IEC IECEE CB SCHEME	Ref. Certif. No.
	JPTUV-013726-M1

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	Room air conditioner indoor unit
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; Class I Rated Power: refer to the test report IP20 (Indoor unit only) Refrigerant: R22, R407C, R410A
Trade mark (if any) Marque de fabrique (si elle existe)	ELECTRA
Model/type Ref. Ref. de type	K series
Additional information (if necessary) Information complémentaire (si nécessaire)	For model differences, refer to the test report. Re-issue of JPTUV-013726 dated 02.03.2006, due to first 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 la	IEC 60335-2-40:1995+A1 IEC 60335-1:1991+A1+A2
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	12012835 002

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: 28.05.2007

Signature: Dipl. Ing. M. Glagla

Ref. Certif. No.

Appendix to CB Certificate JPTUV-013726-M1 PAGE 1 OF 1
Report Number: 12012835 002

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

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

Date: 28.05.2007

Vladin Glagla
Dipl. Ing. M. Glagla

Date: Signature:

10/061a 8.06

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.	12012835 002
Compiled by (+ signature)	Queenie Luo
Approved by (+ signature)	Stone Shi
Contents	18 pages
Date of issue	2007.05.24

CB Testing laboratory Name	TÜV Rheinland (Guangdong) Ltd.
Address	43/F, Metro Plaza, 183 Tianhe Rd. North, Guangzhou 510620, P. R. China
Testing location/procedure	CBTL ☒ SMT ☐ TMP ☐
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 60335-2-40:1995 + 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**

Test item description	Room air conditioner indoor unit
Trademark	ELECTRA
Model and/or type reference	K series (See list of models on page 4-5)
Manufacturer	Same as applicant
Factory	See page 3
Rating(s)	220-230V~ 50Hz Rated Power input: see list of models on page 4-5 Refrigerant: R22, R407C, R410A IP20

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

See appendix 1 on original report 12012835 001 for marking plates.

Summary of testing:

1. The appliance has been tested according to IEC 60335-1/IEC 60335-2-40.
2. The clauses of 7.12, 7.16, 7.101, 10, 11.8, 13, 17, 19.2, 19.14, 24.1, 29, 30 were evaluated.
3. The tests of clauses 10,11.8,13, 17,19.2, 19.14 , 30 were conducted on model K24RC with a connection to the outdoor unit GC24RC, and the refrigerant is R22, the discharged quantity is 1660g.
4. The appliances were pre-production samples without serial numbers.
5. Please refer to the original report 12012835 001 for further information.

Test items particulars:

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

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 .....: 2007.04.10

Date(s) of performance of test.....: 2007.04.10-2007.05.15

General remarks

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

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

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.12012835 001, dated 2006.02.15 (original report);

Ref.No.12012835 002, dated 2007.05.24 (modification report)

Description of modification:

This report is based on 12012835 001 for alternate components for all models, please refer to the original report for further information.

- The fan motor transformer is changed from EI 54X18 to GLP-060798.
- Two new pumps were used.
- The fuse on the control board is changed from 3,15A to 5,0A.

Remark : see table 24.1 for details.

List of models:

No.	Model name	Rated Voltage	Rated input	Refrigerant
1	K9RC	220-230V	42W	R22
2	K9ST	220-230V	42W	R22
3	K11RC	220-230V	42W	R22
4	K11ST	220-230V	42W	R22
5	K15RC	220-230V	54W	R22
6	K15ST	220-230V	54W	R22
7	K18RC	220-230V	66W	R22
8	K18ST	220-230V	66W	R22
9	K24RC	220-230V	78W	R22
10	K24ST	220-230V	78W	R22
11	K9RH	220-230V	1692W	R22
12	K11RH	220-230V	1692W	R22
13	K15RH	220-230V	2304W	R22
14	K18RH	220-230V	2616W	R22
15	K24RH	220-230V	2778W	R22
16	K9SH	220-230V	942W	R22
17	K11SH	220-230V	942W	R22
18	K15SH	220-230V	1554W	R22
19	K18SH	220-230V	1866W	R22
20	K24SH	220-230V	1878W	R22
21	K9RC R407C	220-230V	42W	R407C
22	K9ST R407C	220-230V	42W	R407C
23	K11RC R407C	220-230V	42W	R407C
24	K11ST R407C	220-230V	42W	R407C
25	K15RC R407C	220-230V	54W	R407C
26	K15ST R407C	220-230V	54W	R407C
27	K18RC R407C	220-230V	66W	R407C
28	K18ST R407C	220-230V	66W	R407C
29	K24RC R407C	220-230V	78W	R407C
30	K24ST R407C	220-230V	78W	R407C
31	K9RH R407C	220-230V	1692W	R407C
32	K11RH R407C	220-230V	1692W	R407C
33	K15RH R407C	220-230V	2304W	R407C
34	K18RH R407C	220-230V	2616W	R407C

List of models:

35	K24RH R407C	220-230V	2778W	R407C
36	K9SH R407C	220-230V	942W	R407C
37	K11SH R407C	220-230V	942W	R407C
38	K15SH R407C	220-230V	1554W	R407C
39	K18SH R407C	220-230V	1866W	R407C
40	K24SH R407C	220-230V	1878W	R407C
41	K9RC R410A	220-230V	42W	R410A
42	K9ST R410A	220-230V	42W	R410A
43	K11RC R410A	220-230V	42W	R410A
44	K11ST R410A	220-230V	42W	R410A
45	K15RC R410A	220-230V	54W	R410A
46	K15ST R410A	220-230V	54W	R410A
47	K18RC R410A	220-230V	75W	R410A
48	K18ST R410A	220-230V	75W	R410A
49	K9RH R410A	220-230V	1692W	R410A
50	K11RH R410A	220-230V	1692W	R410A
51	K15RH R410A	220-230V	2304W	R410A
52	K18RH R410A	220-230V	2625W	R410A
53	K9SH R410A	220-230V	942W	R410A
54	K11SH R410A	220-230V	942W	R410A
55	K15SH R410A	220-230V	1554W	R410A
56	K18SH R410A	220-230V	1875W	R410A

Remark : see model description in original report 12012835 001 for model difference.

