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TEST REPORT
IEC 60335-2-15
Safety of household and similar electrical appliances
Part 2: Particular requirements for appliances for heating liquids

Report Number. .....:	180501969SHA-001
Date of issue.....:	2018-08-10; Amendment 2: 2019-04-02
Total number of pages.....:	57 pages of test report (Including 10 pages of photographs)
Name of Testing Laboratory preparing the Report.....:	Intertek Testing Shanghai Limited
Applicant's name .....:	Ningbo Symay Electrical Appliances Enterprise Co., Ltd.
Address.....:	18.Yantanghe Road, Daqi Sub-district, Beilun District, 315000 Ningbo, Zhejiang, P. R. China
Test specification:	
Standard.....:	IEC 60335-2-15:2012, AMD1:2016 for use in conjunction with IEC 60335-1:2010, AMD1:2013, AMD2:2016 EN 60335-2-15:2016 + A11:2018 used in conjunction with EN 60335-1:2012 + AC:2014 + A11:2014 + A13:2017 EN 62233:2008
Test procedure .....:	--
Non-standard test method .....:	N/A
Test Report Form No. .....:	IEC60335_2_15O
Test Report Form(s) Originator ....:	IMQ S.p.A.
Master TRF.....:	Dated 2017-09

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.

General disclaimer:

The test results presented in this report relate only to the object tested.
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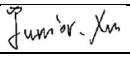
Test item description..... :	Coffee Maker
Trade Mark..... :	--
Manufacturer..... :	Same as applicant
Model/Type reference..... :	CM-101*(*=A or S), CM-102A, CM-105*(*=A, B, EA or EA1), CM-106*(*=A or S), CM-107*(*=A, B, BS or EA), CM-108*(*=blank, A, E, S, T, AT, ET or TS), CM-109*(*=blank, A, B, E, S, T, AT, BT, ES, ET, TS or ETS), CM-111*(*=-1 or A-1), CM-112*(*=blank, -1, A, B or A-1), CM-113, CM-116, CM-118*(*=A or A-1), CM-119*(*=blank or A), CM-121*(*=A, E, AT or ET), CM-122*(*=A, E, AT or ET), CM-123*(*=A or S), CM-125A, CM-126*(*=T or TA), CM-127*(*=E or ET), BV1500TS-*(*=CEV, CEB, SAA, SA or 01)
Ratings..... :	220-240V~, 50-60Hz, Class I CM-113: 420-500W; CM-101*(*=A or S), CM-102A, CM-106*(*=A or S): 550-650W; CM-111*(*=-1 or A-1), CM-112*(*=blank, -1, A, B or A-1), CM-116, CM-118*(*=A or A-1), CM-119*(*=blank or A): 650-750W; CM-108*(*=blank, A, E, S, T, AT, ET or TS), CM-109*(*=blank, A, B, E, S, T, AT, BT, ES, ET, TS or ETS), CM-123*(*=A or S), CM-125A, 126*(*=T or TA): 800W; CM-121*(*=AT or ET), CM-122*(*=AT or ET), CM-127ET: 900W; CM-105*(*=A, B, EA or EA1), CM-107*(*=A, B, BS or EA), CM-121*(*=A or E), CM-122*(*=A or E), CM-127E: 950W; BV1500TS-*(*=CEV, CEB, SAA, SA or 01): 1100W.

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):

☒	**CB Testing Laboratory:**	Intertek Testing Shanghai Limited	
Testing location/ address .....:		Building No. 86, 1198 Qinzhou Road (North), Shanghai 200233, China	
Tested by (name, function, signature).....:		Junior Xu (Engineer)	
Approved by (name, function, signature) ..:		Gavin Fu (Supervisor)	
☐	**Testing procedure: CTF Stage 1:**	N/A	
Testing location/ address .....:		N/A	
Tested by (name, function, signature).....:		N/A	
Approved by (name, function, signature) ..:		N/A	
☐	**Testing procedure: CTF Stage 2:**	N/A	
Testing location/ address .....:		N/A	
Tested by (name, function, signature).....:		N/A	
Witnessed by (name, function, signature) .:		N/A	
Approved by (name, function, signature) ..:		N/A	
☐	**Testing procedure: CTF Stage 3:**	N/A	
☐	**Testing procedure: CTF Stage 4:**	N/A	
Testing location/ address .....:		N/A	
Tested by (name, function, signature).....:		N/A	
Witnessed by (name, function, signature) .:		N/A	
Approved by (name, function, signature) ..:		N/A	
Supervised by (name, function, signature) :		N/A	

List of Attachments (including a total number of pages in each attachment): Constructional Data Form (CDF): 15 pages
Summary of testing: From the result of our inspection and tests on the submitted samples, we conclude that they comply with the requirements of the standards.

