









<b>TEST REPORT</b> <b>IEC 60335-2-15</b> <b>Safety of household and similar electrical appliances</b> <b>Part 2: Particular requirements for appliances for heating liquids</b>	
<b>Report Number</b> .....	170501498SHA-001
<b>Date of issue</b> .....	2017-05-24; Amendment 1: 2017-08-14
<b>Total number of pages</b> .....	58 pages of test report (include 10 pages of photographs)
<b>Applicant's name</b> .....	Ningbo Poogoo Electrical Appliance Co., Ltd.
<b>Address</b> .....	Puyan Village Ditang Street Yuyao Zhejiang China
<b>Test specification:</b>	
<b>Standard</b> .....	EN 60335-2-15:2016 used in conjunction with EN 60335-1:2012+A11:2014+AC:2014 and EN 62233:2008 IEC 60335-2-15:2012 (Sixth edition) in conjunction with IEC 60335-1:2010 (Fifth edition)
<b>Test procedure</b> .....	--
<b>Non-standard test method</b> .....	N/A
<b>Test Report Form No.</b> .....	IEC60335_2_15J
<b>Test Report Form(s) Originator</b> ....	IMQ S.p.A.
<b>Master TRF</b> .....	Dated 2013-06
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<b>Test item description</b> .....	Water Kettle
<b>Trade Mark</b> .....	-
<b>Manufacturer</b> .....	Same as applicant
<b>Model/Type reference</b> .....	PK-G916, PK-G916S, PK-G918, PK-G928, PK-G928B, PK-G917
<b>Ratings</b> .....	220-240V~, 50/60Hz, 1850-2200W, Class I

<b>Testing procedure and testing location:</b>		
<input checked="" type="checkbox"/>	<b>Testing Laboratory:</b>	Intertek Testing Shanghai Limited
<b>Testing location/ address .....</b>		Building No. 86, 1198 Qinzhou Road (North), Shanghai 200233, China
<input type="checkbox"/>	<b>Associated CB Testing Laboratory:</b>	N/A
<b>Testing location/ address .....</b>		
<b>Tested by (name + signature) .....</b>		Mark Zhang 
<b>Approved by (name + signature) .....</b>		Gavin Fu 
<input type="checkbox"/>	<b>Testing procedure: TMP/CTF Stage 1:</b>	N/A
<b>Testing location/ address .....</b>		
<b>Tested by (name + signature) .....</b>		N/A
<b>Approved by (name + signature) .....</b>		N/A
<input type="checkbox"/>	<b>Testing procedure: WMT/CTF Stage 2:</b>	N/A
<b>Testing location/ address .....</b>		
<b>Tested by (name + signature) .....</b>		N/A
<b>Witnessed by (name + signature) .....</b>		N/A
<b>Approved by (name + signature) .....</b>		N/A
<input type="checkbox"/>	<b>Testing procedure: SMT/CTF Stage 3 or 4:</b>	N/A
<b>Testing location/ address .....</b>		
<b>Tested by (name + signature) .....</b>		N/A
<b>Witnessed by (name + signature) .....</b>		N/A
<b>Approved by (name + signature) .....</b>		N/A
<b>Supervised by (name + signature).....</b>		N/A

<p><b>List of Attachments (including a total number of pages in each attachment):</b>  <b>Constructional Data Form (CDF): 5 pages</b></p>	
<p><b>Summary of testing:</b>          From the result of our inspection and tests on the submitted samples, we conclude that they comply with the requirements of the standards.          Determination of the test result includes consideration of measurement uncertainty from the test equipment and methods.</p>	
<p><b>Tests performed (name of test and test clause):</b>          Refer to description for Amendment 1 (page5) for details.</p>	<p><b>Testing location:</b>  <b>Same as previous page.</b></p>
<p><b>Summary of compliance with National Differences:</b>  <b>List of countries addressed:</b> National differences for Germany have been checked  <input checked="" type="checkbox"/> <b>The product fulfils the requirements of <u>EN 60335-2-15:2016 used in conjunction with EN 60335-1:2012+A11:2014+AC:2014 and EN 62233:2008</u></b></p>	

<p><b>Copy of marking plate (representative):</b>  <b>for kettle and stand</b></p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p><b>PK-G918</b></p> <p><b>220-240V~ 50/60Hz 1850-2200W</b></p>     <p>Ningbo Poogoo Electrical Appliance Co.,Ltd.          Puyan Village Ditang Street Yuyao Zhejiang China</p> </div> <p>Note: When the equipment is vended to EU, then name and address of the importer or authorized representative within the EEA shall be added on the equipment.</p>
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<b>Test item particulars</b> ..... :	
<b>Classification of installation and use</b> ..... : Class I, household and similar application	
<b>Supply Connection</b> ..... : Cord connection, type Y attachment ..... :	
<b>Possible test case verdicts:</b> - 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)	
<b>Testing</b> .....:	
<b>Date of receipt of test item</b> .....: 2017-07-19	
<b>Date (s) of performance of tests</b> .....: 2017-07-19 to 2017-08-14	
<b>General remarks:</b>	
<p>"(See Enclosure #)" refers to additional information appended to the report.          "(See appended table)" refers to a table appended to the report.</p> <p>Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.</p> <p><b>The (EU) 2015/1143 has been considered, the appliance is not intended to heat milk, coffee, or similar and there is no overflow risk during normal operation.</b></p> <p>PAH test according to AfPS GS 2014:01 PAK is considered and passed, please refer to PAH test report 170501498SHA-001-PAH, 170501498SHA-001-PAH+A1 for detail.</p> <p>No obvious or conspicuous PAK/PAH issues was observed.          This test report should be read in conjunction with the Construction Data Form (CDF).</p> <p>This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.</p>	
<b>Manufacturer's Declaration per sub-clause 4.2.5 of IEC60335-1:</b>	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided.....:	<input type="checkbox"/> <b>Yes</b> <input checked="" type="checkbox"/> <b>Not applicable</b>
<b>When differences exist; they shall be identified in the General product information section.</b>	

<b>Name and address of factory (ies) .....</b> : Ningbo Poogoo Electrical Appliance Co., Ltd. Puyan Village Ditang Street Yuyao Zhejiang China				
<b>General product information:</b>				
<p>The kettles covered in this report are for household and similar application. The appliance incorporate temperature limiter and temperature controller (two self-resetting thermal cut-out) to safeguard the appliances. All the models have the similar construction and critical componen, some characteristic as following:</p>				
Model	Max level	Handle shape	Lid	Bottom decoration
PK-G916	1,7L	roundness	plastic	plastic
PK-G916S	1,7L	roundness	metal	metal
PK-G917	1,7L	squareness	plastic	metal
PK-G918	1,7L	roundness	plastic	plastic
PK-G928	2,0L	squareness	metal	metal
PK-G928B	2,0L	squareness	metal	metal
<p>PK-G916 and PK-G916S only different at that PK-G916S has metal decoration at lid and base support. PK-G917 and PK-G916S only different at the appearance of lid and base part. PK-G916 and PK-G918 only different at the appearance of lid and base part. PK-G928 and PK-G928B only different at the appearance of lid.</p> <p>Tests were performed on all models, PK-G918, PK-G917, PK-G928B were selected as representative for the tests and other models were also tested while mentioned, finally only the most unfavourable results were recorded.</p>				
<b>Amendment 1:</b>				
<p>The original test report ref. 170501498SHA-001 issued on 2017-05-24, was modified on 2017-08-14 to include the following changes and additions:</p> <ol style="list-style-type: none"> <li>1.Added one new model: PK-G917, it has the similar construction and critical component as PK-G916S, only different at the appearance of lid and base part.</li> <li>2.Updated the PAHs report.</li> <li>3.Added alternative thermal control, cordless connector system, temperature limiter.</li> <li>4.Updated all component certificates and component Standards</li> </ol> <p>Tests were performed on PK-G917, PK-G918 (tested with new added thermal control), PK-G928B (tested with new added thermal control) were selected as representative for the tests and other models were also tested while mentioned, finally only the most unfavourable results were recorded.</p> <p>Clauses Concerned: Cl.7, Cl.8, Cl.10, Cl.11, Cl.13, Cl.15, Cl.16, Cl.19, Cl. 20, Cl.21, Cl.22, Cl.23, Cl.24, Cl.25, Cl.27, Cl.28, Cl. 29 Annex EMF and 20 photos need to be concerned. Other clause which not mentioned in the report was referred to original test report.</p> <p>The temperature of Cl.30 was not higher than the original report, so Cl. 30.1 was not concerned.</p>				

