

IEC**IECEE
CB
SCHEME**

Ref. Certif. No.

JPTUV-013076-M2

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST
CERTIFICATES FOR ELECTRICAL EQUIPMENT
(IECEE) CB SCHEMESYSTEME CEI D'ACCEPTATION MUTUELLE DE
CERTIFICATS D'ESSAIS DES EQUIPEMENTS
ELECTRIQUES (IECEE) METHODE OC**CB TEST CERTIFICATE
CERTIFICAT D'ESSAI OC**Product
Produit

Room air conditioner indoor unit

Name and address of the applicant
Nom et adresse du demandeurElectra Consumer Products
21 Aminadav St., Tel-Aviv
67067, IsraelName and address of the manufacturer
Nom et adresse du fabricantElectra Consumer Products
21 Aminadav St., Tel-Aviv
67067, IsraelName and address of the factory
Nom et adresse de l'usine

(See appendix for factories information)

Rating and principal characteristics
Valeurs nominales et caractéristiques principalesAC 220V-230V; 50Hz; Class I
rated power input: refer to the test report
IP20; Refrigerant: R22, R407C or R410ATrade mark (if any)
Marque de fabrique (si elle existe)

ELECTRA

Model/type Ref.
Ref. de typeWMF series
TOP series
For details: refer to the test report.Additional information (if necessary)
Information complémentaire (si nécessaire)For model differences, refer to the test report.
Re-issue of JPTUV-013076-M1 dated 13.04.2006,
due to second modification.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 laIEC 60335-2-40:1995+A1
IEC 60335-1:1991+A1+A2As 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

12012834 003

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

TUV Rheinland Group

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Signature:

Dipl.-Ing. M. Geiser

Date: 20.09.2006

Appendix to CB Certificate JPTUV-013076-M2
Report Number: 12012834 003

PAGE 1 OF 1

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

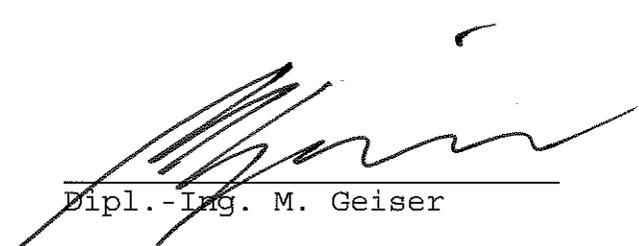
Name and address of the factory(ies)
Electra Air-conditioning (Shenzhen) Co., Ltd.

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

Electra Consumer Products Ltd.

Sapir 1, Rishon Lezion
75704
Israel

Date: 20.09.2006


Dipl.-Ing. M. Geiser

TEST REPORT

IEC 60335-2-40

Safety of household and similar electrical appliances Part 2: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers

Report Reference No.....: 12012834 003

Compiled by (+ signature): S. Kischka

Approved by (+ signature): M. Kera

Contents.....: 8 pages

Date of issue: 2006-09-11



CB Testing laboratory Name: TÜV Rheinland Japan Ltd., Yokohama Laboratory

Address: 4-25-2 Kita-Yamata, Tsuzuki-ku, Yokohama 224-0021, Japan

Testing location/procedure.....: CBTL SMT TMP

Address: Same as above

Applicant's Name.....: ELECTRA CONSUMER PRODUCTS

Address: 21 Aminadav St, Tel-Aviv, 67067 Israel

Test specification

Standard.....: IEC 60335-2-40:1995 + A1:2000 used in conjunction with
IEC 60335-1:1991 + A1:1994 + A2:1999

Test procedure: CB

Non-standard test method.....: N.A.

Test Report Form No.....: IEC60335_2_40C

TRF originator.....: AENOR

Master TRF: Dated 2002-02

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Test item description.....: Room air conditioner indoor unit

Trademark: ELECTRA

Model and/or type reference.....: TOP series (See model list on page 5)

Manufacturer.....: Same as applicant

Factory.....: See page 2

Rating(s).....: 220-230V~ 50Hz

Rated Power input: see rating labels

Refrigerant: R22, R407C

IP20

Summary of testing

- 1. The modified appliance is checked according to clause 7 and 29, for other clause, please refer to report 12012834 001.