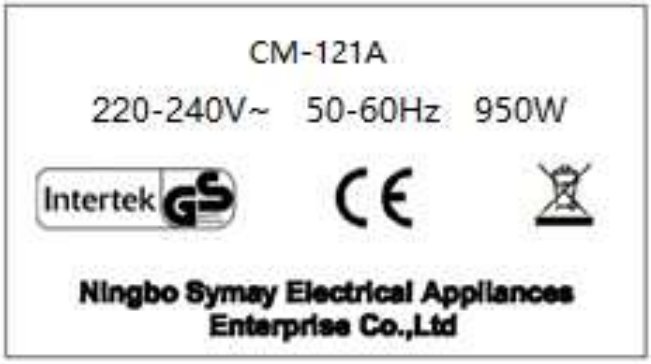
Tests performed (name of test and test clause): Refer to description for Amendment 2 (page 8) for details.	**Testing location:** Same as previous page.

Summary of compliance with National Differences (List of countries addressed):

National differences for Germany, U.K and Italy have been checked

☒ **The product fulfils the requirements of <u>EN 60335-2-15:2016+ A11:2018 used in conjunction with EN 60335-1:2012+AC:2014+A11:2014+A13:2017 and EN 62233:2008</u>**

Copy of marking plate(representative):



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.

Test item particulars:	
Classification of installation and use .....:	Portable and indoor use only
Supply Connection.....:	Type Y
.....:	
Possible test case verdicts:	
- test case does not apply to the test object.....:	N/A
- test object does meet the requirement .....:	P (Pass)
- test object does not meet the requirement.....:	F (Fail)
Testing:	
Date of receipt of test item .....:	2019-03-07
Date (s) of performance of tests.....:	2019-03-07 to 2019-04-01

General remarks:

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

Throughout this report a ☒ comma / ☐ point is used as the decimal separator.

The (EU) 2015/1143 has been considered, the appliance is intended to heat the water first and then brew the coffee powder, there is no overflow risk during normal operation.

The keep warm function evaluated according to Clause 19.106 of IEC 60335-2-15.

PAH test according to AfPS GS 2014:01 PAK is considered and passed, please refer to PAH test report 18501969SHA-001-PAH and 18501969SHA-001-PAH +A1 for detail.

No obvious or conspicuous PAK/PAH issues was observed.

This test report should be read in conjunction with the Construction Data Form (CDF).

Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty.

Manufacturer's Declaration per Sub-clause 4.2.5 of IECEE 02:	
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……:	☐ **Yes** ☒ **Not applicable**
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies) ..... :	Ningbo Symay Electrical Appliances Enterprise Co., Ltd. 18.Yantanghe Road, Daqi Sub-district, Beilun District, 315000 Ningbo, Zhejiang, P. R. China

General product information:

The products covered by this report are coffee makers, for household and indoor use, which incorporates temperature limiter and thermal link or self-resetting thermostat and thermal link.

Model summary:

Model	Rating (W)	Pot	Water level (Cup)	Switch	Metal decoration	keep warm plate
CM-101A	550-650	A	6	E		√
CM-101S	550-650	A	6	E	I	√
CM-102A	550-650	A	6	E		√
CM-105A	950	A	10	E	K	√
CM-105B	950	A	10	E		√
CM-105EA	950	A	10	G	K	√
CM-105EA1	950	A	10	G	J	√
CM-106A	550-650	A	5	E		√
CM-106S	550-650	A	5	E	I	√
CM-107A	950	A	15	E		√
CM-107B	950	A	15	E		√
CM-107BS	950	A	15	E	I	√
CM-107EA	950	A	15	G		√
CM-108	800	A	10	E	I	√
CM-108A	800	A	10	E	K	√
CM-108E	800	A	10	G	I	√
CM-108S	800	A	10	E	K	√
CM-108T	800	B	8	F	I	
CM-108AT	800	B	8	F	K	
CM-108ET	800	B	8	G	I	
CM-108TS	800	B	8	F	K	
CM-109	800	A	12	E		√
CM-109A	800	A	12	E	K	√
CM-109B	800	A	12	E	J	√
CM-109E	800	A	12	G		√
CM-109S	800	A	12	E	K	√
CM-109T	800	B	10	F		
CM-109AT	800	B	10	F	K	
CM-109BT	800	B	10	F	J	
CM-109ES	800	A	12	G	I	√
CM-109ET	800	B	10	G		
CM-109TS	800	B	10	F	K	
CM-109ETS	800	B	10	G	I	
CM-111-1	650-750	D	3,5	H	I	
CM-111A-1	650-750	D	3,5	H	I	
CM-112	650-750	D	3,5	H	K	
CM-112-1	650-750	D	3,5	H	K	
CM-112A	650-750	D	3,5	H	K	
CM-112B	650-750	D	3,5	E	K	
CM-112A-1	650-750	D	3,5	H	K	
CM-113	420-500	C	2,5	H	I	
CM-116	650-750	D	7	H		
CM-118A	650-750	C, D	3	E	I	
CM-118A-1	650-750	C, D	3	E	I	
CM-119	650-750	D	3,5	G	K	
CM-119A	650-750	D	3,5	G	K	
CM-121A	950	A	12	E	K	√
CM-121E	950	A	12	G	K	√
CM-121AT	900	B	10	E	K	