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
7	MARKING AND INSTRUCTIONS		
7.1	Rated voltage or voltage range (V) .....	Refer to marking	P
	Symbol for nature of supply, or .....	Refer to marking	P
	Rated frequency (Hz) .....	Refer to marking	P
	Rated power input (W), or .....	Refer to marking	P
	Rated current (A) .....		N/A
	Manufacturer's or responsible vendor's name, trademark or identification mark .....	Refer to marking	P
	Model or type reference .....	Refer to marking	P
	Symbol IEC 60417-5172, for class II appliances		N/A
	IP number, other than IPX0 .....		N/A
	Symbol IEC 60417-5180, for class III appliances, unless		N/A
	the appliance is operated by batteries only		N/A
	Symbol IEC 60417-5018, for class II and class III appliances incorporating a functional earth		N/A
	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, if the working voltage exceeds extra-low voltage		N/A
	Appliances intended to be partially immersed in water for cleaning, marked with the maximum level of immersion, (IEC 60335-2-15)		N/A
	And with the substance of the following: "Do not immerse beyond this level" (IEC 60335-2-15)		N/A
	For kettles: level mark or other means which indicate the rated capacity (IEC 60335-2-15)		P
	Unless they cannot be filled beyond their rated capacity (IEC 60335-2-15)		N/A
	Indication visible whit kettle in filling position (IEC 60335-2-15)		P
	Reference to the level mark on the outside of the kettle, if the level is not self-evident (IEC 60335-2-15)		P
	Marking on the appliance of the closed position of the lid of pressure cooker, if it is not obvious (IEC 60335-2-15)		N/A

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	Identification mark and model or type reference of stand for cordless kettles (IEC 60335-2-15)		P
	Soy milk makers: level mark or other means to indicate when they are filled to rated capacity (IEC 60335-2-15)		N/A
	Unless they cannot be filled beyond their rated capacity (IEC 60335-2-15)		N/A
7.3	Range of rated values marked with the lower and upper limits separated by a hyphen	220-240V	P
	Different rated values marked with the values separated by an oblique stroke	50/60Hz	P
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		P
	the power input or current are related to the arithmetic mean value of the rated voltage range		N/A
	Relation between marking for upper and lower limits of rated power input or rated current and voltage is clear		P
7.6	Correct symbols used		P
	Symbol for nature of supply placed next to rated voltage		P
	Symbol for class II appliances placed unlikely to be confused with other marking		N/A
	Units of physical quantities and their symbols according to international standardized system		P
7.8	Except for type Z attachment, terminals for connection to the supply mains indicated as follows:		
	- marking of terminals exclusively for the neutral conductor (letter N)		N/A
	- marking of protective earthing terminals (symbol IEC 60417-5019)		P
	- marking of functional earthing terminals (symbol IEC 60417-5018)		N/A
	- marking not placed on removable parts		P
7.9	Marking or placing of switches which may cause a hazard		P
7.10	Indications of switches on stationary appliances and controls on all appliances by use of figures, letters or other visual means .....	use figures "0" and "1"	P

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	This applies also to switches which are part of a control		P
	If figures are used, the off position indicated by the figure 0		P
	The figure 0 indicates only OFF position, unless no confusion with the OFF position		P
7.12	Instructions for safe use provided		P
	Details concerning precautions during user maintenance		P
	The instructions state that:		
	- the appliance is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction	Replaced by of EN60335-2-15/A11:2012	N/A
	- children being supervised not to play with the appliance	Replaced by of EN60335-2-15/A11:2012	N/A
	For a part of class III construction supplied from a detachable power supply unit, the instructions state that the appliance is only to be used with the unit provided		N/A
	Instructions for class III appliances state that it must only be supplied at SELV, unless		N/A
	it is a battery-operated appliance, the battery being charged outside the appliance		N/A
	For appliances for altitudes exceeding 2000 m, the maximum altitude is stated.....::		N/A
	The instructions for appliances incorporating a functional earth states that the appliance incorporates an earth connection for functional purposes only		N/A
	The instructions for appliances include the substance of the following: (IEC 60335-2-15)		P
	This appliance is intended to be used in household and similar applications such as: (IEC 60335-2-15)		P
	- staff kitchen areas in shops, offices and other working environments;		P
	- farm houses;		P
	- by clients in hotels, motels and other residential type environments;		P
	- bed and breakfast type environments.		P

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	If the manufacturer wants to limit the use of the appliance to less than the above, this is clearly stated in the instructions (IEC 60335-2-15)		N/A
	Appliance incorporating an appliance inlet and intended to be immersed for cleaning, instructions include the following : (IEC 60335-2-15)		
	- the connector must be remove before cleaning		N/A
	- the appliance inlet must be dried before the appliance is used again		N/A
	The instructions for appliances normally cleaned after use and not intended to be immersed in water for cleaning, state that the appliance must not be immersed (IEC 60335-2-15)		P
	This requirement normally applies to coffee-makers, cooking pans, milk heaters, pressure cookers, steam cookers, slow cookers, soy milk makers and yoghurt makers (IEC 60335-2-15)		N/A
	The instructions for use for appliances intended to be used with a connector incorporating a thermostat, state that only the appropriate connector must be used (IEC 60335-2-15)		N/A
	Unless, kettles are constructed so that a hazard cannot arise from boiling water being ejected, the instructions for use include the following: (IEC 60335-2-15)		
	- if the kettle is overfilled, boiling water may be ejected		P
	The instructions for use for kettles filled through a lid aperture which is situated below the handle, include the substance of the following: (IEC 60335-2-15)		
	- WARNING: "Do not remove the lid while the water is boiling"		N/A
	- WARNING: "Position the lid so that steam is directed away from the handle"		N/A
	The caution statement is not required if the lid can only be closed so that steam is directed away from the handle (IEC 60335-2-15)		N/A
	The instructions for cordless appliances state that the appliance is only to be used with the stand provided (IEC 60335-2-15)		P
	If the appliance and stand of cordless appliances can be lifted together by gripping the handle of the appliance, the instructions include the substance of the following: (IEC 60335-2-15)		
	- CAUTION: Insure that the appliance is switched off before removing it from its stand.		N/A
	Instructions for feeding bottle heaters: (IEC 60335-2-15)		

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	- state that the food should not be heated for too long a period		N/A
	- state how to check that the correct food temperature has not been exceeded		N/A
	Instructions for pressure cookers, other than dynamic pressure cookers: (IEC 60335-2-15)		
	- state that the ducts in the pressure regulator allowing the escape of steam should be checked regularly to ensure that they are not blocked		N/A
	Instructions for pressure cookers: (IEC 60335-2-15)		
	- give details of how to open the container safely		N/A
	- and state that the container must not be opened until the pressure has decreased sufficiently		N/A
	The instructions for use for egg boilers provided with a pricking device contain the substance of the following : (IEC 60335-2-15)		
	- CAUTION: "Avoid injuries from the egg pricking device"		N/A
	Instructions for espresso coffee-makers incorporating a pressurized reservoir filled by the user: (IEC 60335-2-15)		
	- contain information for the safe refilling of the water reservoir and the substance of the following:		N/A
	- WARNING: The filling aperture must not be opened during use		N/A
	The instructions for all appliances include: (IEC 60335-2-15)		
	- a warning to avoid spillage on the connector		N/A
	- details on how to clean the surfaces in contact with food		N/A
	- a warning of potential injury from misuse		N/A
	- a statement that the heating element surface is subject to residual heat after use		N/A
	The instructions for soy milk makers also include a statement that care shall be taken when handling the sharp cutting blades, emptying the container and during cleaning (IEC 60335-2-15)		N/A
	The instruction for soy milk makers incorporating a switch necessary for compliance with 22.40 include the substance of the following: (IEC 60335-2-15)		
	- Switch off the appliance and disconnect from supply before changing accessories or approaching parts that move in use		N/A

<b>IEC 60335-2-15</b>			
Clause	Requirement + Test	Result - Remark	Verdict
7.12.5	Replacement cord instructions, type X attachment with a specially prepared cord		N/A
	Replacement cord instructions, type Y attachment		P
	Replacement cord instructions, type Z attachment		N/A
7.13	Instructions and other texts in an official language	English and German	P
7.14	Marking clearly legible and durable, rubbing test as specified		P
7.15	Markings on a main part		P
	Marking clearly discernible from the outside, if necessary after removal of a cover		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		N/A
	For fixed appliances, name, trademark or identification mark and model or type reference visible after installation according to the instructions		N/A
	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
	The symbol IEC 60417-5018 placed next to the symbol IEC 60417-5172 or IEC 60417-5180		N/A
8	<b>PROTECTION AGAINST ACCESS TO LIVE PARTS</b>		
8.1	Adequate protection against accidental contact with live parts		P
8.1.1	Requirement applies for all positions, detachable parts removed		P
	Lamps behind a detachable cover not removed, if conditions met		N/A
	Insertion or removal of lamps, protection against contact with live parts of the lamp cap		N/A
	Use of test probe B of IEC 61032, with a force not exceeding 1 N: no contact with live parts		P
	Use of test probe B of IEC 61032 through openings, with a force of 20N: no contact with live parts		P

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
8.1.2	Use of test probe 13 of IEC 61032, with a force not exceeding 1 N, through openings in class 0 appliances and class II appliances/constructions: no contact with live parts		P
	Test probe 13 also applied through openings in earthed metal enclosures having a non-conductive coating: no contact with live parts		N/A
	See Note 101 (IEC 60335-2-15)		P
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		P
	Only possible to touch parts separated from live parts by double or reinforced insulation		P
10	POWER INPUT AND CURRENT		
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
	If the power input varies throughout the operating cycle and the maximum value of the power input exceeds, by a factor greater than two, the arithmetic mean value of the power input occurring during a representative period, the power input is the maximum value that is exceeded for more than 10 % of the representative period		N/A
	Otherwise the power input is the arithmetic mean value		N/A
	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless		P
	the rated power input is related to the arithmetic mean value		N/A
11	HEATING		
11.1	No excessive temperatures in normal use		P
11.2	The appliance is held, placed or fixed in position as described .....	Tested away from the walls of the test corner	P
	Portable appliances tested away from the walls of the test corner (IEC 60335-2-15)		P
11.3	Temperature rises, other than of windings, determined by thermocouples		P