Test items particulars

Serial Number : Prototype samples without series models
 Additional information..... : N(.A.)
 :
 :

Test case verdicts

Test case does not apply to the test object : N(.A.)
 Test item does meet the requirement..... : P(ass)
 Test item does not meet the requirement : F(ail)

Testing

Date of receipt of test item : 2006-08-31
 Date(s) of performance of test..... : 2006-08-31—2006-09-05

General remarks

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

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

Clause numbers between brackets refer to clauses in IEC 60335-1

"(see Enclosure #)" refers to an 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

History of amendments and modifications:

Ref.No.12012834 001, dated 2005-12-08(Original report);

Ref.No.12012834 002, dated 2006-04-12(Modification report);

Ref.No.12012834 003, dated 2006-09-11(Modification report);

Copy of marking plate:

ELECTRA	MODEL: TOP 9 RC R22		
PROD NO.:	Fuse: 10A(G)		
TYPE:	COS ϕ =0.95		
220-230V~ 50Hz	IP20 Rev.A	Dehumidification: 1.3 l/h	
R22:	Prated: 32W	PS: 4.4MPa	Ps: 0.6MPa
		Temp.Class: T1	Weight: 13.5kg

ELECTRA	MODEL: TOP 9 ST R22		
PROD NO.:	Fuse: 10A(G)		
TYPE:	COS ϕ =0.95		
220-230V~ 50Hz	IP20 Rev.A	Dehumidification: 1.3 l/h	
R22:	Prated: 32W	PS: 4.4MPa	Ps: 0.6MPa
		Temp.Class: T1	Weight: 13.5kg

ELECTRA	MODEL: TOP 12 RC R22		
PROD NO.:	Fuse: 15A(G)		
TYPE:	COS ϕ =0.95		
220-230V~ 50Hz	IP20 Rev.A	Dehumidification: 1.5 l/h	
R22:	Prated: 42W	PS: 4.4MPa	Ps: 0.6MPa
		Temp.Class: T1	Weight: 14kg

ELECTRA	MODEL: TOP 12 ST R22		
PROD NO.:	Fuse: 15A(G)		
TYPE:	COS ϕ =0.95		
220-230V~ 50Hz	IP20 Rev.A	Dehumidification: 1.5 l/h	
R22:	Prated: 42W	PS: 4.4MPa	Ps: 0.6MPa
		Temp.Class: T1	Weight: 14kg

Copy of marking plate:

ELECTRA	MODEL: TOP 9 RC R407C		
PROD NO.:	Fuse: 10A(G)		
TYPE:	COS ϕ =0.95		
220-230V~ 50Hz	IP20 Rev.A	Dehumidification: 1.3 l/h	
R407C:	Prated: 32W	PS: 4.4MPa	Ps: 0.6MPa
		Temp.Class: T1	Weight: 13.5kg

ELECTRA	MODEL: TOP 9 ST R407C		
PROD NO.:	Fuse: 10A(G)		
TYPE:	COS ϕ =0.95		
220-230V~ 50Hz	IP20 Rev.A	Dehumidification: 1.3 l/h	
R407C:	Prated: 32W	PS: 4.4MPa	Ps: 0.6MPa
		Temp.Class: T1	Weight: 13.5kg

ELECTRA	MODEL: TOP 12 RC R407C		
PROD NO.:	Fuse: 15A(G)		
TYPE:	COS ϕ =0.95		
220-230V~ 50Hz	IP20 Rev.A	Dehumidification: 1.5 l/h	
R407C:	Prated: 42W	PS: 4.4MPa	Ps: 0.6MPa
		Temp.Class: T1	Weight: 14kg

ELECTRA	MODEL: TOP 12 ST R407C		
PROD NO.:	Fuse: 15A(G)		
TYPE:	COS ϕ =0.95		
220-230V~ 50Hz	IP20 Rev.A	Dehumidification: 1.5 l/h	
R407C:	Prated: 42W	PS: 4.4MPa	Ps: 0.6MPa
		Temp.Class: T1	Weight: 14kg

Description of modification:

1. Additional models approval.

The additional models TOP series are identical with corresponding certified models TOP* R410A series except the new models have different outer enclosure, the new models are matching with different outdoor unit, details please refer to photo document.