CM-121ET	900	B	10	G	K	
CM-122A	950	A	15	E	K	√
CM-122E	950	A	15	G	K	√
CM-122AT	900	B	10	E	K	
CM-122ET	900	B	10	G	K	
CM-123A	800	A	12	H		
CM-123S	800	A	12	H	I	
CM-125A	800	A	10	H	I	
CM-126T	800	B	8	H	I	
CM-126TA	800	B	8	H	I	
CM-127E	950	A	15	G	K	√
CM-127ET	900	B	10	G	K	
BV1500TS-*(*=CEV, CEB, SAA, SA or 01)	1100	B	5	L	K	

Remark: the letters represent as below:

A	Glass pot
B	Vacuum cup
C	Ceramic cup
D	Stainless steel insulated cup
E	Light touching electrical switch
F	Temperature limiter switch(on/off)
G	Electrical switch with LCD
H	Temperature limiter reset switch + power switch
I	The upper part is decorated with metal
J	The lower part is decorated with metal
K	Both upper and lower part is decorated with metal
L	Light touching mechanical switch
√	Yes
Blank	No
1 Cup	125mL

Some model characteristic as the following description:
CM-107A is same as CM-107B except for CM-107B is taller than CM-107A.
CM-108A is same as CM-108S except for the switch of CM-108A is on the side, CM-108S is on the front, same way as CM-109A and CM-109S.
CM-108AT is same as CM-108TS except for the metal decoration at the bottom of CM-108AT is a circle, CM-108S only around the switch.
CM-111-1 is same as CM-111A-1 except for the metal decoration of CM-111-1 is narrow than CM-111A-1, same way as CM-119 and CM-119A
CM-112 is same as CM-112A except for the metal decoration of CM-112 is narrow than CM-112A, same way as CM-112-1 and CM-112A-1; CM-112 is same as CM-112-1 except for shape of temperature limiter reset switch, same way as CM-112A and CM-112A-1.
CM-118A is same as CM-118A-1 except for power PCB.
CM-126T is same as CM-126TA except for the shape of the filter, CM-126T is square, CM-126TA is round.
BV1500TS-*(*=CEV, CEB, SAA, SA or 01), they are all the same except for the model name.

Tests are performed on all models, the CM-101S, CM-102A, CM-105A, CM-105EA, CM-106S, CM-107BS, CM-107EA, CM-108A, CM-108E, CM-108T, CM-109A, CM-109E, CM-109T, CM-111-1, CM-112B, CM-113, CM-116, CM-118, CM-119, CM-121A, CM-121E, CM-122A, CM-122E, CM-123S, CM-125A, CM-126T, CM-127E, BV1500TS-CEV which are selected as representative for the tests and other models were also tested while mentioned, finally only the most unfavourable results were recorded.

Amendment 2:

The original test report ref. No. 180501969SHA-001, dated on 2018-08-10, with amendment 1 dated on 2018-12-29, was modified on 2019-04-02 to include the following changes and additions:

1. Standard update from “EN 60335-2-15:2016” to “EN 60335-2-15:2016 + A11:2018”.
2. Add five models: BV1500TS-*(*=CEV, CEB, SAA, SA or 01). They are all the same except for the model name.
3. Update table 24.1 and PAH report.

After review, BV1500TS-CEV as representative model subjected to do relevant tests.
Clause 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.29, Annex EMF and new added standard. Other clauses which not mentioned in the report were referred to original test report.
Table concerned: Table 10.1, 11.8, 11. Z101, 13.2, 13.3, 16.2, 16.3, 19, 19.13, 21.1, 24.1, 29.1, 29.2.
The temperature of Cl.30 was not higher than the original report.

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict

7	**MARKING AND INSTRUCTIONS**		
7.1	Rated voltage or voltage range (V) .... :	220-240	P
	Symbol for nature of supply, or .... :	~	P
	Rated frequency (Hz) .... :	50-60	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 (2003-02), for class III appliances, unless		N/A
	the appliance is operated by batteries only, or		N/A
	for appliances powered by rechargeable batteries recharged in the appliance		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, and (IEC 60335-2-15)		N/A
	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, unless (IEC 60335-2-15)		N/A
	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)		N/A
	Reference to the level mark on the outside of the kettle, if the level is not self-evident (IEC 60335-2-15)		N/A
	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)		N/A
	Soy milk makers: level mark or other means to indicate when they are filled to rated capacity, unless (IEC 60335-2-15)		N/A
	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, 50-60Hz	P
	Different rated values marked with the values separated by an oblique stroke		N/A
7.5	Appliances with more than one rated voltage or one or more rated voltage ranges, marked with rated input or rated current for each rated voltage or range, unless		P
	the power input or current are related to the arithmetic mean value of the rated voltage range	Except for below	P
	Relation between marking for upper and lower limits of rated power input or rated current and voltage is clear	For CM-113, CM-101*(*=A or S), CM-102A, CM-106*(*=A or S), CM-111*(*=-1 or A-1), CM-112*(*=blank, -1, A, B or A-1), CM-116, CM-118*(*=A or A-1), CM-119*(*=blank or A)	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
7.10	Indications of switches on stationary appliances and controls on all appliances by use of figures, letters or other visual means .... :		P
	This applies also to switches which are part of a control		P