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict

7	**MARKING**		P
7.12	Instructions for safe use provided	Stated in user manual.	P
	Classification of 6.101 included, for appliances not accessible to general public (IEC 60335-2-40:1995)		N/A
7.12.1	Sufficient details for installation or maintenance supplied:		P
	- national wiring regulations for installation (IEC 60335-2-40:1995)	Stated in user manual.	P
	- dimensions of space for installation (IEC 60335-2-40:1995)	Stated in user manual.	P
	- wiring diagram (IEC 60335-2-40:1995)	Provided.	P
	- range of external static pressures (only heat pumps and appliances with electric resistance heaters) (IEC 60335-2-40:1995)	No static pressure required	N/A
	- minimum clearance from appliances with supplementary heaters to combustible surfaces (IEC 60335-2-40:1995)	No supplementary heaters	N/A
	- indication of suitable parts for outdoor use (IEC 60335-2-40:1995)	Indoor unit	N/A
	- method of connection to the electrical supply and interconnection of separate components (IEC 60335-2-40:1995)		P
	- type and rated characteristics of fuses (IEC 60335-2-40:1995)	5,0A T	P
	- details of supplementary heating elements, including fitting instructions (IEC 60335-2-40:1995)		N/A
	- maximum and minimum water or brine operating temperatures (IEC 60335-2-40:1995)		N/A
	- maximum and minimum water or brine operating pressures (IEC 60335-2-40:1995)		N/A
	- indication of open water storage tanks (IEC 60335-2-40:1995)		N/A
7.12.2	Means for disconnection with contact separation at least 3 mm or instruction regarding means of disconnection in the fixed wiring (IEC 60335-1/A2:99)	Power cord with plug	N/A
7.12.3	Insulation in contact with parts exceeding 50 K; instruction		N/A
7.12.4	Information with regard to building-in:	Stated in the installation manual	P
	- dimensions of space		P
	- dimensions and position of support		P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- ventilation openings		P
	- connection/interconnection plug accessible		P
7.12.5	Replacement cord, type X attachment		N/A
	Replacement cord, type Y attachment		P
	Replacement cord, type Z attachment		N/A
7.16	Marking of a possible replaceable thermal link or fuse link clearly visible with regard to replacing the link	Current fuse rating marked on the PCB, near the fuse holder:5,0A T , AC250V	P
7.101	Marking of fuses and overload protective devices, if replaceable (IEC 60335-2-40:1995):		P
	- fuse rated current in amperes, type and rated voltage (IEC 60335-2-40:1995)	Current fuse rating marked on the PCB, near the fuse holder:5,0A T , AC250V	P
	- manufacturer and model of the overload protective device (IEC 60335-2-40:1995)		N/A
10	POWER INPUT AND CURRENT		P
10.1	Power input at rated voltage and normal operating temperature not deviating from rated input by more than shown in table; measured power input (W); rated input (W); deviation .....:	(see appended table)	P
10.2	Current at normal operating temperature not deviating from rated current by more than shown in table; measured current at rated voltage under normal operation (A); rated current (A); deviation .....:	Not marked on rating label	N/A
11	**HEATING**		P
11.8	Monitored temperatures not exceeding the values of Table 3 (IEC 60335-2-40:1995)	(see appended table)	P
	Protective devices do not operate		P
	Sealing compound not flowing out		P
	Temperature of the air in the outlet duct not exceeding 90 °C (IEC 60335-2-40:1995)		N/A
13	**LEAKAGE CURRENT**		P
13.1	Leakage current not excessive and electric strength adequate		P
13.2	Leakage current measured by means of circuit described in Annex G (IEC 60335-2-40:1995)		P
	Leakage current measurements	(see appended table)	P
13.3	Electric strength test of insulation. See Note in Interpretation Sheet I-SH 02, August 1994	(see appended table)	P
	No breakdown during the test		P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
17	**OVERLOAD PROTECTION OF TRANSFORMERS AND ASSOCIATED CIRCUITS**		P
	No excessive temperatures in transformer or associated circuits in event of short-circuits likely to occur in normal use		P
	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	(see appended table)	P
	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		P
	Temperature of the winding not exceeding the value specified in table 6		P
	Except fail-safe transformer complying 15.5 of IEC 61558-1 (IEC 60335-1/A2:1999)	Not fail-safe transformer	N/A
19	**ABNORMAL OPERATION**		P
19.2	Test of appliance with motor rotors, other than motor-compressors, operated for 15 days (360 h) or until a protection device opens the circuit (IEC 60335-2-40:1995)	(see appended table)	P
	Insulation of motor windings (IEC 60335-2-40:1995) .....:	(see appended table)	P
	Temperature of enclosure does not exceed (°C) (IEC 60335-2-40:1995) .....:	(see appended table)	P
	Temperature of the windings does not exceed the values shown in the table; temperature (°C) (IEC 60335-2-40:1995) .....:	(see appended table)	P
	Electric strength test as specified in 16.3, 72 h after the beginning of the test (IEC 60335-2-40:1995)		P
	A 30 mA residual current device does not open (IEC 60335-2-40:1995)		P
	At the end, the leakage current between the windings and the enclosure does not exceed 2 mA (IEC 60335-2-40:1995)		P
19.14	No flames, molten metal, poisonous or ignitable gas or deformed enclosures (IEC 60335-2-40:1995)		P
	Temperatures rise shall not exceed the values shown in Table 7 (IEC 60335-2-40:1995)	The temperature rise of test corner, sheath of supply cord are lower than 175°C	P
	The electric strength test, the test voltage being:		P
	- basic insulation: 1000 V		P
	- supplementary insulation: 2750 V		P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- reinforced insulation: 3750 V		P
24	**COMPONENTS**		P
24.1	Components comply with safety requirements in relevant IEC standards		P
	Motor-compressors not tested according to IEC 60335-2-34 (not necessary to meet all requirements of IEC 60335-2-34) (IEC 60335-2-40:1995)		N/A
24.1.1	Fixed capacitors for radio interference suppression, compliance with annex Q (IEC 60335-1/A2:1999)		P
	Small lampholders: compliance with requirements for E10 lampholders		N/A
	Isolating transformers and safety isolating transformers: compliance with IEC 61558-2-6 or comply with annex R (IEC 60335-1/A2:1999)		N/A
	Appliance couplers for IPx0 appliances: compliance with IEC 60320		N/A
	Other appliance couplers: compliance with IEC 309		N/A
	Automatic controls: compliance with IEC 60730, unless tested with the appliance	Thermal links for the transformer and pump are approved type.	P
	Switches: compliance with IEC 61058-1, unless tested with the appliance (IEC 60335-1/A2:1999)		N/A
24.1.2	Automatic controls complying with IEC 60730: additional tests according to this standard and 11.3.5 to 11.3.8 and Cl. 17 of IEC 60730 as type 1 controls (see number of cycles of operation IEC 60335-2-40:1995)		N/A
24.1.3	Switches tested under the conditions occurring in the appliance, comply with annex S (IEC 60335-1/A2:1999)		N/A
	Switch tested separately according to IEC 61058-1for 10 000 cycles of operation (IEC 60335-1/A2:1999)		N/A
	Switches for no-load-operation and operable only with the aid of a tool, are not subjected to the tests of clauses of IEC 61058-1 This applies also to switches operated by hand, and with interlock for no-load-operation (IEC 60335-1/A2:1999)		N/A
	Switches without this interlock subjected to the test of Cl. 17.2.7 for 100 cycles of operation (IEC 60335-1/A2:1999)		N/A
24.1.4	Components marked with their operating characteristics are used in the appliance in accordance with these markings		P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Component which have to comply with other standard is tested separately, according to the relevant standard		P
	Component used within the limits of its marking, tested in accordance with conditions occurring in the appliance		P
	Component not marked, or not used in accordance with its marking, or no IEC standard exists, tested under the conditions occurring in the appliance		P
	Components not mentioned in table 3 tested as part of the appliance		P
24.1.5	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		P
	Capacitors for which 30.2.3. is applicable and permanently connected in series with a motor shall be class P1 or P2 of IEC 60252 (IEC 60335-1/A2:1999)		P
	List of components	(see appended table)	P
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
	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		P
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	No such constructions.	N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	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	No such constructions.	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
30	**RESISTANCE TO HEAT, FIRE AND TRACKING**		P
30.1	See Annex H		P
	Relevant external parts of non-metallic material		P
	Parts supporting live parts and parts providing supplementary or reinforced insulation sufficiently resistant to heat		P
	Ball-pressure test with a force of 20 N, diameter of impression not exceeding 2 mm .....:	(see appended table)	P
	External parts: at 75 °C	Transformer enclosure	P
	Parts supporting live parts: at 125 °C	Transformer bobbin, terminal support for transformer;pump winding enclosure.	P
	Parts providing supplementary or reinforced insulation: temperature (°C).....:		P
30.2	Relevant parts of non-metallic material adequately resistant to ignition and spread of fire		P
30.2.1	Possible burning test of relevant parts according to Annex J		N/A
	Glow-wire test of Annex K made at temperature 550 °C		P
30.2.3	Appliances operated while unattended, possible bad-connection test according to Annex L		N/A
	Glow-wire test of Annex K made at 750 °C	Transformer bobbin, trnaformer enclosure,terminal support for transformer;pump winding enclosure.	P
	Possible needle-flame test according to Annex M		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
30.2.4	Parts of non-metallic material within a distance of 50 mm from parts not withstanding the tests of 30.2.2 or 30.2.3, subjected to the needle-flame test of Annex M		N/A
30.3	Relevant insulating material have adequate resistance to tracking		N/A
	Tracking test at 175 V according to Annex N		N/A
	Tracking test at 250 V according to Annex N		N/A
	No hazard other than fire, tracking test at 175 V according to Annex N, and in addition needle-flame test of surrounding parts according to Annex M		N/A
	Possible needle-flame test of non-metallic material		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict