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	Temperature rises of windings determined by resistance method, unless		N/A
	the windings are non-uniform or it is difficult to make the necessary connections		N/A
	See Note 101 (IEC 60335-2-15)		N/A
11.4	Heating appliances operated under normal operation at 1.15 times rated power input (W) .....	(see appended table)	P
	If the temperature rise limits are exceeded in appliances incorporating motors, transformers or electronic circuits and if the power input is lower than the rated power input, test repeated with the appliance supplied at 1,06 times rated voltage (IEC 60335-2-15)		N/A
11.7	Appliances operated for the duration specified in 11.7.101 to 11.7.106 (IEC 60335-2-15)		P
11.7.101	For kettles with temperature limiter: test terminated after second operation of temperature limiter (IEC 60335-2-15)		P
	For kettles with thermostat: test terminated 15 min after the water has attained 95 °C		N/A
	For other kettles: test terminated 5 min after the water has attained 95 °C		N/A
11.8	Temperature rises monitored continuously and not exceeding the values in table 3 .....	(see appended table)	P
	If the temperature rise of a motor winding exceeds the value of table 3, or		N/A
	if there is doubt with regard to classification of insulation,		N/A
	tests of Annex C are carried out		N/A
	Sealing compound does not flow out		P
	Protective devices do not operate, except		P
	components in protective electronic circuits tested for the number of cycles specified in 24.1.4		N/A
	When an appliance connector incorporates a thermostat, the temperature rise limit for the pins of the inlet does not apply (IEC 60335-2-15)		N/A
	The temperature rise limits of motors, transformers, components of electronic circuit and parts directly influenced by them may be exceeded when the appliance is operated at 1,15 times rated power input (IEC 60335-2-15)		N/A

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		
13.1	Leakage current not excessive and electric strength adequate		P
	Heating appliances operated at 1.15 times the rated power input (W).....:	(see appended table)	P
	Motor-operated appliances and combined appliances supplied at 1.06 times the rated voltage (V).....:		N/A
	Protective impedance and radio interference filters disconnected before carrying out the tests		N/A
13.2	For class 0, class II and class III appliances, and class II constructions, leakage current measured by means of the circuit described in figure 4 of IEC 60990	Class II construction	P
	For class 0I and class I appliances, a low impedance ammeter may be used	Class I	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
15	MOISTURE RESISTANCE		
15.2	Spillage of liquid does not affect the electrical insulation		P
	Spillage solution comprising water containing approximately 1 % NaCl and 0,6 % rinsing agent	Only containing 1 % NaCl by EN 60335-1	P
	Appliances with type X attachment fitted with a flexible cord as described		N/A
	Appliances incorporating an appliance inlet tested with or without an connector, whichever is most unfavourable		N/A
	The test is only carried out with the appliance connector in position (IEC 60335-2-15)		P
	For cordless appliances, the test with the appliance on the horizontal plane carried out with the appliance both on and off its stand (IEC 60335-2-15)		P
	For rice cookers, the test carried out with the rice container in place (IEC 60335-2-15)		N/A

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	In case of doubt, spillage tests carried out with the appliance deviating from the normal position by an angle not exceeding 5° (IEC 60335-2-15)		P
	Detachable parts are removed		P
	Overfilling test with additional amount of the solution, over a period of 1 min (l).....:	0,26L	P
	The appliance withstands the electric strength test of 16.3		P
	No trace of water on insulation that can result in a reduction of clearances or creepage distances below values specified in clause 29		P
	Kettles that can be filled through the spout: additional overfilling test in conditions as specified (IEC 60335-2-15)		N/A
	For cordless kettles, the additional test carried out only with the cordless kettle off its stand, the kettle being replaced on its stand in order to carry out the electric strength test of 16.3 (IEC 60335-2-15)		P
	Coffee makers provided with a removable coffee pot: particular overfilling test in conditions as specified (IEC 60335-2-15)		N/A
	Steam sterilizers: particular overfilling test in conditions as specified (IEC 60335-2-15)		N/A
15.3	Appliances proof against humid conditions		P
	Checked by test Cab: Damp heat steady state in IEC 60068-2-78		P
	Detachable parts removed and subjected, if necessary, to the humidity test with the main part		N/A
	Humidity test for 48 h in a humidity cabinet	93%RH, 23°C	P
	Reassembly of those parts that may have been removed		N/A
	The appliance withstands the tests of clause 16		P
15.102	Connecting device of stands for cordless kettles not affected by water : particular electric strength test in conditions as specified (IEC 60335-2-15)		P
	Compliance is checked by the test in conditions as specified		P
	Stand withstanding the test of 16.3 with voltage reduced to 2500 V for reinforced insulation		P
16	LEAKAGE CURRENT AND ELECTRIC STRENGTH		

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
16.1	Leakage current not excessive and electric strength adequate		P
	Protective impedance disconnected from live parts before carrying out the tests		N/A
	Tests carried out at room temperature and not connected to the supply		P
16.2	Single-phase appliances: test voltage 1.06 times rated voltage (V) .....	254,4V	P
	Three-phase appliances: test voltage 1.06 times rated voltage divided by $\sqrt{3}$ (V) .....		N/A
	Leakage current measurements .....	(see appended table)	P
	Limit values doubled if:		
	- all controls have an off position in all poles, or		N/A
	- the appliance has no control other than a thermal cut-out, or		N/A
	- all thermostats, temperature limiters and energy regulators do not have an off position, or		N/A
	- the appliance has radio interference filters		N/A
	With the radio interference filters disconnected, the leakage current do not exceed limits specified .....	(see appended table)	N/A
16.3	Electric strength tests according to table 7 .....	(see appended table)	P
	Test voltage applied between the supply cord and inlet bushing and cord guard and cord anchorage as specified .....	(see appended table)	P
	No breakdown during the tests		P
19	ABNORMAL OPERATION		
19.1	The risk of fire, mechanical damage or electric shock under abnormal or careless operation obviated		P
	Electronic circuits so designed and applied that a fault will not render the appliance unsafe .....	(see appended table)	P
	Appliances incorporating heating elements subjected to the tests of 19.2 and 19.3, and		P
	if the appliance also has a control that limit the temperature during clause 11 it is subjected to the test of 19.4, and		P
	if applicable, to the test of 19.5		P
	Appliances incorporating PTC heating elements are also subjected to the test of 19.6		N/A

<b>IEC 60335-2-15</b>			
Clause	Requirement + Test	Result - Remark	Verdict
	Appliances incorporating motors subjected to the tests of 19.7 to 19.10, as applicable		N/A
	Appliances incorporating electronic circuits subjected to the tests of 19.11 and 19.12, as applicable		P
	Appliances incorporating contactors or relays subjected to the test of 19.14, being carried out before the tests of 19.11		N/A
	Appliances incorporating voltage selector switches subjected to the test of 19.15		N/A
	Unless otherwise specified, the tests are continued until a non-self-resetting thermal cut-out operates, or		N/A
	until steady conditions are established		P
	If a heating element or intentionally weak part becomes open-circuited, the relevant test is repeated on a second sample		N/A
	Kettles are not subjected to the test of 19.2 (IEC 60335-2-15)		P
	Kettles also subjected to the test of 19.101, unless the appliance incorporates a non-self-resetting thermal cut-out, in order to comply with 19.4 (IEC 60335-2-15)		P
	Kettles for which compliance with 19.101 relies on the operation of a non-self-resetting thermal cut-out are subjected to the test of 19.102 (IEC 60335-2-15)		P
19.3	Test of 19.2 repeated; test voltage (V), power input of 1.24 times rated power input (W) .....		N/A
	Kettles are operated empty at 1.15 times rated power input (IEC 60335-2-15)	Same as cl.11.4	P
	The test is carried out with the kettle filled with sufficient water to cover the heating element or if the heating element is not positioned inside the container, to a depth of 10 mm (IEC 60335-2-15)	Depth of 10 mm	P
19.4	Test conditions as in clause 11, any control limiting the temperature during tests of clause 11 short-circuited		P
	Pressure cookers: (IEC 60335-2-15)		
	- all pressure regulating devices rendered inoperative; and		N/A