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	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 EN60335-2-15:2016	N/A
	- children being supervised not to play with the appliance	Replaced by of EN60335-2-15:2016	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)		
	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
	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

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	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)		P
	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		N/A
	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)		N/A
	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)		
	- 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

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	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;		P
	- details on how to clean the surfaces in contact with food;		P
	- a warning of potential injury from misuse;		P
	- a statement that the heating element surface is subject to residual heat after use		P
	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
	The instructions for coffee-makers other than built-in coffee-makers or those tested in a cabinet, shall state that the coffee-maker shall not be placed in a cabinet when in use (IEC 60335-2-15, AMD1)		N/A

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	For coffee-makers having an additional decorative door, and for coffee-makers intended to be used in a cabinet, the instructions shall state that the coffee-maker must be operated with the decorative door open or the cabinet door open (IEC 60335-2-15, AMD1)		N/A
	The instructions for coffee-makers having surfaces of glass, ceramic or similar material that forms part of the enclosure of live parts shall include the substance of the following: (IEC 60335-2-15, AMD1)		
	WARNING: Do not use the appliance if the surface is cracked		N/A
	The instructions for coffee-makers shall state that cleaning and user maintenance shall not be made by children without supervision (IEC 60335-2-15, AMD1)		N/A
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
	Signal words WARNING, CAUTION, DANGER in uppercase having a height as specified .... :		P
	Uppercase letter of the text explaining the signal word not smaller than 1,6 mm		P
	Moulded in, engraved, or stamped markings either raised above or have a depth below the surface of at least 0,25 mm, unless		P
	contrasting colours are used		P
	Markings checked by inspection, measurement and 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

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	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	**PROTECTION AGAINST ACCESS TO LIVE PARTS**		
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 20 N: no contact with live parts		P
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

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	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		P
	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless	For CM-113, CM-101*(*=A or S), CM-102A, CM-106*(*=A or S), CM-111*(*=-1 or A-1), CM-112*(*=blank, -1, A, B or A-1), CM-116, CM-118*(*=A or A-1), CM-119*(*=blank or A)	P
	the rated power input is related to the arithmetic mean value	Except for above models	P
	The power input of automatic coffee-makers is measured during one operating cycle that is selectable by the user, such as cleaning, descaling, or selecting a beverage. The measurement starts with the appliance at room ambient temperature (IEC 60335-2-15, AMD1)		N/A
	The operating cycle starts with the activation by the user and ends when the appliance stops the cycle automatically and the next operating cycle can be started by the user (IEC 60335-2-15, AMD1)		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
	Coffee-makers with a decorative door or intended to be used in a cabinet shall be tested with the door open (IEC 60335-2-15, AMD1)		N/A
11.3	Temperature rises, other than of windings, determined by thermocouples		P
	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

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	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
	Appliances with electronic power controls are operated as combined appliances (IEC 60335-2-15, AMD1)		N/A
11.7	Appliances operated for the duration specified in 11.7.101 to 11.7.106 (IEC 60335-2-15)		P
11.7.104	For espresso coffee-makers, the brewing period is followed by a rest period of 1 min or the period stated in the instructions, if this is longer. The water container is refilled during the rest periods (IEC 60335-2-15, AMD1)		N/A
	For automatic espresso coffee makers and espresso coffee makers, the brewing period is the time necessary to produce the maximum quantity of coffee allowed by the timer or by the capacity of the coffee pot		N/A
	For manual espresso coffee makers, maximum quantity of coffee to be produced specified in the instructions, or		N/A
	the brewing period is the time necessary to produce 100 ml of coffee for each cycle		N/A
	For espresso coffee-makers having an outlet for supplying steam or hot water, the brewing period is immediately followed by a period during which the steam or water is supplied for the time stated in the instructions, or		N/A
	- for espresso coffee makers having an outlet for supplying steam, 1 min;		N/A
	- for espresso coffee makers having an outlet for supplying water, the time necessary to produce 100 ml of water		N/A
	- for espresso coffee-makers having an outlet for supplying steam and an outlet for supplying hot water, 1 min period supplying steam is followed by time necessary to produce 100 ml of water (IEC 60335-2-15, AMD1)		N/A
	Espresso coffee-makers operated until steady conditions are established		N/A
	Other coffee-makers operated for the time necessary to make the maximum quantity of coffee stated in the instructions		P