10	TABLE: input power and current						P
	Operation mode:	Cooling: 32/23(°C) Heating: 27/-(°C)					P
	Test voltage (V):	230					—
Model	Rated cooling (W)	Rated heating (W)	Measured cooling (W)	Measured heating (W)	Deviation cooling (%)	Deviation heating (%)	Limit
K24RC	78	78	82	83	5,1%	6,0%	20%
Remark: the test was performed with all critical components and highest value was listed.							

11.8	**TABLE: TEMPERATURE RISE MEASUREMENTS**		**P**
K24RC	t1 (°C) ..... :	25	--
	t2 (°C) ..... :	Cooling: 32/23 Heating: 27/-	--
	test voltage (V) ..... :	1,06x230=244V	--

temperature of part/at:	Cooling (°C)	Heating (°C)	required T (°C)
Power cord	16,6	51,1	75
Pump winding enclosure(PSB-7A)	23,6	47,7	Material test
Pump winding enclosure(PSB7)	19,6	54,2	Material test
Pump wire (PSB-7A)	17,3	48,4	T105
Pump wire (PSB7)	17,3	48,4	T105
Plastic part support transformer terminal	34,2	30,2	Material test
Transformer enclosure(GLP-060798)	34,2	30,2	Material test
Test corner	32,3	26,6	90

	winding temperature rise measurements:	25°C	P
	K = 234,5 for copper windings ..... :	Yes	--
	K = 225 for aluminium windings ..... :	--	--
	insulation class ..... :	See below	--

temperature of winding:	R_1 (Ω)	R_2 (Ω)	T(°C)	required T (°C)	insulation class
Pump(PSB-7A)	385	451	63,6	115	E
Pump(PSB7)	399	443	53,6	115	E
Remark : The temperature rise of winding were tested in both cooling and heating modes and the highest values were listed.					