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	- in other than dynamic pressure cookers, all protective devices that vent steam and intentionally weak parts that vent steam rendered inoperative; and		N/A
	- in dynamic pressure cookers, all protective devices, other than intentionally weak parts, that vent steam rendered inoperative		N/A
19.5	Test of 19.4 repeated on Class 0I and I appliances with tubular sheathed or embedded heating elements. No short-circuiting, but one end of the element connected to the sheath		P
	The test repeated with reversed polarity and the other end of the heating element connected to the sheath		P
	The test is not carried out on appliances intended to be permanently connected to fixed wiring and on appliances where an all-pole disconnection occurs during the test of 19.4		N/A
19.11.2	Fault conditions applied one at a time, the appliance operating under conditions specified in clause 11, but supplied at rated voltage, duration of the tests as specified:		
	a) short circuit of functional insulation if clearances or creepage distances are less than the values specified in clause 29		N/A
	b) open circuit at the terminals of any component	Open LED diode for all models: No hazards.	P
	c) short circuit of capacitors, unless they comply with IEC 60384-14		N/A
	d) short circuit of any two terminals of an electronic component, other than integrated circuits	Short circuit LED diode for all models: No hazards.	P
	This fault condition is not applied between the two circuits of an optocoupler		N/A
	e) failure of triacs in the diode mode		N/A
	f) failure of microprocessors and integrated circuits		N/A
	g) failure of an electronic power switching device		N/A
	Each low power circuit is short-circuited by connecting the low-power point to the pole of the supply source from which the measurements were made		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
19.13	During the tests the appliance does not emit flames, molten metal, poisonous or ignitable gas in hazardous amounts		P
	Temperature rises not exceeding the values shown in table 9.....:	(see appended table)	P
	Compliance with clause 8 not impaired		P
	If the appliance can still be operated it complies with 20.2		N/A
	Insulation, other than of class III appliances or class III constructions that do not contain live parts, withstands the electric strength test of 16.3, the test voltage as specified in table 4:		
	- basic insulation (V).....:	1000V/1min	P
	- supplementary insulation (V).....:	1750V/1min	P
	- reinforced insulation (V).....:	3000V/1min	P
	After operation or interruption of a control, clearances and creepage distances across the functional insulation withstand the electric strength test of 16.3, the test voltage being twice the working voltage		P
	The appliance does not undergo a dangerous malfunction, and		N/A
	no failure of protective electronic circuits, if the appliance is still operable		N/A
	Appliances tested with an electronic switch in the off position, or in the stand-by mode:		
	- do not become operational, or		N/A
	- if they become operational, do not result in a dangerous malfunction during or after the tests of 19.11.4		N/A
	If the appliance contains lids or doors that are controlled by one or more interlocks, one of the interlocks may be released provided that:		
	- the lid or door does not move automatically to an open position when the interlock is released, and		N/A
	- the appliance does not start after the cycle in which the interlock was released		N/A
	During the test of 19.4, protective devices of pressure cookers other than dynamic pressure cookers operate before pressure has reached 350 kPa (IEC 60335-2-15)		N/A

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	During the test of 19.4, protective devices or intentionally weak parts of dynamic pressure cookers operate before pressure has reached 250 kPa (IEC 60335-2-15)		N/A
	Temperature rise of windings of induction rice cookers not exceeding the values specified in 19.7 (IEC 60335-2-15)		N/A
	Induction rice cookers: electric strength test carried out immediately after switching off the appliance (IEC 60335-2-15)		N/A
19.101	Kettles operated empty at 0,85 times or 1,15 times rated power input, whichever is more unfavourable, with thermal cut-out that operates during the test of 19.4 short circuited (IEC 60335-2-15)	1,15 times is more unfavourable	P
	During the test, any flames keep within the enclosure of the kettle and supporting surface does not ignite	No flames	P
	After the test, live parts not be accessible		P
19.102	Kettles incorporating two self-resetting thermal cut-outs operated with one of the thermal cut-out short circuited, empty at 0.85 or 1.15 times rated power input, whichever is most unfavourable (IEC 60335-2-15)	1,15 times rated power input	P
	Within 2 s of the thermal cut-out operating, the kettle is filled with water having a temperature of 15 °C ± 5 °C. After 1 min, the kettle is emptied		P
	The test is carried out 100 times		P
20	STABILITY AND MECHANICAL HAZARDS		
20.1	Appliances having adequate stability		P
	Tilting test through an angle of 10°, appliance placed on an inclined plane/horizontal support, not connected to the supply mains; appliance does not overturn		P
	Tilting test repeated on appliances with heating elements, angle of inclination increased to 15°		P
	Possible heating test in overturned position; temperature rise does not exceed values shown in table 9		N/A
21	MECHANICAL STRENGTH		
21.1	Appliance has adequate mechanical strength and is constructed as to withstand rough handling		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Checked by applying 3 blows to every point of the enclosure like to be weak, in accordance with test Ehb of IEC 60068-2-75, spring hammer test, with an impact energy of 0,5 J	(see appended table)	P
	The appliance shows no damage impairing compliance with this standard, and		P
	compliance with 8.1, 15.1 and clause 29 not impaired		P
	If doubt, supplementary or reinforced insulation subjected to the electric strength test of 16.3		N/A
	If necessary, repetition of groups of three blows on a new sample		N/A
	Breakage of glass parts is neglected provided that compliance with 8.1, 15.1 and 15.101 is not impaired (IEC 60335-2-15)		N/A
21.2	Accessible parts of solid insulation having strength to prevent penetration by sharp implements		P
	Test not applicable if the thickness of supplementary insulation is at least 1 mm and reinforced insulation at least 2 mm		P
	The insulation is tested as specified, and does withstand the electric strength test of 16.3		N/A
22	CONSTRUCTION		
22.4	Appliance for heating liquids and appliance causing undue vibration not provided with pins for insertion into socket-outlets		P
22.6	Electrical insulation not affected by condensing water or leaking liquid		P
	Electrical insulation of Class II appliances not affected if a hose ruptures or seal leaks		P
	In case of doubt, test as described		P
	Drain holes, at least 5 mm in diameter or 20 mm <sup>2</sup> in area with a width of at least 3 mm (IEC 60335-2-15)	5,2mm in diameter	P
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		P
22.9	Insulation, internal wiring, windings, commutators and slip rings not exposed to oil, grease or similar substances, unless	No oil, grease or similar substances	P
	the substance has adequate insulating properties		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
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		P
	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	50N pull and push to enclosure and handle, 50N push and 30N pull to knobs	P
22.12	Handles, knobs etc. fixed in a reliable manner		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	knob	P
	Axial force 30 N applied to parts, the shape being so that an axial pull is likely to be applied	Handle	P
22.13	Unlikely that handles, when gripped as in normal use, make the operator's hand touch parts having a temperature rise exceeding the value specified for handles which are held for short periods only		P
22.14	No ragged or sharp edges creating a hazard for the user in normal use, or during user maintenance		P
	No exposed pointed ends of self-tapping screws or other fasteners, likely to be touched by the user in normal use or during user maintenance		P
22.15	Storage hooks and the like for flexible cords smooth and well rounded		P
22.18	Current-carrying parts and other metal parts resistant to corrosion		P
22.20	Direct contact between live parts and thermal insulation effectively prevented, unless		P
	material used is non-corrosive, non-hygroscopic and non-combustible		N/A
22.21	Wood, cotton, silk, ordinary paper and fibrous or hygroscopic material not used as insulation, unless	No such material	P
	impregnated		N/A
	This requirement does not apply to magnesium oxide and mineral ceramic fibres used for the electrical insulation of heating elements		P

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Clause	Requirement + Test	Result - Remark	Verdict
22.22	Appliances not containing asbestos	No asbestos	P
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	Neither clearances nor creepage distances over supplementary and reinforced insulation reduced below values specified in clause 29 as a result of wear		P
	Neither clearances nor creepage distances between live parts and accessible parts reduced below values for supplementary insulation if wires, screws etc. become loose		P
22.32	Supplementary and reinforced insulation constructed or protected against pollution so that clearances or creepage distances are not reduced below the values in clause 29		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 materials or beads alone not used as supplementary or reinforced insulation		N/A
	Ceramic and similar porous material in which heating conductors are embedded is considered to be basic insulation, not reinforced insulation		P
	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 and conductive liquids that are in contact with unearthed accessible metal parts are not in direct contact with live parts, or		P
	unearthed metal parts separated from live parts by basic insulation only		P
	Electrodes not used for heating liquids	No electrode used	P
	For class II constructions, conductive liquids that are or may become accessible in normal use and conductive liquids that are in contact with unearthed accessible metal parts, not in direct contact with basic or reinforced insulation, unless		P

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Clause	Requirement + Test	Result - Remark	Verdict
	the reinforced insulation consists of at least 3 layers		N/A
	For class II constructions, conductive liquids which are in contact with live parts, not in direct contact with reinforced insulation, unless		N/A
	the reinforced insulation consists of at least 3 layers		N/A
	An air layer not used as basic or supplementary insulation in a double insulation system if likely to be bridged by leaking liquid		P
22.34	Shafts of operating knobs, handles, levers etc. not live, unless		P
	the shaft is not accessible when the part is removed		N/A
22.35	For other than class III constructions, handles, levers and knobs, held or actuated in normal use, not becoming live in the event of a failure of basic insulation		P
	Such parts being of metal, and their shafts or fixings are likely to become live in the event of a failure of basic insulation, are either adequately covered by insulation material or their accessible parts are separated from their shafts or fixings by supplementary insulation		P
	This requirement does not apply to handles, levers and knobs on stationary appliances and cordless appliances, other than those of electrical components, provided they are reliably connected to an earthing terminal or earthing contact, or separated from live parts by earthed metal		N/A
	Insulating material covering metal handles, levers and knobs withstand the electric strength test of 16.3 for supplementary insulation		N/A
22.41	No components, other than lamps, containing mercury	No mercury contained	P
22.44	Appliances not having an enclosure that is shaped or decorated like a toy		P
22.45	When air is used as reinforced insulation, clearances not reduced below the values specified in 29.1.3 due to deformation as a result of an external force applied to the enclosure		P
22.101	Kettles constructed so that the lid does not fall off when water is poured out (IEC 60335-2-15)		P
	Compliance is checked by the test as specified		P