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	The container refilled as quickly as possible and the coffee-maker operated again until steady conditions are established		P
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
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	The leakage current is measured by means of the circuit described in Figure 4 of IEC 60990:1999	Class II construction	P
	For class 0I appliances and class I appliances, except parts of class II construction, C may be replaced by a low impedance ammeter	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

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict

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	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
	Detachable parts are removed		P
	Overfilling test with additional amount of the solution, over a period of 1 min (l)..... :	0,25l except for below, 0,28l for CM-107A, CM-107B, CM-107BS, CM-107EA, CM-122A, CM-122E, CM-127ET	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
	The test is only carried out with the appliance connector in position (IEC 60335-2-15)		P
	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
	Kettles that can be filled through the spout: additional overfilling test in conditions as specified (IEC 60335-2-15)		N/A
	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)		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)		N/A
	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
	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
	Coffee-makers dispensing liquid into a serving container, such as a cup or jug, are tested by steadily pouring 0,5 l of the solution over the surface where the container is filled or the container is transported and removed by the user. If a drop container is placed beneath this surface, the drop container is completely filled before the test is carried out (IEC 60335-2-15, AMD1)		P
	Coffee-makers having external surfaces on which it is possible to place a vessel, such as a cup or jug, are tested by pouring 0,2 l of the solution over the complete depositing area in approximately 5 s (IEC 60335-2-15, AMD1)		P
	For coffee makers, after each overfilling test or application of liquid, all residues are then removed and the appliance is dried (IEC 60335-2-15, AMD1)		P
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		P
	Humidity test for 48 h in a humidity cabinet	93%RH, 23℃	P
	Reassembly of those parts that may have been removed		P
	The appliance withstands the tests of Clause 16		P
16	**LEAKAGE CURRENT AND ELECTRIC STRENGTH**		
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 √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

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Clause	Requirement + Test	Result - Remark	Verdict
	- 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 ..... :	Except for CM-108T, CM-108AT, CM-108TS, CM-109T, CM-109AT, CM-109BT, CM-109TS, CM-111-1, CM-111A-1, CM-112, CM-112-1, CM-112A, CM-112A-1, CM-113, CM-116, CM-123A, CM-123S, CM-125A, CM-126T, CM-126TA	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
	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	Except for CM-108T, CM-108AT, CM-108TS, CM-109T, CM-109AT, CM-109BT, CM-109TS, CM-111-1, CM-111A-1, CM-112, CM-112-1, CM-112A, CM-112A-1, CM-113, CM-116, CM-123A, CM-123S, CM-125A, CM-126T, CM-126TA	P
	Appliances incorporating contactors or relays subjected to the test of 19.14, being carried out before the tests of 19.11		P
	Appliances incorporating voltage selector switches subjected to the test of 19.15		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	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		P
	Kettles are not subjected to the test of 19.2 (IEC 60335-2-15)		N/A
	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)		N/A
	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)		N/A
	For appliances with an external surface providing a keep warm function, the test of 19.106 applies (IEC 60335-2-15, AMD1)		P
	For coffee-makers having a decorative door, the test of 19.107 applies (IEC 60335-2-15, AMD1)		N/A
	For automatic coffee-makers of the coffee bean type, the tests of 19.108 applies (IEC 60335-2-15, AMD1)		N/A
19.2	Test of appliances with heating elements with restricted heat dissipation; test voltage (V), power input of 0,85 times rated power input (W) ..... :	(see appended table)	P
	Appliances are placed as near as possible to the walls of the test corner (IEC 60335-2-15)		P
	They are tested empty with lids open or closed whichever is the more unfavourable (IEC 60335-2-15)		P
	Induction rice cookers operating under the conditions of Clause 11 with the rice container empty (IEC 60335-2-15)		N/A
19.3	Test of 19.2 repeated; test voltage (V), power input of 1,24 times rated power input (W) ..... :	(see appended table)	P
	Kettles are operated empty at 1,15 times rated power input (IEC 60335-2-15)		N/A
	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)		N/A