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict

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) ..... :	1,06X230=244	--

leakage current I between:	I (mA)	required I (mA)
L/N- enclosure (with aluminum foil)	0,09	0,25
L/N- earthed metal part	0,84	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 - enclosure (with aluminum foil)	3750	No

17	TABLE: OVERLOAD PROTECTION, TEMPERATURE RISE MEASUREMENTS			P
	at 1,06 or 0,94 times rated voltage (V) ..... :	1,06x230=244V		--
	Ambient temperature(°C)……..:	25		--
	Test model……..:	GLP-060798		--
	Test condition……..:	Short-circuit of secondary winding		--
Thermal couples location:		Measured temperature (°C)	Limit temperature (°C)	Result
Primary Winding		55,4	225	P
Secondary Winding		71,2	225	P

Remark 1: 13 seconds later, the protector was operated.

Remark 2: Resistance method is not applicable due to severe complications are involved.

19.2	TABLE: LOCK MOTOR TEST, TEMPERATURE RISE MEASUREMENTS	P
Abnormal conditions:	Lock motor rotor	-
Duration:	15 days	-
Test voltage:	230V	-
T1(°C)	25	-
T2(°C)	25	-
Model	PSB7	-

Temperature of part/at (°C)	Temperature(°C)	Required temperature(°C)
Enclosure temperature	99	150

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict

Winding temperature	128	165(impedance protected)
Result:		
Protective device operated?		No
If yes ,what was the protective device?		--
How long was the operation until protective device operated?		--
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		0,04	2,0

24.1	TABLE: COMPONENTS	P

Remark :For thermal links of pump 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

object/part No.	manufacturer/ trademark	type/model	technical data	Standard	Mark(s) of conformity [1])
Pump for K series	Sanhua	PSB-7A	220-40V 50/60Hz 385Ω±5% (20℃) Class E	IEC 60335-1	TUV R 50061033
Alternate	Zhongbao	PSB7	220-240V 50/60Hz 333Ω±10% (20℃) Class E	IEC 60335-2-40	Tested with appliance
Thermal link for PSB-7A	Desheng	BR	250V,2A, Temp:140℃	IEC 60691	VDE 132813
Alternate	Changhong Tongli	KW-A1	250V,2A, Temp:140℃	IEC 60691	VDE 40020906
Thermal link for PSB7	Aupo	P7	250V, 6A Temp:150 °C	IEC 60691	TUV R 50049926
Connector for PSB7	JST	VHR-3N	250V 10A	IEC 61984	TUV R 00075122
Winding of PSB7	Chengdu South-west Electric	QZY/180	180°C	--	UL E178366
Winding enclosure	Jiangyin Longshan	PBT10% 5310G	--	--	Tested with appliance

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict

Transformer for K series	GREEN	GLP-060798	Input : L-1:218Ω±5% L-2:229Ω±5% L-3:238Ω±5% L-4:249Ω±5% L-5:272Ω±5% L-6:282Ω±5% Output : M-M : 218Ω±5% Class B	IEC 60335-2-40	Tested with appliance
Thermal link in transformer GLP-060798	Aupo	A4-F	AC250V, 2A ,130°C	IEC 60691	VDE 40008720
Alternate	Xiamen Set	K4	AC250V, 2A ,130°C	IEC 60691	VDE 40017055
Fuse in controller	hollyland	50T	250V, 5A	IEC 60127	VDE 139231

29.1	**TABLE: CREEPAGE DISTANCE AND CLEARANCE THROUGH INSULATION MEASUREMENTS**								**P**
creepage (cr) and clearance (cl) distance (mm):	Class III appliances		Other appliances, U working						remark
--	--		< 130 V		130-250 V		250-240 V		--
--	cr	cl	cr	cl	cr	cl	cr	cl	--
between live parts of different polarity:									
- if protected against deposition of dirt	1,0	1,0	1,0	1,0	2,0	2,0	2,0	2,0	N/A
- if not protected against deposition of dirt	2,0	1,5	2,0	1,5	**3,0**	**2,5**	**4,0**	**3,0**	**P**
- if lacquered or enamelled windings	1,0	1,0	1,5	1,5	**2,0**	**2,0**	3,0	3,0	**P**
Cl and Cr measured between : 1. Output of transformer: Cl = 4,0 mm; min.Cr = 8,0mm; 2. winding of pump: Cl = 3,0mm; min Cr = 4,0mm; 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 or pure mica and the like	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	**4,0**	**3,0**	-,-	-,-	**P**
- if the live parts are lacquered or enamelled windings	1,0	1,0	1,5	1,5	2,0	2,0	-,-	-,-	N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict

- at the end of tubular sheathed-type heating elements	-,-	-,-	1,0	1,0	1,0	1,0	-,-	-,-	N/A
Cl and Cr measured between : 1. terminal of transformer and earthed metal part: min. Cl = 9,0mm; min.Cr = 20,0mm; 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	**8,0**	**8,0**	-,-	-,-	**P**
between metal parts separated by supplementary insulation	-,-	-,-	4,0	4,0	4,0	4,0	-,-	-,-	N/A
between live parts in recesses in the mounting face of the appliance and the surface to which it is fixed	2,0	2,0	6,0	6,0	6,0	6,0	-,-	-,-	N/A
Cl and Cr measured between : 1. test fingers and transformer terminals through the gap of enclosure : Cl = 20,0 mm; min. Cr =50,0 mm; The shortest value is considered.									