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	Lid not fall off and water only emitted from the spout		P
22.102	Kettles so constructed that there are no sudden jets of steam or hot water likely to expose the user to a hazard when the appliance is used as in normal use (IEC 60335-2-15)		P
	Compliance is checked by inspection during the test of clause 11		P
22.103	Appliance coupler of cordless appliances constructed to withstand the stresses occurring during normal use (IEC 60335-2-15)		P
	Compliance is checked by the test as specified		P
	Appliance is placed on its stand and withdrawn for:		
	- cordless kettles 10 000 times		P
	- cordless coffee makers 10 000 times		N/A
	- other cordless appliances 6 000 times		N/A
	The test continued without current flowing for a further 10 000 times for cordless kettles and cordless coffee makers, or		P
	6 000 times for other cordless appliances		N/A
	If a single stand is supplied with more than one cordless appliance, the test for each cordless appliance is carried out using the same stand		N/A
	The appliance is suitable for further use and compliance with 8.1, 16.3, 27.5 and clause 29 not be impaired		P
	The test is carried out without current flowing if the connection contacts cannot make or break on load		N/A
22.114	Appliances constructed so that food or liquids are prevented from penetrating into places that could cause electrical or mechanical faults (IEC 60335-2-15)		P
23	INTERNAL WIRING		
23.1	Wireways smooth and free from sharp edges		P
	Wires protected against contact with burrs, cooling fins etc.		P
	Wire holes in metal well-rounded or provided with bushings		N/A
	Wiring effectively prevented from coming into contact with moving parts		N/A

<b>IEC 60335-2-15</b>			
Clause	Requirement + Test	Result - Remark	Verdict
23.5	The insulation of internal wiring subjected to the supply mains voltage withstanding the electrical stress likely to occur in normal use		P
	Basic insulation electrically equivalent to the basic insulation of cords complying with IEC 60227 or IEC 60245, or		N/A
	no breakdown when a voltage of 2000 V is applied for 15 min between the conductor and metal foil wrapped around the insulation		P
	For class II construction, the requirements for supplementary insulation and reinforced insulation apply,		N/A
	except that the sheath of a cord complying with IEC 60227 or IEC 60245 may provide supplementary insulation.		N/A
	A single layer of internal wiring insulation does not provide reinforced insulation		P
23.7	The colour combination green/yellow only used for earthing conductors		P
23.8	Aluminium wires not used for internal wiring		P
24	<b>COMPONENTS</b>		
24.1	Components comply with safety requirements in relevant IEC standards		P
	List of components .....	(see appended table)	P
	Motors not required to comply with IEC 60034-1, they are tested as part of the appliance		P
	Relays tested as part of the appliance, or		N/A
	alternatively acc. to IEC 60730-1, and meeting the additional requirements in IEC 60335-1		P
	The requirements of Clause 29 apply between live parts of components and accessible parts of the appliance		P
	Components can comply with the requirements for clearances and creepage distances for functional insulation in the relevant component standard		P
	30.2 of this standard apply to parts of non-metallic material in components including parts of non-metallic material supporting current-carrying connections		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Components that have not been previously tested to comply with the IEC standard for the relevant component are tested according to the requirements of 30.2		P
	Components that have been previously tested to comply with the resistance to fire requirements in the IEC standard for the relevant component need not be retested provided the specified conditions are met		P
	If these conditions are not satisfied, the component is tested as part of the appliance.		P
	Power electronic converter circuits not required to comply with IEC 62477-1, they are tested as part of the appliance		N/A
	If components have not been tested and found to comply with relevant IEC standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9		P
	For components mentioned in 24.1.1 to 24.1.9 no additional tests specified in the relevant component standard are necessary other than those specified in 24.1.1 to 24.1.9		P
	Components not tested and found to comply with relevant IEC standard and components not marked or not used in accordance with its marking, tested under the conditions occurring in the appliance		P
	Lampholders and starterholders that have not being tested and found to comply with the relevant IEC standard, tested as a part of the appliance and additionally according to the gauging and interchangeability requirements of the relevant IEC standard		N/A
	No additional tests specified for nationally standardized plugs such as those detailed in IEC/TR 60083 or connectors complying with the standard sheets of IEC 60320-1 and IEC 60309		P
24.1.4	Automatic controls comply with IEC 60730-1 with the relevant part 2. The number of cycles of operation being at least:		
	- thermostats:	10 000	N/A
	- temperature limiters:	1 000	Certified component P
	- self-resetting thermal cut-outs:	300	Certified component P
	- voltage maintained non-self-resetting thermal cut-outs:	1 000	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- other non-self-resetting thermal cut-outs:	30	N/A
	- timers:	3 000	N/A
	- energy regulators:	10 000	N/A
	The number of cycles for controls operating during clause 11 need not be declared, if the appliance meets the requirements of this standard when they are short-circuited		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
	Thermal cut-outs of the capillary type comply with the requirements for type 2.K controls in IEC 60730-2-9		N/A
	Self-resetting thermal cut-outs required for compliance with the test of 19.101 are subjected to 3 000 cycles of operation (IEC 60335-2-15)	Certified component	P
24.1.5	Appliance couplers comply with IEC 60320-1		P
	However, for class II appliances classified higher than IPX0, the appliance couplers comply with IEC 60320-2-3		N/A
	Interconnection couplers comply with IEC 60320-2-2		N/A
	Appliance couplers incorporating thermostats, thermal cut-outs or fuses in the connectors comply with IEC 60320-1, except that: (IEC 60335-2-15)		N/A
	- the earthing contact of connector is allowed to be accessible, if contact is not likely to be gripped during insertion or withdrawal of the connector		N/A
	- the temperature required for the test of clause 18 is that measured on the pins of the appliance inlet during test of clause 11 of this standard		N/A
	- the breaking-capacity test of clause 19 carried out using the inlet of the appliance		N/A
	- the temperature rise of current-carrying parts specified in clause 21 not determined		N/A

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	Thermal controls are not allowed in connectors complying with the standard sheets of IEC 60320-1 (IEC 60335-2-15)		P
24.2	Appliances not fitted with:		
	- switches or automatic controls in flexible cords		P
	- devices causing the protective device in the fixed wiring to operate in the event of a fault in the appliance		P
	- thermal cut-outs that can be reset by soldering, unless		P
	the solder has a melting point of at least 230 °C		N/A
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS		
25.1	Appliance not intended for permanent connection to fixed wiring, means for connection to the supply:		
	- supply cord fitted with a plug, the current rating and voltage rating of the plug being not less than the corresponding ratings of its associated appliance		P
	- an appliance inlet having at least the same degree of protection against moisture as required for the appliance, or		N/A
	- pins for insertion into socket-outlets		N/A
	Appliances incorporating an appliance inlet other than those standardized in IEC 60320-1 are supplied with a cord set (IEC 60335-2-15)		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
25.5	Method for assembling the supply cord to the appliance:		
	- type X attachment		N/A
	- type Y attachment		P
	- type Z attachment, if allowed in relevant part 2		N/A
	Type Z attachment is allowed for egg boilers, feeding bottle heaters, yoghurt makers and stands of cordless appliances (IEC 60335-2-15)		N/A

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	Type X attachment, other than those with a specially prepared cord, not used for flat twin tinsel cords		N/A
	For multi-phase appliances supplied with a supply cord and that are intended to be permanently connected to fixed wiring, the supply cord is assembled to the appliance by type Y attachment		N/A
25.6	Plugs fitted with only one flexible cord		P
25.7	Supply cords, other than for class III appliances, being one of the following types:		
	- rubber sheathed (at least 60245 IEC 53)		N/A
	- polychloroprene sheathed (at least 60245 IEC 57)		N/A
	- polyvinyl chloride sheathed. Not used if they are likely to touch metal parts having a temperature rise exceeding 75 K during the test of clause 11		
	<ul style="list-style-type: none"> <li>light polyvinyl chloride sheathed cord (60227 IEC 52), for appliances not exceeding 3 kg</li> </ul>		N/A
	<ul style="list-style-type: none"> <li>ordinary polyvinyl chloride sheathed cord (60227 IEC 53), for other appliances</li> </ul>	H05VV-F	P
	- heat resistant polyvinyl chloride sheathed. Not used for type X attachment other than specially prepared cords		
	<ul style="list-style-type: none"> <li>heat-resistant light polyvinyl chloride sheathed cord (60227 IEC 56), for appliances not exceeding 3 kg</li> </ul>		N/A
	<ul style="list-style-type: none"> <li>heat-resistant polyvinyl chloride sheathed cord (60227 IEC 57), for other appliances</li> </ul>		N/A
	Supply cords for class III appliances adequately insulated		N/A
	Test with 500 V for 2 min for supply cords of class III appliances that contain live parts		N/A
	Supply cord of livestock feed boilers are polychloroprene sheathed (IEC 60335-2-15)		N/A
25.8	Nominal cross-sectional area of supply cords not less than table 11; rated current (A); cross-sectional area (mm <sup>2</sup> ).....:		P
	Portable appliances having a rated current of up to 10 A may incorporate a supply cord having a nominal cross-sectional area of 0,75 mm <sup>2</sup> , if the length is less than 2 m (IEC 60335-2-15)	<10A, 0,75 mm <sup>2</sup> , length: 0,75m	P
25.9	Supply cords not in contact with sharp points or edges		P