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
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
	- 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	Electronic circuits, compliance checked by evaluation of the fault conditions specified in 19.11.2 for all circuits or parts of circuits, unless	Except for CM-108T, CM-108AT, CM-108TS, CM-109T, CM-109AT, CM-109BT, CM-109TS, CM-111-1, CM-111A-1, CM-112, CM-112-1, CM-112A, CM-112A-1, CM-113, CM-116, CM-123A, CM-123S, CM-125A, CM-126T, CM-126TA	P
	they comply with the conditions specified in 19.11.1		N/A
	Appliances incorporating an electronic circuit that relies upon a programmable component to function correctly, subjected to the test of 19.11.4.8, unless		N/A
	restarting does not result in a hazard		N/A
	Appliances having a device with an off position obtained by electronic disconnection, or a device placing the appliance in a stand-by mode, subjected to the tests of 19.11.4	According to OSM decision, no possible unsafe operate for this appliance, so Cl19.11.4 was not conducted.	P
	If the safety of the appliance under any of the fault conditions depends on the operation of a miniature fuse-link complying with IEC 60127, the test of 19.12 is carried out		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	During and after each test the following is checked:		
	- the temperature of the windings do not exceed the values specified in Table 8		N/A
	- the appliance complies with the conditions specified in 19.13		P
	- any current flowing through protective impedance not exceeding the limits specified in 8.1.4		N/A
	If a conductor of a printed board becomes open-circuited, the appliance is considered to have withstood the particular test, provided both of the following conditions are met:		
	- the base material of the printed circuit board withstands the test of Annex E		N/A
	- any loosened conductor does not reduce clearance or creepage distances between live parts and accessible metal parts below the values specified in Clause 29		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	No fire and no hazard.	P
	b) open circuit at the terminals of any component	For BV1500TS-*: D4-D6: the appliance didn't work; C1, EC3, EC4: the appliance can normal work; No hazard.	P
	c) short circuit of capacitors, unless	For BV1500TS-*: C1, EC3, EC4: appliance didn't work, no hazard	P
	they comply with IEC 60384-14		P
	d) short circuit of any two terminals of an electronic component, other than integrated circuits	For BV1500TS-*: D4-D6: the appliance didn't work, no hazard	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	No fire and no hazard.	P
	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
	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

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	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
19.14	Appliances operated under the conditions of Clause 11, any contactor or relay contact operating under the conditions of Clause 11 being short-circuited		P
	For a relay or contactor with more than one contact, all contacts are short-circuited at the same time		N/A
	A relay or contactor operating only to ensure the appliance is energized for normal use is not short-circuited		N/A
	If more than one relay or contactor operates in Clause 11, they are short-circuited in turn		N/A
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
	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

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Clause	Requirement + Test	Result - Remark	Verdict
	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
22.5	No risk of electric shock when touching pins, for appliances having a capacitor with rated capacitance equal to or greater than 0,1µF, the appliance being disconnected from the supply at the instant of voltage peak	Replaced by of EN60335-1 EN 60335 1:2012	P
	Voltage not exceeding 34 V (V)..... :	Max.: <10V	P
	If compliance relies on the operation of an electronic circuit, the electromagnetic phenomena tests of 19.11.4.3 and 19.11.4.4 are applied		N/A
	The discharge test is then repeated three times, voltage not exceeding 34 V (V) ..... :		N/A
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 mm² in area with a width of at least 3 mm (IEC 60335-2-15)	5,5mm in diameter	P
22.7	Adequate safeguards against the risk of excessive pressure in appliances containing liquid or gases or having steam-producing devices	Its spout is open to atmosphere	P
	Additional test for espresso coffee-maker: (IEC 60335-2-15, AMD1)		
	Appliance operated with coffee filter blocked and outlet closed. The maximum pressure attained is measured, then the appliance is subjected to twice the measure pressure for 5 min		N/A
	No rupture, no leakage other than through a self-resetting pressure-relief device or intentionally weak part		N/A

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	If a self-resetting pressure relief device operates, the appliance shall be suitable for further use		N/A
	Maximum pressure test with pressure limiting devices made ineffective		N/A
	No explosion nor emission of dangerous jets of steam		N/A
	Last test repeated in case of rupture of an intentionally weak part: the appliance shall be terminated in the same mode		N/A
	All pressure regulating devices and all protective devices and intentionally weak parts are rendered inoperative and the lid is closed		N/A
	For pressure cookers, other than dynamic pressure cookers, the pressure is gradually increased hydraulically to two times the operating pressure of the protective device during the test of 19.4		N/A
	Dynamic pressure cookers: the pressure is gradually increased hydraulically to 50 kPa in excess of the operating pressure of the protective device or intentionally weak part during the test of 19.4		N/A
	No rupture of container		N/A
22.8	Electrical connections not subject to pulling during cleaning of compartments to which access can be gained without the aid of a tool, and that are likely to be cleaned in normal use		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
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, if loosening result in a hazard		P

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	Removing or fixing in wrong position of handles, knobs etc. indicating position of switches or similar components not possible, if resulting in a hazard		P
	A choking hazard does not apply to appliances for commercial use		P
	Axial force 15 N applied to parts, the shape being so that an axial pull is unlikely to be applied	Switch	P
	Axial force 30 N applied to parts, the shape being so that an axial pull is likely to be applied		N/A
	If the part is removed and can be contained within the small parts cylinder, it is considered to be a choking hazard		N/A
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
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

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
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
	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

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
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
22.38	Capacitors not connected between the contacts of a thermal cut-out		P
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
22.114	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
	Compliance is checked by inspection		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

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	Wiring effectively prevented from coming into contact with moving parts		N/A
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	**COMPONENTS**		
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		N/A
	Relays tested as part of the appliance, or		N/A
	alternatively according 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
	Lamp holders and starter holders 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		N/A
24.1.1	Capacitors likely to be permanently subjected to the supply voltage and used for radio interference suppression or for voltage dividing, comply with IEC 60384-14		P
	If the capacitors have to be tested, they are tested according to Annex F		N/A
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	Certified component	P
	- temperature limiters: 1000		N/A