30.1	Table: Ball pressure test		P
Part	Test temperature(ºC)	Impression diameter(mm)	Limit (mm)
Transformer bobbin (GLP-060798)	125	1,7	2,0
Transformer enclosure (GLP-060798)	75	1,5	2,0
Plastic part support transformer terminal (GLP-060798)	125	1,0	2,0
Winding enclosure of pump (PSB7)	75	1,5	2,0

30.2	Table: resistance to heat, fire and tracking, glow-wire test					P
	Glow-wire test(ºC)					--
Part	Test temperature (ºC)	Result				
		Ti=	Te=	Max high of flame	Ignition of tissue paper	Other observation
Transformer bobbin (GLP-060798)	850	0,7s	32,7s	40mm	No	--
Transformer bobbin (GLP-060798)	750	--	--	--	--	Not burning
Transformer enclosure (GLP-060798)	850	0,6s	47,3s	80mm	No	--

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict

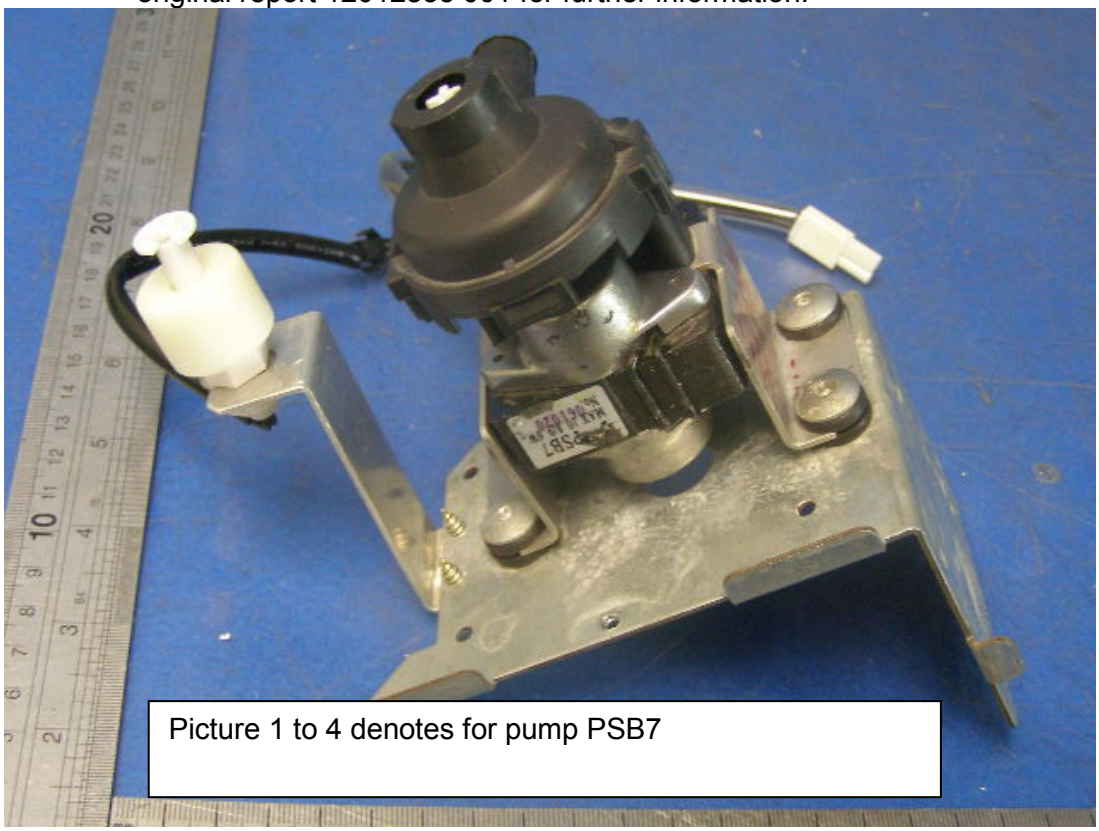
Transformer enclosure (GLP-060798)	750	--	--	--	--	Not burning
Plastic part support transformer terminal (GLP-060798)	850	30,9s	50,0s	20mm	No	--
Plastic part support transformer terminal (GLP-060798)	750	--	--	--	--	Not burning
Winding enclosure of pump (PSB7)	850	0,1s	1,2s	20mm	No	--
Winding enclosure of pump (PSB7)	750	--	--	--	--	Not burning