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
25.10	Supply cord of class I appliances have a green/yellow core for earthing		P
	In multi-phase appliances, the colour of the neutral conductor of the supply cord is blue.		N/A
25.11	Conductors of supply cords not consolidated by soldering where they are subject to contact pressure, unless		P
	the contact pressure is provided by spring terminals		N/A
25.13	Inlet openings so constructed as to prevent damage to the supply cord	The inlet opening is of insulation material	P
	If it is not evident that the supply cord can be introduced without risk of damage, a non-detachable lining or bushing complying with 29.3 for supplementary insulation provided		N/A
	If unsheathed supply cord, a similar additional bushing or lining is required, unless the appliance is		N/A
	class 0, or		N/A
	a class III appliance not containing live parts		N/A
25.15	For appliances with supply cord and appliances to be permanently connected to fixed wiring by a flexible cord, 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:		
	- fixed appliances: pull 100 N; torque (not on automatic cord reel) (Nm).....:		N/A
	- other appliances: values shown in table 12: mass (kg); pull (N); torque (not on automatic cord reel) (Nm).....:	>1 and <4Kg, 60N pull and 0,25Nm torque	P
	Pull and torque test of supply cord, values shown in table 12: mass (kg); pull (N); torque (not on automatic cord reel) (Nm).....:	>1 and <4Kg, 60N pull and 0,25Nm torque	P
	Cord not damaged and max. 2 mm displacement of the cord	Max. 0,8mm	P
25.17	Adequate cord anchorages for type Y and Z attachment, test with the cord supplied with the appliance	Type Y	P
25.18	Cord anchorages only accessible with the aid of a tool, or		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Constructed so that the cord can only be fitted with the aid of a tool		P
25.20	The conductors of the supply cord for type Y and Z attachment insulated from accessible metal parts	Type Y	P
25.101	Supply cords of kettles are not longer than 75 cm, unless they are helically coiled (IEC 60335-2-15)	≤75cm	P
	If a cordless kettle has a cord storage facility, the length of the cord is measured after storing as much of the cord as possible		P
	The length of the cord is measured between the plug and the point where the cord or cord guard enters the appliance		P
27	PROVISION FOR EARTHING		
27.1	Accessible metal parts of Class 0I and I appliances permanently and reliably connected to an earthing terminal or earthing contact of the appliance inlet	Class I	P
	Earthing terminals and earthing contacts not connected to the neutral terminal		P
	Class 0, II and III appliances have no provision for protective earthing		N/A
	Class II appliances and class III appliances can incorporate an earth for functional purposes		N/A
	Safety extra-low voltage circuits not earthed, unless		N/A
	protective extra-low voltage circuits		N/A
27.2	Clamping means of earthing terminals adequately secured against accidental loosening		P
	Terminals for the connection of external equipotential bonding conductors allow connection of conductors of 2.5 to 6 mm <sup>2</sup> , and		N/A
	- do not provide earthing continuity between different parts of the appliance, and		N/A
	- conductors cannot be loosened without the aid of a tool		N/A
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
27.3	For a detachable part having an earth connection and being plugged into another part of the appliance, the earth connection is made before and separated after current-carrying connections when removing the part		P

<b>IEC 60335-2-15</b>			
Clause	Requirement + Test	Result - Remark	Verdict
	For appliances with supply cords, current-carrying conductors become taut before earthing conductor, if the cord slips out of the cord anchorage		P
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
27.4	No risk of corrosion resulting from contact between parts of the earthing terminal and the copper of the earthing conductor or other metal		P
	Parts providing earthing continuity, other than parts of a metal frame or enclosure, have adequate resistance to corrosion		P
	If of steel, these parts provided with an electroplated coating with a 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 the body of the earthing terminal is a part of a frame or enclosure of aluminium or aluminium alloys, precautions taken to avoid risk of corrosion		P
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		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 the clearances of basic insulation are based on the rated voltage of the appliance		N/A
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
	Resistance not exceeding 0,1 Ω at the specified low-resistance test (Ω) .....	Max.0,02 Ω	P
28.1	<b>SCREWS AND CONNECTIONS</b>		
	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	No such screws	P
	Diameter of screws of insulating material min. 3 mm	No such screws	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Screws of insulating material not used for any electrical connections or connections providing earthing continuity		N/A
	Screws used for electrical connections or connections providing earthing continuity screwed into metal		P
	Screws not of insulating material if their replacement by a metal screw can impair supplementary or reinforced insulation		N/A
	For 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 impairs basic insulation		N/A
	For screws and nuts; torque-test as specified in table 14.....:	Three screws used	P
28.2	Electrical connections and connections providing earthing continuity constructed so that contact pressure is not transmitted through non-ceramic insulating material liable to shrink or distort, unless		P
	there is resiliency in the metallic parts to compensate for shrinkage or distortion of the insulating material		N/A
	This requirement does not apply to electrical connections in circuits of appliances for which:		
	<ul style="list-style-type: none"> <li>30.2.2 is applicable and that carry a current not exceeding 0,5 A</li> </ul>		N/A
	<ul style="list-style-type: none"> <li>30.2.3 is applicable and that carry a current not exceeding 0,2 A</li> </ul>		N/A
28.4	Screws and nuts that make mechanical connection secured against loosening if they also make electrical connections or connections providing earthing continuity		P
	This requirement does not apply to screws in the earthing circuit if at least two screws are used, or		N/A
	if an alternative earthing circuit is provided		N/A
	Rivets for electrical connections or connections providing earthing continuity secured against loosening if the connections are subjected to torsion		N/A
29	CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION		
	Clearances, creepage distances and solid insulation withstand electrical stress		P

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	For coatings used on printed circuits boards to protect the microenvironment (Type 1) or to provide basic insulation (Type 2), Annex J applies.....:		N/A
	The microenvironment is pollution degree 1 under type 1 protection		N/A
	For type 2 protection, the spacing between the conductors before the protection is applied is not less than the values specified in Table 1 of IEC 60664-3		N/A
	These values apply to functional, basic, supplementary and reinforced insulation .....		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		N/A
	However, if the distances are affected by wear, distortion, movement of the parts or during assembly, the clearances for rated impulse voltages of 1500V and above are increased by 0,5 mm and the impulse voltage test is not applicable		N/A
	For appliances intended for use at altitudes exceeding 2 000 m, the clearances in Table 16 is increased according to the relevant multiplier values in Table A.2 of IEC 60664-1		N/A
	Impulse voltage test is not applicable:		
	- when the microenvironment is pollution degree 3, or	Parts influenced by vapour	P
	- for basic insulation of class 0 and class 01 appliances, or		N/A
	- to appliances intended for use at altitudes exceeding 2 000 m		N/A
	Appliances are in overvoltage category II		P
	A force of 2 N is applied to bare conductors, other than heating elements		P
	A force of 30 N is applied to accessible surfaces		P
29.1.1	Clearances of basic insulation withstand the overvoltages, taking into account the rated impulse voltage		P
	The values of table 16 or the impulse voltage test of clause 14 are applicable.....:	(see appended table)	P

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	Clearance at the terminals of tubular sheathed heating elements may be reduced to 1,0 mm if the microenvironment is pollution degree 1	End of heating element	P
	Lacquered conductors of windings considered to be bare conductors		N/A
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, using the next higher step for rated impulse voltage .....	(see appended table)	P
	For double insulation, with no intermediate conductive part between basic and supplementary insulation, clearances are measured between live parts and the accessible surface, and the insulation system is treated as reinforced insulation		P
29.1.4	Clearances for functional insulation are the largest values determined from:		
	- table 16 based on the rated impulse voltage .....	(see appended table)	P
	- table F.7a in IEC 60664-1, frequency not exceeding 30 kHz		P
	- clause 4 of IEC 60664-4, frequency exceeding 30 kHz		N/A
	If values of table 16 are largest, the impulse voltage test of clause 14 may be applied instead, unless		N/A
	the microenvironment is pollution degree 3, or		N/A
	the distances can be affected by wear, distortion, movement of the parts or during assembly		N/A
	However, clearances are not specified if the appliance complies with clause 19 with the functional insulation short-circuited		N/A
	Lacquered conductors of windings considered to be bare conductors		N/A
	However, clearances at crossover points are not measured		N/A
	Clearance between surfaces of PTC heating elements may be reduced to 1mm		N/A
29.2	Creepage distances not less than those appropriate for the working voltage, taking into account the material group and the pollution degree.....	(see appended table)	P
	Pollution degree 2 applies, unless		P