IEC 60335-2-15				
Clause	Requirement + Test		Result - Remark	Verdict
	- self-resetting thermal cut-outs:	300		N/A
	- voltage maintained non-self-resetting thermal cut-outs:	1000		N/A
	- other non-self-resetting thermal cut-outs:	30		N/A
	- timers:	3000		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 Sub-clause 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 3000 cycles of operation (IEC 60335-2-15)			N/A
24.1.5	Appliance couplers comply with IEC 60320-1			N/A
	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
24.1.8	The relevant standard for thermal links is IEC 60691	Certified component	P
	Thermal links not complying with IEC 60691 are considered to be an intentionally weak part for the purposes of Clause 19		N/A
24.1.9	Contactors and relays, other than motor starting relays, tested as part of the appliance		P
	They are also tested in accordance with Clause 17 of IEC 60730-1, the number of cycles of operations in 24.1.4 selected according to the contactor or relay function in the appliance..... :	Certified component	P
24.2	Appliances not fitted with:		
	- switches, automatic controls or power supplies 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 melding point of at least 230 °C		P
24.101	Devices incorporated in appliance, other than kettles, in order to comply with 19.4 are non-self-resetting (IEC 60335-2-15)	Thermal link	P
	However, self-resetting thermal cut-outs are allowed for fixed water boilers, if they have been tested for 10 000 cycles of operation		N/A
	Compliance is checked by inspection and during the test of 19.4		P
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

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Clause	Requirement + Test	Result - Remark	Verdict
	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
	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		
	• light polyvinyl chloride sheathed cord (60227 IEC 52), for appliances not exceeding 3 kg;	H03VV-F	P
	• ordinary polyvinyl chloride sheathed cord (60227 IEC 53), for other appliances	H05VV-F	P
	- heat resistant polyvinyl chloride sheathed. Not used for type X attachment other than specially prepared cords		
	• heat-resistant light polyvinyl chloride sheathed cord (60227 IEC 56), for appliances not exceeding 3 kg;		N/A
	• heat-resistant polyvinyl chloride sheathed cord (60227 IEC 57), for other appliances		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- halogen-free, low smoke, thermoplastic insulated and sheathed		
	• Light duty halogen-free low smoke flexible cable (62821 IEC 101) for circular cable and (62821 IEC 101f) for flat cable		N/A
	• Ordinary duty halogen-free low smoke flexible cable (62821 IEC 102) for circular cable and (62821 IEC 102f) for flat cable		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 (mm²) ..... :		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 mm², if the length is less than 2 m (IEC 60335-2-15)	Rated current <6A, 0,75 mm²	P
25.9	Supply cords not in contact with sharp points or edges		P
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
	Where additional neutral conductors are provided in the supply cord:		
	– other colours may be used for these additional neutral conductors;		N/A
	– all of the neutral conductors and line conductors are identified by marking using the alpha numeric notation specified in IEC 60445		N/A
	– the supply cord is fitted to the appliance		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		P
25.12	Insulation of the supply cord not damaged when moulding the cord to part of the enclosure		P
25.13	Inlet openings so constructed as to prevent damage to the supply cord	The enclosure is of insulating material	P

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Clause	Requirement + Test	Result - Remark	Verdict
	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
	Cord not damaged and max. 2 mm displacement of the cord	Max. 0,9mm	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
	constructed so that the cord can only be fitted with the aid of a tool		P
25.19	Type X attachment, glands not used as cord anchorage in portable appliances		N/A
	Tying the cord into a knot or tying the cord with string not used		N/A
25.20	The conductors of the supply cord for type Y and Z attachment insulated from accessible metal parts	Type Y	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

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict
	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
27.5	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

EMF	**ANNEX EN 60233 ELECTROMAGNETICS FIELDS**		
	The tested product also complies with the requirements of EN 62233:2008		
	Limit ……100 %	Measured max. :<10% Refer to EMF report number: 180501969SHA-EMF01+A1	P

EN 60335-2-15:2016/A11:2018			
7.1	Addition: Pot coffee-makers shall have a level mark to indicate when they are filled to rated capacity. This indication shall be visible when the pot coffee-maker is in the filling position.		N/A
7.12	Addition: Instructions for pot coffee-makers shall contain the substance of the following: CAUTION: Never fill the pot coffee-maker above the maximum level since hot foaming coffee or other liquids (e.g. milk) might overflow during heating.		N/A
11	Add “pot coffee-makers” in the first sentence of 11.Z101.		N/A
22.Z101	For pot coffee-maker the operation shall not give a spillage of foaming coffee in normal use.		N/A

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict

10.1	TABLE: Power input deviation				P
Input deviation of/at:	**P rated (W)**	**P measured (W)**	**ΔP (W, %)**	**Required ΔP (W, %)**	**Remark**
BV1500TS-CEV	1100	1076	-2,2%	-10%~+5%	Supplied at 230V