----- End of test report -----

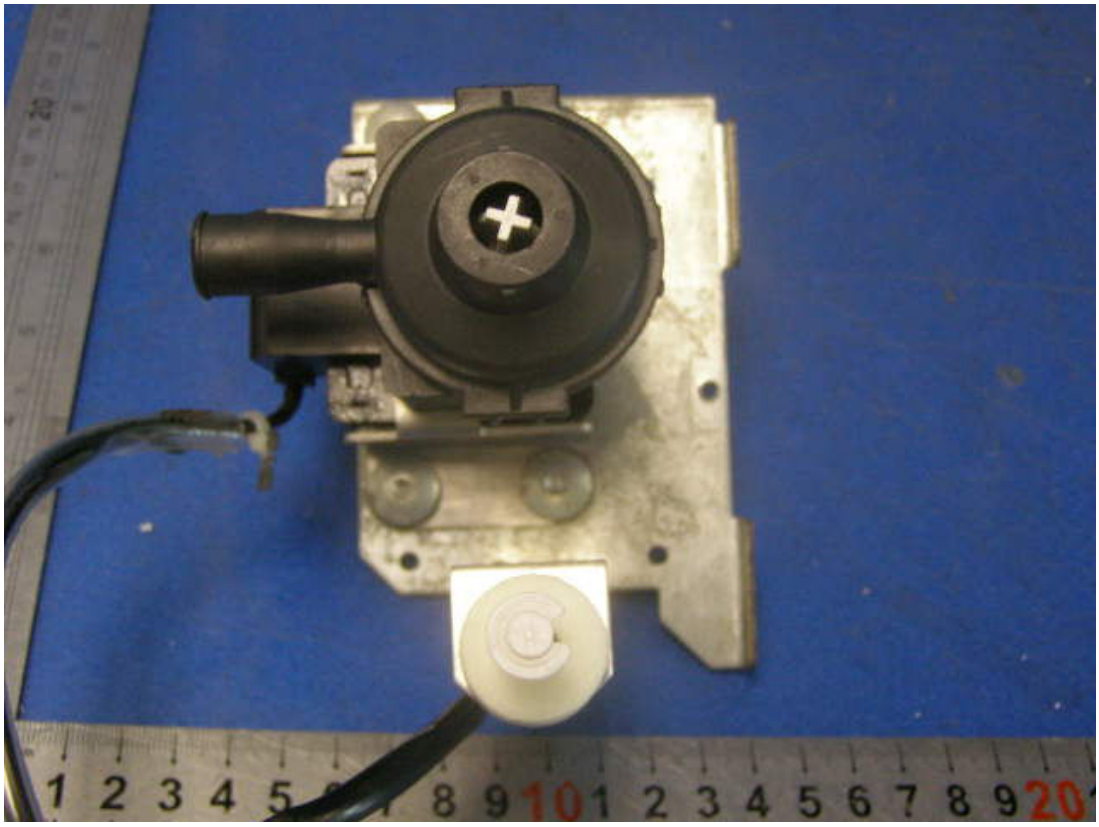
Report Number: 12012835 002

Model: K series

Remark : Here are only deviated components ,please refer to the photo document of original report 12012835 001 for further information.



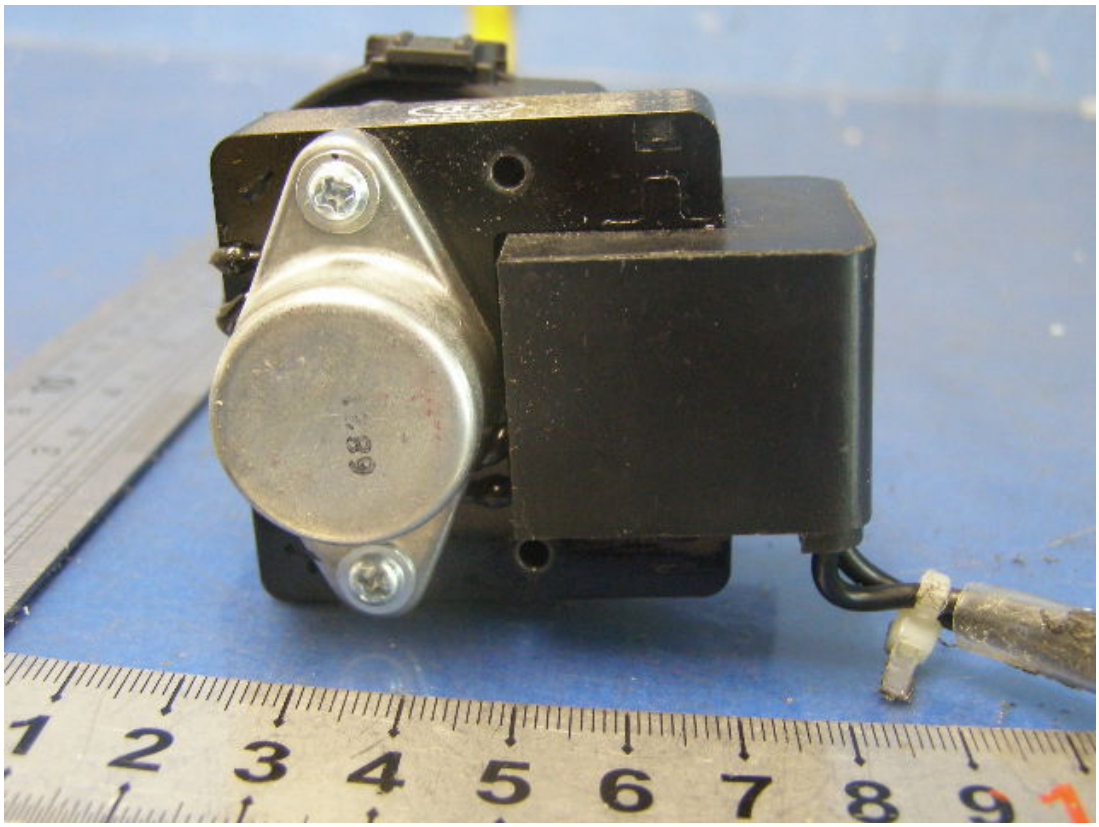
Picture 1



Picture 2

Remark : Here are only deviated components ,please refer to the photo document of original report 12012835 001 for further information.