<b>IEC 60335-2-15</b>			
Clause	Requirement + Test	Result - Remark	Verdict
	- precautions taken to protect the insulation; pollution degree 1	End of heating element	P
	- insulation subjected to conductive pollution; pollution degree 3	Parts influenced by vapour	P
	The microenvironment is pollution degree 3 if the insulation can be polluted by condensation from steam produced during normal use of the appliance (IEC 60335-2-15)		P
	A force of 2 N is applied to bare conductors, other than heating elements		P
	A force of 30 N is applied to accessible surfaces		P
	In a double insulation system, the working voltage for both the basic and supplementary insulation is taken as the working voltage across the complete double insulation system		P
29.2.1	Creepage distances of basic insulation not less than specified in table 17.....:	(see appended table)	P
	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 17 .....		N/A
	Except for pollution degree 1, corresponding 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 those specified for basic insulation in table 17, or .....	(see appended table)	P
	Table 2 of IEC 60664-4, as applicable .....		N/A
29.2.3	Creepage distances of reinforced insulation at least double those specified for basic insulation in table 17, or .....	(see appended table)	P
	Table 2 of IEC 60664-4, as applicable .....		N/A
29.2.4	Creepage distances of functional insulation not less than specified in table 18.....:	(see appended table)	P
	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 18 .....		N/A

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	Creepage distances may be reduced if the appliance complies with clause 19 with the functional insulation short-circuited		N/A
29.3	Supplementary and reinforced insulation have adequate thickness, or a sufficient number of layers, to withstand the electrical stresses		P
	Compliance checked:		
	- by measurement, in accordance with 29.3.1, or		P
	- by an electric strength test in accordance with 29.3.2, or		N/A
	- for insulation, other than single layer internal wiring insulation, by an assessment of the thermal quality of the material combined with an electric strength test, in accordance with 29.3.3, and		N/A
	for accessible parts of reinforced insulation consisting of a single layer, by measurement in accordance with 29.3.4, or		N/A
	- by an assessment of the thermal quality of the material according to 29.3.3 combined with an electric strength test in accordance with 23.5, for each single layer internal wiring insulation touching each other, or		N/A
	- as specified in subclause 6.3 of IEC 60664-4 for insulation that is subjected to any periodic voltage having a frequency exceeding 30 kHz		N/A
29.3.1	Supplementary insulation have a thickness of at least 1 mm		P
	Reinforced insulation have a thickness of at least 2 mm		P

10.1	TABLE: Power input deviation					P
Input deviation of/at:	P rated (W)	P measured (W)	$\Delta P$	Required $\Delta P$	Remark	
PK-G917	1850	1890	+2,2%	-10%~+5%	Supplied at 220V	
	2200	2241	+1,9%	-10%~+5%	Supplied at 240V	
Supplementary information:						

11.8	TABLE: Heating test, thermocouples PK-G918			P
	Test voltage (V).....:	2530W, 255V		—
	Ambient (°C).....:	23°C		—
Thermocouple locations		dT (K)	Max. dT (K)	
Supply cord		19	50	
Handle		20	60	
Internal wiring		55	155(T-25)	
Wood support		10	65	
Knob of lid (PK-G916, PK-G918)		27	60	
Knob of lid (PK-G916S)		30	35	
Ambient of thermal cut out (Strix U1709)		77	100(T-25)	
Ambient of temperature limiter (Strix R4803)		72	80(T-25)	
Knob of temperature limiter		21	60	
Indicator cover		35	--	
Enclosure of kettle		41	--	
Enclosure of stand		24	--	
Shrinkable tube		67	100(T-25)	
Insulation tube		160	175(T-25)	

11.Z101	TABLE: Heating test, thermocouples			P
	Test voltage (V).....:	240		—
	Ambient (°C).....:	23		—
Thermocouple locations		Dt (K)	Max. Dt (K)	Twice Max. Dt (K)
Plastic enclose(PK-G916, PK-G918)		37	60	120
Metal enclose(PK-G916S)		40	45	90

11.8	TABLE: Heating test, thermocouples PK-G928B			P
	Test voltage (V).....:	2530W, 255V		—

	Ambient (°C) .....	23°C	—
Thermocouple locations	dT (K)	Max. dT (K)	
Supply cord	21	50	
Handle	18	60	
Internal wiring	56	155(T-25)	
Wood support	14	65	
Knob of lid(PK-G928)	30	60	
Knob of lid(PK-G928B)	30	60	
Ambient of thermal cut out (Strix U1709)	76	100(T-25)	
Ambient of temperature limiter (Strix R4803)	73	80(T-25)	
Knob of temperature limiter	23	60	
Indicator cover	36	--	
Enclosure of kettle	40	--	
Enclosure of stand	25	--	
Shrinkable tube	67	100(T-25)	
Insulation tube	164	175(T-25)	

<b>11.Z101</b>	<b>TABLE: Heating test, thermocouples PK-G928B</b>		P
	Test voltage (V) .....	240	—
	Ambient (°C) .....	23	—
Thermocouple locations	Dt (K)	Max. Dt (K)	Twice Max. Dt (K)
Metal enclose(PK-G928, PK-G928B)	40	45	90

<b>11.8</b>	<b>TABLE: Heating test, thermocouples PK-G917</b>		P
	Test voltage (V).....	2530W, 255V	—
	Ambient (°C) .....	23°C	—
Thermocouple locations	dT (K)	Max. dT (K)	
Supply cord	21	50	
Handle	20	60	
Internal wiring	56	155(T-25)	
Wood support	14	65	
Knob of lid	30	60	
Ambient of thermal cut out (Strix U1521)	77	100(T-25)	
Ambient of temperature limiter (Strix R4803)	73	80(T-25)	
Ambient of thermal cut out (Fada )	76	100(T-25)	

Ambient of temperature limiter (Fada )	73	100(T-25)
Ambient of thermal cut out (Strix U1709)	77	100(T-25)
Ambient of temperature limiter (Strix R4803)	73	80(T-25)
Knob of temperature limiter	21	60
Indicator cover	34	--
Enclosure of kettle	40	--
Enclosure of stand	23	--
Shrinkable tube	67	100(T-25)
Insulation tube	162	175(T-25)

<b>11.Z101</b>	<b>TABLE: Heating test, thermocouples PK-G917</b>		P
	Test voltage (V) .....	240	—
	Ambient (°C) .....	23	—
Thermocouple locations	Dt (K)	Max. Dt (K)	Twice Max. Dt (K)
Metal enclose	39	45	90

<b>13.2</b>	<b>TABLE: Leakage current</b>		P
	Heating appliances: 1.15 x rated input (W) ..:	Refer to Cl.11.8	—
	Motor-operated and combined appliances: 1.06 x rated voltage (V) .....	N/A	—
<b>Leakage current between:</b>		<b>I (mA)</b>	<b>Max. allowed I (mA)</b>
L/N – Earthing metal parts		0,05(Max.)	0,75
L/N – non-earthing enclosure		0,01(Max.) peak	0,35 peak
L/N – knob/handle		0,01(Max.) peak	0,35 peak
Supplementary information:			

<b>13.3</b>	<b>TABLE: Dielectric strength</b>		P
<b>Test voltage applied between:</b>		<b>Test potential applied (V)</b>	<b>Breakdown / flashover (Yes/No)</b>
Parts isolated with basic insulation		1000	No
Parts isolated with supplementary insulation		1750	No
Parts isolated with reinforced insulation		3000	No
Supplementary information:			

<b>16.2</b>	<b>TABLE: Leakage current</b>		<b>P</b>
	<b>Single phase appliances: 1.06 x rated voltage (V).....:</b>	254,4V	—
	<b>Three phase appliances 1.06 x rated voltage divided by <math>\sqrt{3}</math> (V).....:</b>	N/A	—
<b>Leakage current between:</b>		<b>I (mA)</b>	<b>Max. allowed I (mA)</b>
Live parts – Earthing metal parts		0,08 (Max.)	<b>0,75</b>
Live parts – non-earthing enclosure		0,02 (Max.)	<b>0,25</b>
Live parts – Knob/handle		0,02 (Max.)	<b>0,25</b>
Supplementary information:			

<b>16.3</b>	<b>TABLE: Dielectric strength</b>		<b>P</b>
<b>Test voltage applied between:</b>		<b>Test potential applied (V)</b>	<b>Breakdown / flashover (Yes/No)</b>
Parts isolated with basic insulation		1250	No
Parts isolated with supplementary insulation		1750	No
Parts isolated with reinforced insulation		3000	No
Supplementary information:			

<b>19</b>	<b>Abnormal operation conditions</b>						<b>P</b>
<b>Operational characteristics</b>		<b>YES/NO</b>	<b>Operational conditions</b>				
<b>Are there electronic circuits to control the appliance operation?</b>		Yes	Power input: 240V				
<b>Are there “off” or “stand-by” position?</b>		NO	N/A				
<b>The unintended operation of the appliance results in dangerous malfunction?</b>		NO	N/A				
<b>Sub-clause</b>	<b>Operating conditions description</b>	<b>Test results description</b>	<b>PEC description</b>	<b>EMP 19.11.4</b>	<b>Software type required</b>	<b>19.11.3 PEC</b>	<b>Final result</b>
<b>19.2</b>	N.A	N.A	N.A	N.A	N.A	N.A	N.A
<b>19.3</b>	1,15 times rated power input	no hazards	N.A	N.A	N.A	N.A	P
<b>19.4</b>	Temperature limiter short-circuited, 1,15 times rated power input	no hazards	N.A	N.A	N.A	N.A	P

19.5	Test of 19.4 repeated, one end of the element connected to the elements sheath	no hazards	N.A	N.A	N.A	N.A	P
19.6	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.7	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.8	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.9	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.10	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.11.2	Rated Voltage	Refer the relevant clause	N/A	N/A	N/A	N/A	P
19.11.4.8	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.101	Thermal cut-out short-circuited in turn, 1,15 times rated power input	no hazards	N/A	N/A	N/A	N/A	P
19.102	Refer to Cl.19.102	no hazards	N/A	N/A	N/A	N/A	P

Supplementary information:

19.13	<b>TABLE: Abnormal operation, temperature rises PK-G918</b>					P
Thermocouple locations	Max. temperature rise measured, dT (K)				Max.temperature rise limit, dT (K)	
	Cl.19.3		Cl.19.4	Cl.19.101/ Cl.19.102		
	Empty	With water				
Wooden support	15	18	66	26	150	
Supply cord	23	25	70	34	150	
Enclosure of kettle	36	44	--	46	—	
Enclosure of stand	23	29	--	40	—	
Indicator cover	33	38	--	39	—	
Remark: All models thermal controls are tested and the most unfavourable value recorded.						

