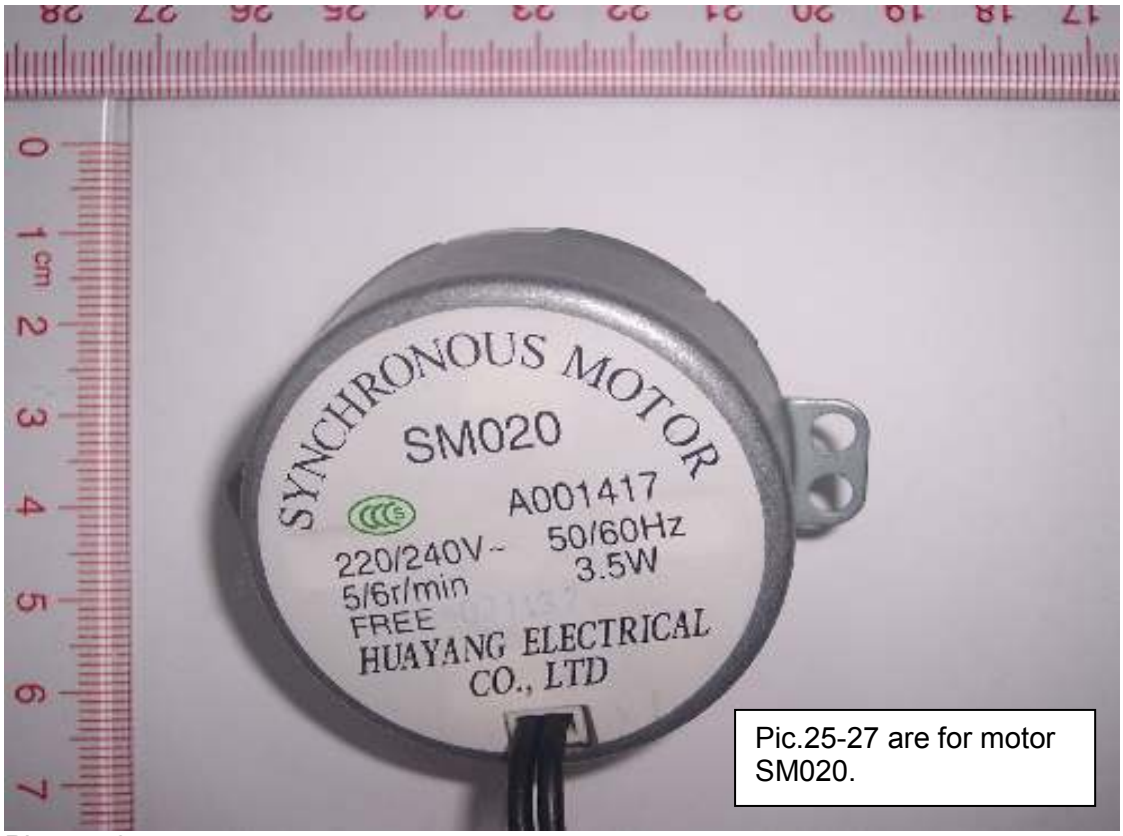


Picture 22



Picture 23

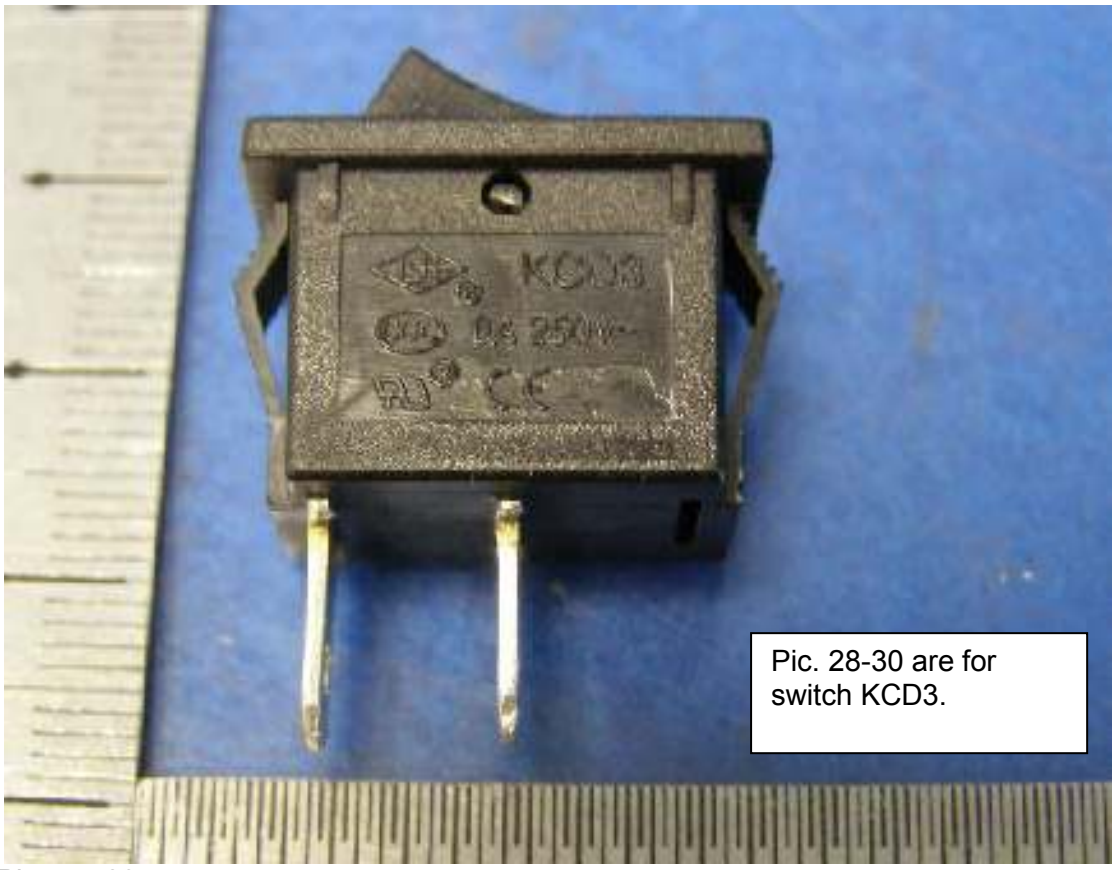
Picture 24