Picture 3

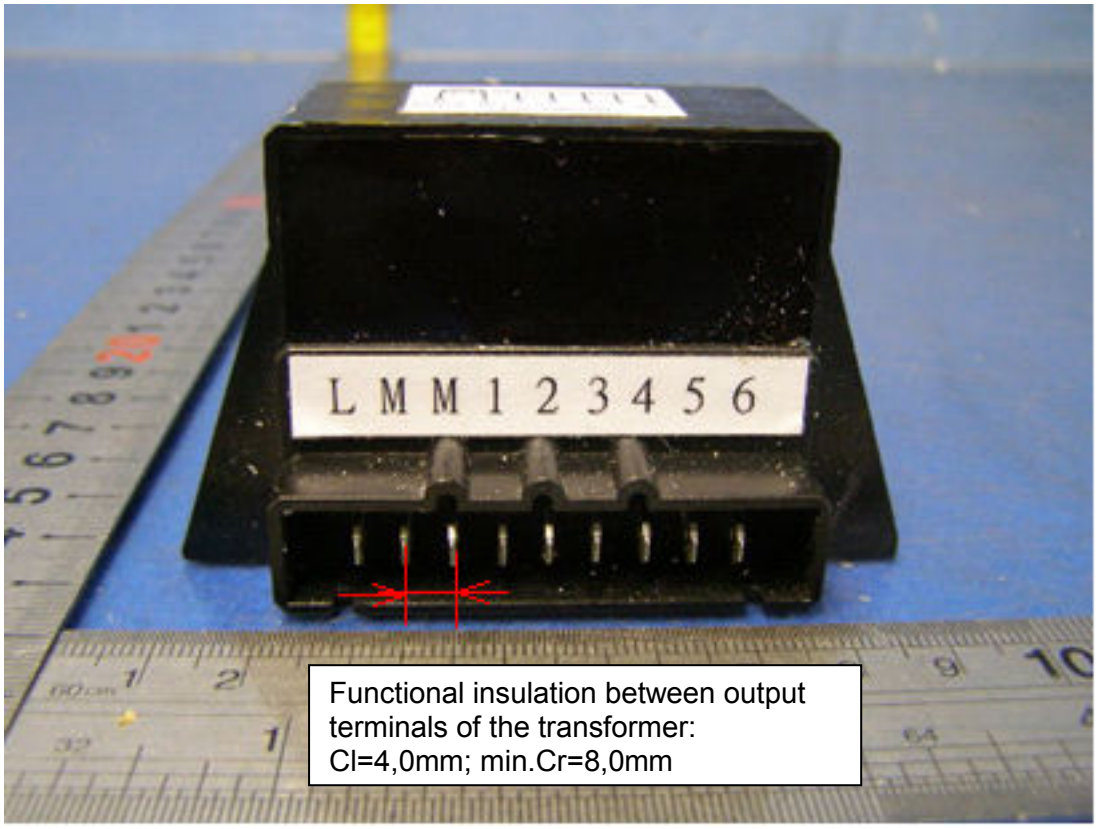


Picture 4

Remark : Here are only deviated components ,please refer to the photo document of original report 12012835 001 for further information.

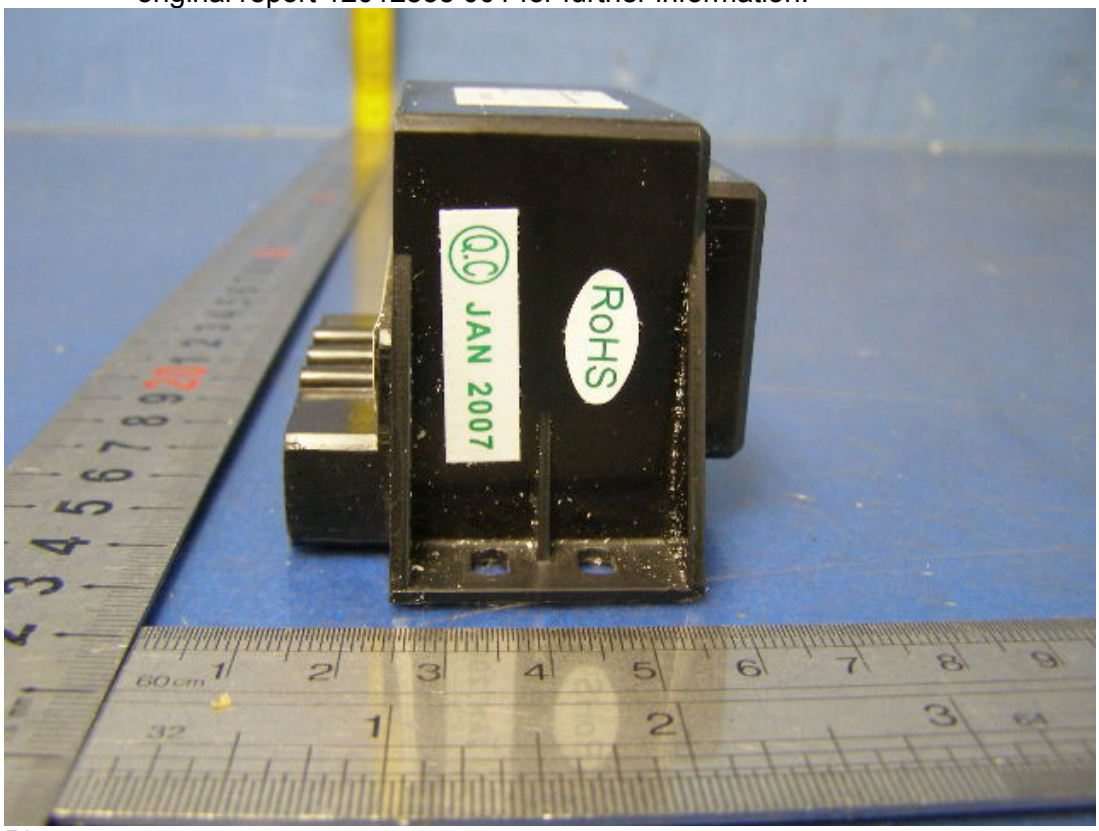
Picture 5 to 10 denotes for transformer GLP-060798