Model list:

No.	Additional model name	Previous certified corresponding models	Rated Voltage	Rated input	Refrigerant	Remark
1	TOP 9RC R22	TOP 9RC R410A	220-230V	32W	R22	Reverse type
2	TOP 9ST R22	TOP 9ST R410A	220-230V	32W	R22	Cooling mode
3	TOP 12RC R22	TOP 12RC R410A	220-230V	42W	R22	Reverse type
4	TOP 12ST R22	TOP 12ST R410A	220-230V	42W	R22	Cooling mode
5	TOP 9RC R407C	TOP 9RC R410A	220-230V	32W	R407C	Reverse type
6	TOP 9ST R407C	TOP 9ST R410A	220-230V	32W	R407C	Cooling mode
7	TOP 12RC R407C	TOP 12RC R410A	220-230V	42W	R407C	Reverse type
8	TOP 12ST R407C	TOP 12ST R410A	220-230V	42W	R407C	Cooling mode

IEC 60335-2-40			
Clause	Requirement - Test	Result - Remark	Verdict
7	MARKING		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 60335-2-40:1995)	~	P
	Rated frequency or frequency range (Hz)	50Hz	P
	Rated input or rated current	See rating label.	P
	Manufacturer's or responsible vendor's name, trademark or identification mark	ELECTRA	P
	Model or type reference	See rating label	P
	Symbol for Class II	Class I appliance	N/A
	Symbol for degree of protection against ingress of water, other than IPX0 (IEC 60335-2-40:1995)	IP20	N/A
	Mass of the refrigerant or of each refrigerant in a blend (except for azeotropic type (IEC 60335-2-40:1995)		N/A
	Refrigerant identification (IEC 60335-2-40:1995)	R22, R407C	P
	Permissible excessive operating pressure in pascals for sanitary hot water heat pumps (IEC 60335-2-40:1995)		N/A
	Excessive operating pressure of the refrigerant circuit for suction and discharge, if they differ (IEC 60335-2-40:1995)	Specified on rating label	P
	The maximum operating pressure for the heat exchanger (IEC 60335-2-40/A1:2000)		P
	Separate marking of the appliances with all the rated characteristics of the supplementary heaters (IEC 60335-2-40:1995)	No supplementary heaters	N/A
	Marking of the direction of the fluid flow (IEC 60335-2-40:1995)		N/A
29	CREEPAGE DISTANCES, CLEARANCES AND DISTANCES THROUGH INSULATION		P
29.1	Creepage distances and clearances not less than specified in table 13	(See appended table)	P
	Values increased by 4 mm in case of reinforced insulation when resonance voltage		N/A
	Creepage distances and clearances for circuits with voltages greater than 250 V r.m.s. (345 V peak) comply with table (IEC 60335-2-40:1995)		P

IEC 60335-2-40			
Clause	Requirement - Test	Result - Remark	Verdict
	For motor-compressors with working voltages ≤ 250 V, 29.1 of IEC 60335-2-34 applies (IEC 60335-2-40:1995)		N/A
	Creepage distances and clearances for motor-compressors with working voltages > 250 V r.m.s. and ≤ 600 V r.m.s. not less than stated in Table 101 (IEC 60335-2-40:1995)		N/A
29.2	Distances through insulation not less than 1,0 mm for supplementary insulation, and 2,0 mm for reinforced insulation. Interpretation of this requirement: see Interpretation Sheet I-SH 02, August, 1994		N/A
29.2.1	Supplementary insulation applied in thin sheet form, other than mica or similar scaly material, consists of at least two layers, each of the layers withstands the electric strength test of 16.3 for supplementary insulation		N/A
	Reinforced insulation applied in thin sheet form, other than mica or similar scaly material, consists of at least three layers, and any two of the layers together withstand the electric strength test of 16.3 for reinforced insulation		N/A
29.2.2	Supplementary or reinforced insulation inaccessible and does not exceed the maximum permissible temperature values		N/A
	Supplementary or reinforced insulation, after conditioning as specified, withstands the electric strength test as specified in 16.3, both at the oven temperature and room temperature		N/A

29.1	TABLE: MINIMUM CREEPAGE DISTANCES AND CLEARANCES								P
Creepage (cr) and clearance (cl) distance (mm):	Class III appliances		Other appliances, working voltage:						Remark
			< 130 V		130-250 V		250-440 V		
	cr	cl	cr	cl	cr	cl	cr	cl	
Between live parts of different potential									
- if protected against deposition of dirt	1,0	1,0	1,0	1,0	<u>3,0</u>	<u>3,0</u>	2,0	2,0	P
- if not protected against deposition of dirt	2,0	1,5	2,0	1,5	<u>4,0</u>	<u>4,0</u>	<u>4,0</u>	<u>3,0</u>	P
- if lacquered or enameled windings	1,0	1,0	1,5	1,5	<u>4,0</u>	<u>4,0</u>	3,0	3,0	P
- for positive temperature coefficient (PTC) resistors including their connecting wires, if protected against deposition of moisture or dirt	—	—	1,0	1,0	1,0	1,0	—	—	N/A