19.13	<b>TABLE: Abnormal operation, temperature rises PK-G928B</b>					P
Thermocouple locations	Max. temperature rise measured, dT (K)				Max.temperature rise limit, dT (K)	

	Cl.19.3		Cl.19.4	Cl.19.101/ Cl.19.102	
	Empty	With water			
Wooden support	15	22	65	27	150
Supply cord	22	31	71	35	150
Enclosure of kettle	39	47	--	48	—
Enclosure of stand	29	32	--	43	—
Indicator cover	35	41	--	44	—

Remark: All models thermal controls are tested and the most unfavourable value recorded.

19.13	TABLE: Abnormal operation, temperature rises PK-G917					P
Thermocouple locations	Max. temperature rise measured, dT (K)				Max.temperature rise limit, dT (K)	
	Cl.19.3		Cl.19.4	Cl.19.101/ Cl.19.102		
	Empty	With water				
Wooden support	15	22	66	27	150	
Supply cord	22	30	70	35	150	
Enclosure of kettle	39	46	--	47	—	
Enclosure of stand	29	31	--	42	—	
Indicator cover	34	41	--	43	—	

Remark: All models thermal controls are tested and the most unfavourable value recorded.

24.1	TABLE: Critical components information					P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity	
Thermal control	Strix Limited	U1709	100-240V~, 13A, T125, Tf120, 3000 cycles	EN 60730-1 EN 60730-2-9 EN 60335-2-15	BEAB*/ C1208 +test with appliance	
Cordless connector system		P72C4	100-240V~, 13A, Class I	EN 60320-1 EN 60320-2-4 EN 60335-2-15	BEAB*/ 20285+ Test with appliance	
Temperature limiter		R4803	100-240V~, 13A, T105, Tf80, 1E4 Cycles	EN 60730-1 EN 60730-2-9 EN 60335-2-15	BEAB*/ 20020+Test with appliance	

All above listed components are new added, others refer to CDF for detail

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

Earthing screw	2,9	II	0,5
Supplementary information:			

<b>29.1</b>	<b>TABLE: Clearances</b>						<b>P</b>
	Overvoltage category .....: II					—	
		<b>Type of insulation:</b>					
<b>Rated impulse voltage (V):</b>	<b>Min. cl (mm)</b>	<b>Basic (mm)</b>	<b>Supplementary (mm)</b>	<b>Reinforced (mm)</b>	<b>Functional (mm)</b>	<b>Verdict / Remark</b>	
330	0,2* / 0,5 / 0,8**	-	-	-	-	N/A	
500	0,2* / 0,5 / 0,8**	-	-	-	-	N/A	
800	0,2* / 0,5 / 0,8**	-	-	-	-	N/A	
1 500	0,5 / 0,8** / 1,0***	-	-	-	-	N/A	
2 500	<u>1,5 / 2,0***</u>	X	X	-	X	P	
4 000	<u>3,0 / 3,5***</u>	-	-	X	-	P	
6 000	5,5 / 6,0***	-	-	-	-	N/A	
8 000	8,0 / 8,5***	-	-	-	-	N/A	
10 000	11,0 / 11,5***	-	-	-	-	N/A	
Supplementary information:							
*) For tracks on printed circuit boards if pollution degree 1 and 2							
**) For pollution degree 3							
***) If the construction is affected by wear, distortion, movement of the parts or during assembly							

<b>29.2</b>	<b>TABLE: Creepage distances, basic, supplementary and reinforced insulation</b>										<b>P</b>
<b>Working voltage (V):</b>	<b>Creepage distance (mm)</b>										
	<b>Pollution degree</b>										
	<b>1</b>	<b>2</b>			<b>3</b>			<b>Type of insulation</b>			
		<b>Material group</b>			<b>Material group</b>						
		<b>I</b>	<b>II</b>	<b>IIIa/IIIb</b>	<b>I</b>	<b>II</b>	<b>IIIa/IIIb*</b>	<b>B**</b>	<b>S**</b>	<b>R**</b>	<b>Verdict</b>
≤50	0,18	0,6	0,85	1,2	1,5	1,7	1,9		—	—	N/A
≤50	0,18	0,6	0,85	1,2	1,5	1,7	1,9	—		—	N/A
≤50	0,36	1,2	1,7	2,4	3,0	3,4	3,8	—	—		N/A
125	0,28	0,75	1,05	1,5	1,9	2,1	2,4		—	—	N/A
125	0,28	0,75	1,05	1,5	1,9	2,1	2,4	—		—	N/A
125	0,56	1,5	2,1	3,0	3,8	4,2	4,8	—	—		N/A
250	<u>0,56</u>	1,25	1,8	<u>2,5</u>	3,2	3,6	<u>4,0</u>	X	—	—	P

250	0,56	1,25	1,8	<b>2,5</b>	3,2	3,6	<b>4,0</b>	—	X	—	P
250	1,12	2,5	3,6	<b>5,0</b>	6,4	7,2	<b>8,0</b>	—	—	X	P
400	1,0	2,0	2,8	4,0	5,0	5,6	6,3		—	—	N/A
400	1,0	2,0	2,8	4,0	5,0	5,6	6,3	—		—	N/A
400	2,0	4,0	5,6	8,0	10,0	11,2	12,6	—	—		N/A
500	1,3	2,5	3,6	5,0	6,3	7,1	8,0		—	—	N/A
500	1,3	2,5	3,6	5,0	6,3	7,1	8,0	—		—	N/A
500	2,6	5,0	7,2	10,0	12,6	14,2	16,0	—	—		N/A
>630 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0		—	—	N/A
>630 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	—		—	N/A
>630 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
>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

Supplementary information:

\*) Material group IIIb is allowed if the working voltage does not exceed 50 V

\*\*) B = Basic insulation, S = Supplementary insulation, R = Reinforced insulation

29.2	TABLE: Creepage distances, functional insulation							P
Working voltage (V):	Creepage distance (mm) Pollution degree							Verdict / Remark
	1	2			3			
	Material group			Material group				
	I	II	IIIa/IIIb	I	II	IIIa/IIIb*		
≤10	0,08	0,4	0,4	0,4	1,0	1,0	1,0	N/A
50	0,16	0,56	0,8	1,1	1,4	1,6	1,8	N/A
125	0,25	0,71	1,0	1,4	1,8	2,0	2,2	N/A
250	0,42	1,0	1,4	<b>2,0</b>	2,5	2,8	<b>3,2</b>	P
400	0,75	1,6	2,2	3,2	4,0	4,5	5,0	N/A
500	1,0	2,0	2,8	4,0	5,0	5,6	6,3	N/A
>630 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
>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
Supplementary information:								
*) Material group IIIb is allowed if the working voltage does not exceed 50 V								

Photo 1.

Description: Overall view of PK-G917



Photo 2.

Description: Overall view of PK-G917



Photo 3.

Description: Overall view of PK-G917



Photo 4.

Description: Top view of PK-G917



Photo 5.

Description: Over view of PK-G917



Photo 6.

Description: Bottom view of PK-G917



Photo 7.

Description: Lid open view of PK-G917



Photo 8.

Description: Water level view of PK-G917



Photo 9.

Description: Temperature limiter knob view of PK-G917



Photo 10.

Description: Internal view of PK-G917



Photo 11.

Description: Internal view of PK-G917



Photo 12.

Description: Internal view of PK-G917



Photo 13.

Description: Internal view of PK-G917



Photo 14.

Description: base view of PK-G917



Photo 15.

Description: Internal view of base view of PK-G917



Photo 16.

Description: Indicator view of PK-G917



Photo 17.

Description: Earthing terminal view of PK-G917



Photo 18.

Description: Earthing terminal view of PK-G917



Photo 19.

Description: Temperature limiter, thermal control and Cordless connector system (R4803, U1709 and P72C4 of Strix Limited)



Photo 20.

Description: Temperature limiter, thermal control and Cordless connector (R4803, U1709 and P72C4 of Strix Limited)