Picture 5

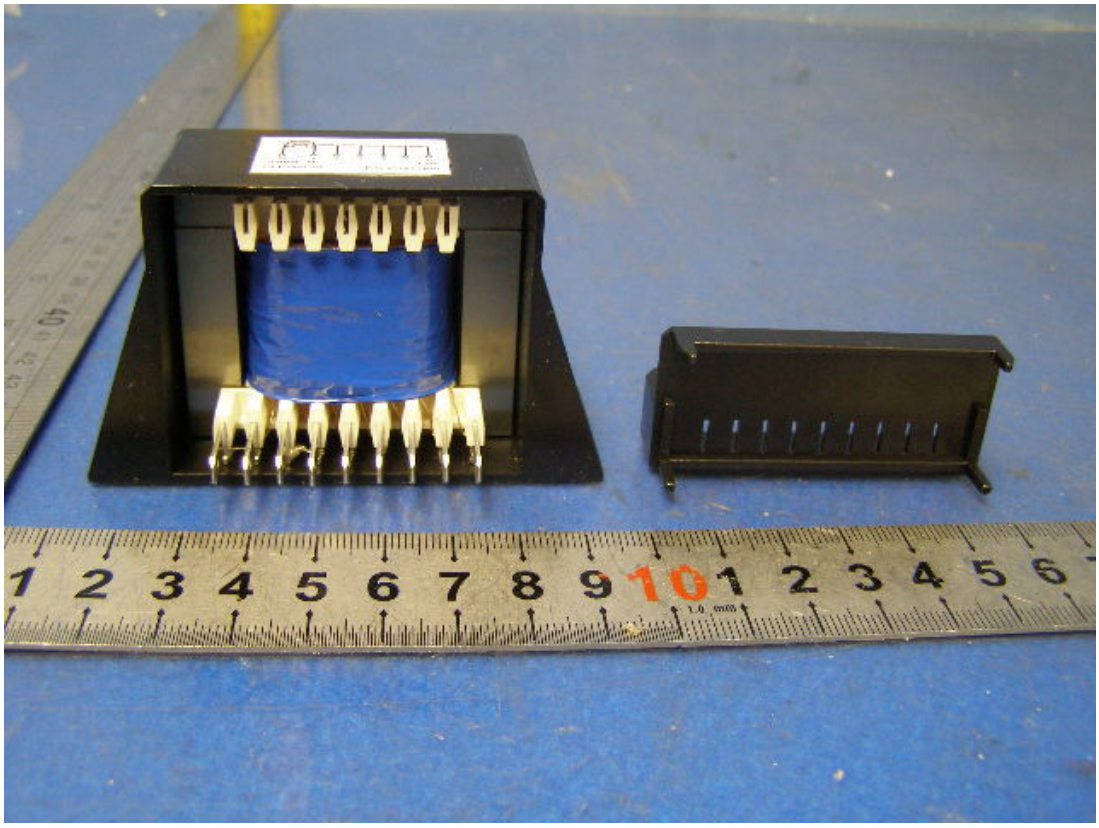


Picture 6

Remark : Here are only deviated components ,please refer to the photo document of original report 12012835 001 for further information.

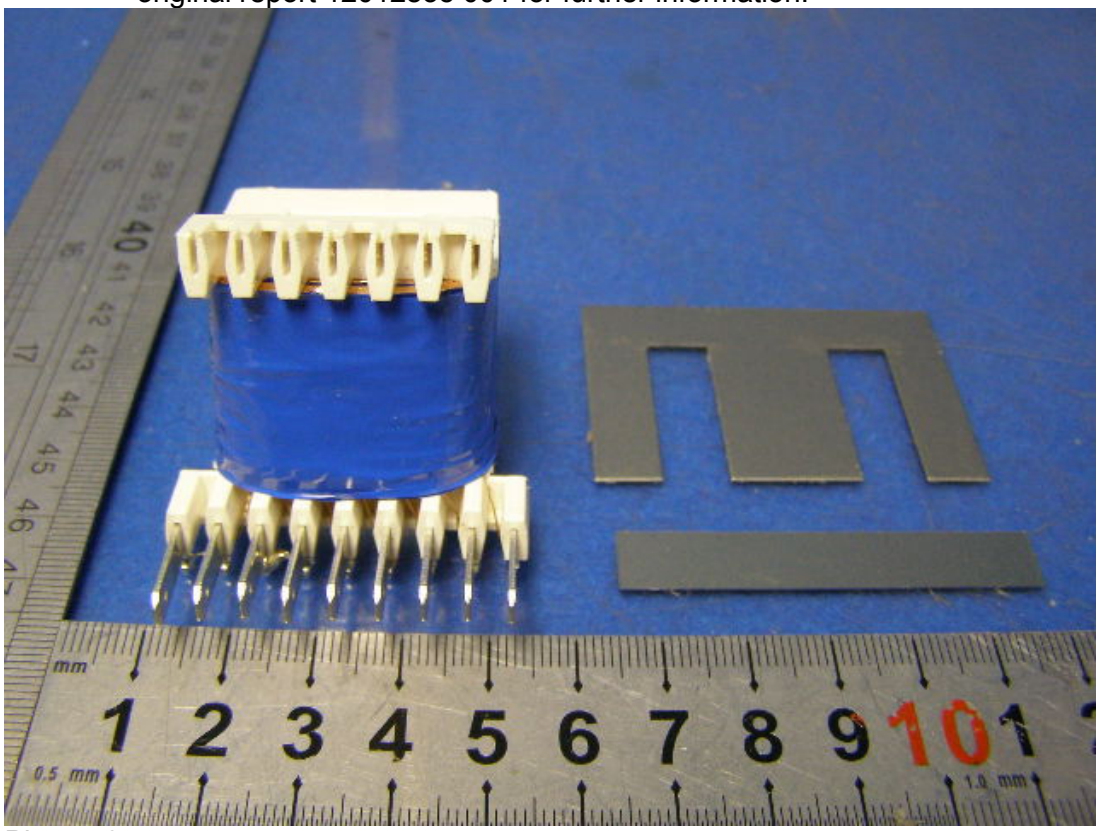


Picture 7



Picture 8

Remark : Here are only deviated components ,please refer to the photo document of original report 12012835 001 for further information.



Picture 9

Picture 10