IEC 60335-2-40										
Clause	Requirement - Test								Result - Remark	Verdict
CI and Cr measured between:										
1. L and N on PCB;										
The shortest value is considered.										
Between live parts and other metal parts over basic insulation:										
- if protected against deposition of dirt:									N/A	
- if of ceramic material, pure mica and similar material	1,0	1,0	1,0	1,0	2,5	2,5	—	—	N/A	
- if of other material	1,5	1,0	1,5	1,0	3,0	2,5	—	—	N/A	
- if not protected against deposition of dirt	2,0	1,5	2,0	1,5	<u>4,0</u>	<u>4,0</u>	—	—	P	
- if the live parts are lacquered or enamelled windings	1,0	1,0	1,5	1,5	<u>4,0</u>	<u>4,0</u>	—	—	P	
- at the end of tubular sheathed-type heating elements	—	—	1,0	1,0	1,0	1,0	—	—	N/A	
CI and Cr measured between:										
1. Live part on terminal and earthing metal part;										
The shortest value is considered.										
Between live parts and other metal parts over reinforced insulation										
- if the live parts are lacquered or enamelled windings	—	—	6,0	6,0	6,0	6,0	—	—	N/A	
- for other live parts	—	—	8,0	8,0	<u>10,0</u>	<u>10,0</u>	—	—	P	
CI and Cr measured between:										
1. Test finger and internal live part through the gap of enclosure.										
The shortest value is considered.										

--End of report--

Report Number: 12012834 003



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Model: TOP 9RC R22, TOP 9ST R22
TOP 12RC R407C, TOP 12ST R407C



Picture 1



Picture 2

Report Number: 12012834 003



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Model: TOP 9RC R22, TOP 9ST R22
TOP 12RC R407C, TOP 12ST R407C