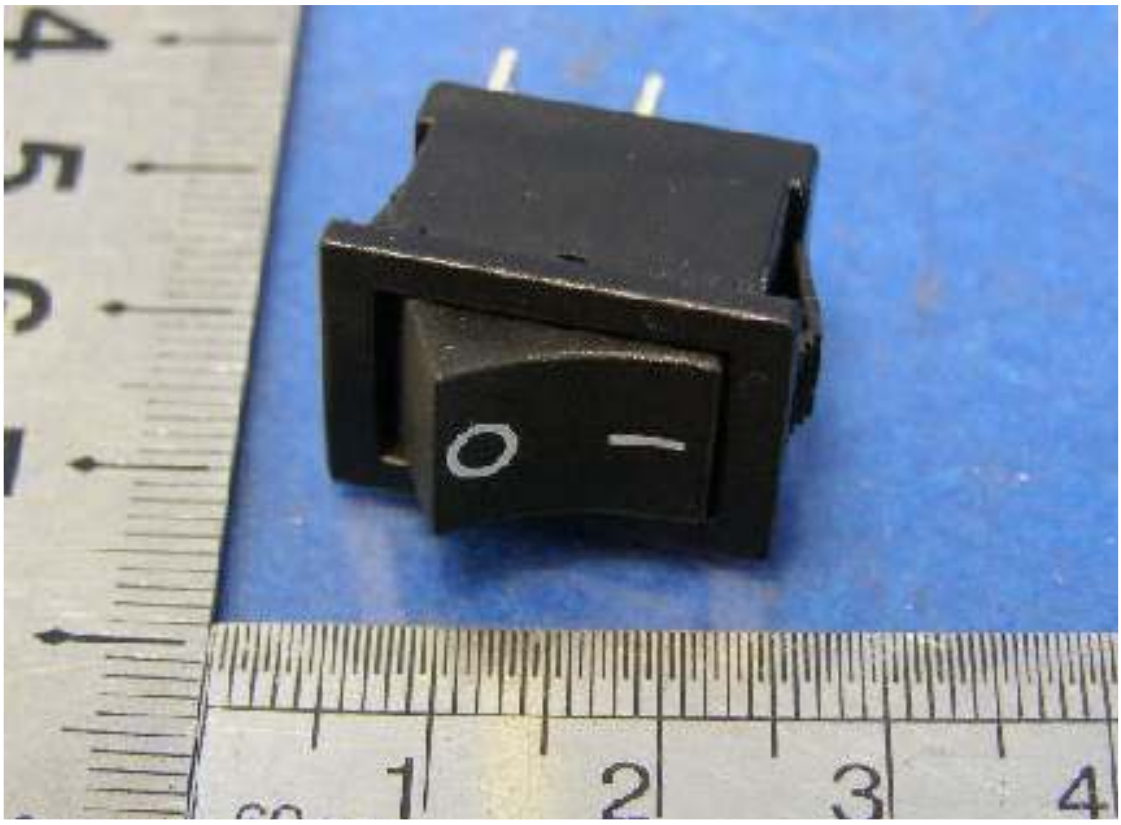
Picture 25

Picture 26

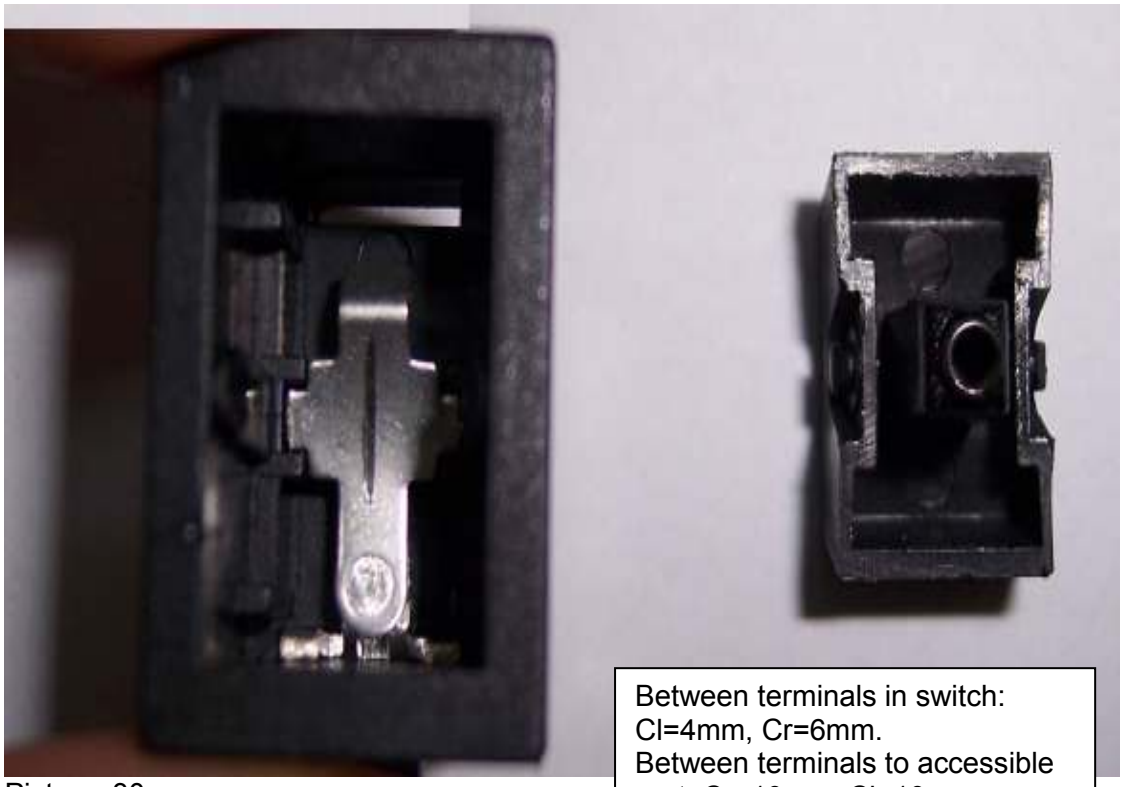
Picture 27



Picture 28



Picture 29



Between terminals in switch: Cl=4mm, Cr=6mm.
Between terminals to accessible part: Cr=10mm, Cl=10mm

Picture 30