Picture 3



Picture 4

Report Number: 12012834 003

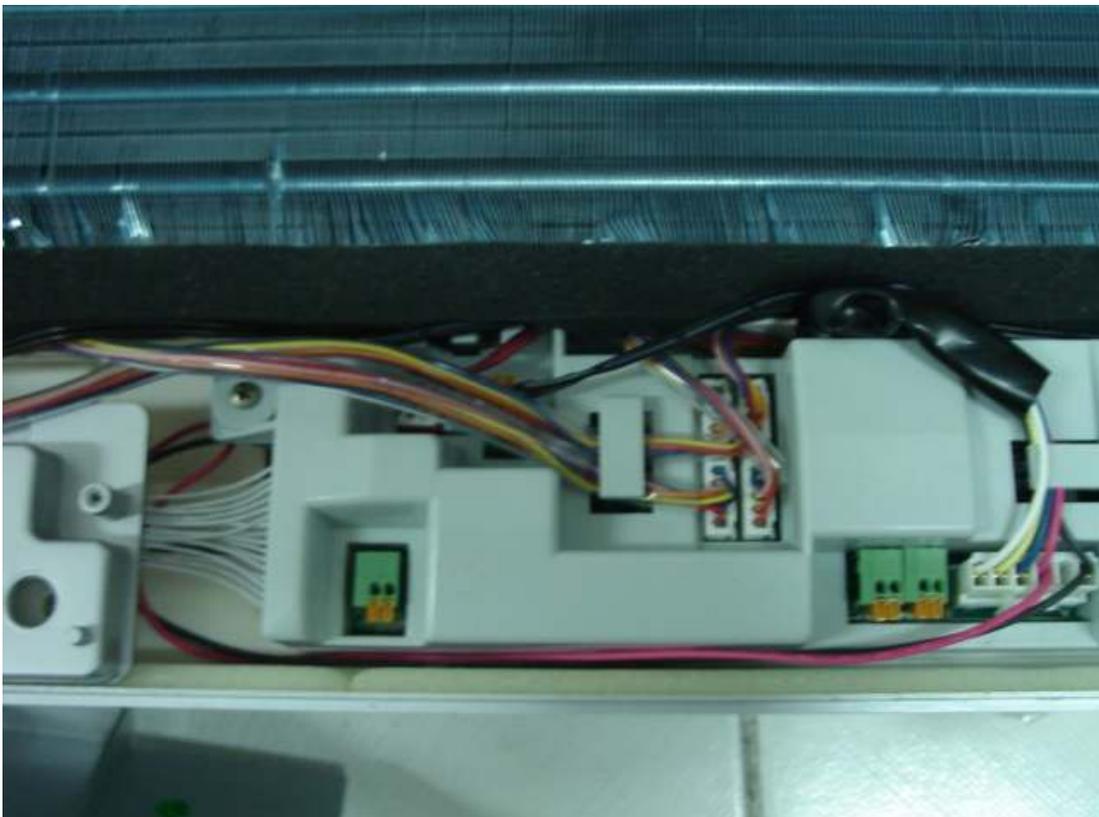


TÜV Rheinland Group

Model: TOP 9RC R22, TOP 9ST R22
TOP 12RC R407C, TOP 12ST R407C



Picture 5



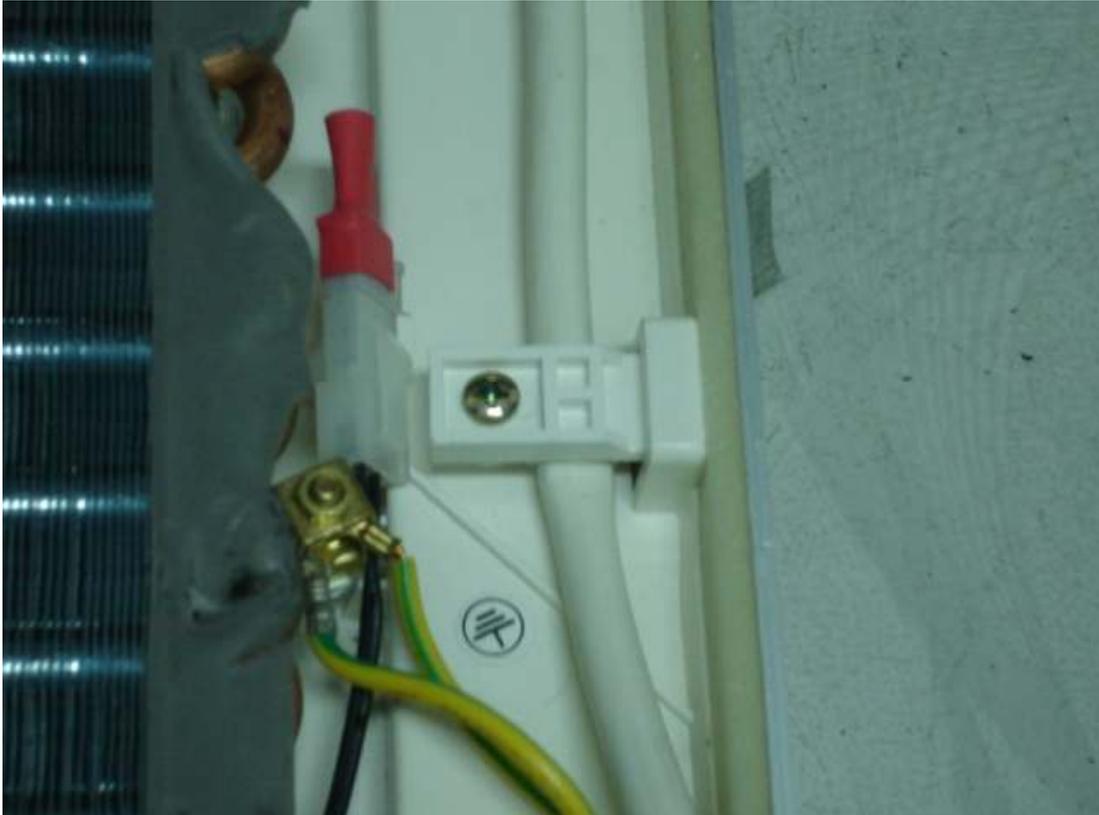
Picture 6

Report Number: 12012834 003



TÜV Rheinland Group

Model: TOP 9RC R22, TOP 9ST R22
TOP 12RC R407C, TOP 12ST R407C



Picture 7



Picture 8