11.8	TABLE: Heating test, thermocouples for BV1500TS-CEV		P
	Test voltage (V).....:	260V/1377W	—
	Ambient (°C).....:	23	—
Thermocouple locations		**Max. temperature rise measured, ΔT (K)**	**Max. temperature rise limit, ΔT (K)**
Supply cord		39	50
PCB		17	105(T-25)
relay		56	60(T-25)
X2 capacitor		53	75(T-25)
Ambient of thermostat		112	155(T-25)
Mounting surface of thermostat		147	For reference
Insulation of thermal link		95	175(T-25)
Enclosure		59	--
Water tube		69	--
Internal wire		115	175(T-25)
Heating element support		89	--
PCB support		53	--
Wire connector		24	80(T-25)
Ambient of switch		17	65(T-25)
Switch button		9	60
Handle of pot		32	60
Wooden support		5	65

11.Z101	TABLE Z101: Heating test, thermocouples for BV1500TS-CEV		P
	Test voltage (V) ..... :	240V	—
	Ambient (°C)..... :	23	—
Surface		**Max. temperature rise measured, ΔT (K)**	**Max. temperature rise limit, ΔT (K)**
Bare metal		37	45

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict

Coated metal	-	55
Glass and ceramic	-	60
Plastic and plastic coating >0,3 mm	43	65

13.2	**TABLE: Leakage current**		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	—
Leakage current between:		**I (mA)**	**Max. allowed I (mA)**
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:			

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

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

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict

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

19	Abnormal operation conditions		P
Operational characteristics		**YES/NO**	**Operational conditions**
Are there electronic circuits to control the appliance operation?		Yes	Power input: 240V
Are there "off" or "stand-by" position?		NO	NA
The unintended operation of the appliance results in dangerous malfunction?		NO	NA

Sub-clause	Operating conditions description	Test results description	PEC description	EMP 19.11.4	Software type required	19.11.3 PEC	Final result
19.2	Power input of 0.85 times rated power input	No hazards	N/A	N/A	N/A	N/A	P
19.3	Power input of 1.24 times rated power input	No hazards	N/A	N/A	N/A	N/A	P
19.4	Thermostat 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	No hazards	N/A	N/A	N/A	N/A	P

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict

19.11.4.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19.10X	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Supplementary information:							

19.13	**TABLE: Abnormal operation, temperature rises for BV1500TS-CEV**	**P**
Thermocouple locations	**Max. temperature rise measured, ΔT (K)**	**Max. temperature rise limit, ΔT (K)**
Temp. Rise for 19.2 &19.3		
Wood support	25	150
Supply cord	43	150
PCB support	56	
Enclosure	78	--
Temp. Rise for 19.4 &19.5		
Wood support	37	150
Supply cord	53	150
Supplementary information:		

21.1	**TABLE: Impact resistance**		P
Impacts per surface	Surface tested	Impact energy (Nm)	Comments
3 times	Enclosure	0,5	P

24.1	**TABLE: Critical components information**				**P**
Object / part No.	**Manufacturer/ trademark**	**Type / model**	**Technical data**	**Standard**	**Mark(s) of conformity**
Please refer to the latest edition of the Constructional Data Form (CDF) issued for this test report.					

29.1	**TABLE: Clearances**					**P**
	Overvoltage category .... :			II		—
		Type of insulation:				
Rated impulse voltage (V):	**Min. cl (mm)**	**Basic (mm)**	**Supplementary (mm)**	**Reinforced (mm)**	**Functional (mm)**	**Verdict / Remark**
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

IEC 60335-2-15			
Clause	Requirement + Test	Result - Remark	Verdict

1 500	0,5 / 0,8** / 1,0***	-	-	-	-	N/A
2 500	**1,5 /** 2,0***	X	X	-	X	P
4 000	**3,0 /** 3,5***	-	-	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

29.2	TABLE: Creepage distances, basic, supplementary and reinforced insulation										P
Working voltage (V):	**Creepage distance (mm) Pollution degree**										
	1	**2**			**3**			**Type of insulation**			
		Material group			**Material group**						
		I	**II**	**IIIa/IIIb**	**I**	**II**	**IIIa/IIIb***	**B****	**S****	**R****	**Verdict**
≤50	0,18	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	**0,56**	1,25	1,8	**2,5**	3,2	3,6	4,0	X	—	—	P
250	0,56	1,25	1,8	**2,5**	3,2	3,6	4,0	—	X	—	P
250	1,12	2,5	3,6	**5,0**	6,4	7,2	8,0	—	—	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

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Clause	Requirement + Test	Result - Remark	Verdict

>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

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>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**							
	1	**2**			**3**			
		Material group			**Material group**			
		I	**II**	**IIIa/IIIb**	**I**	**II**	**IIIa/IIIb***	**Verdict / Remark**
≤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	**2,0**	2,5	2,8	3,2	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

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Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

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

Photo 1.

Description: Over view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

Photo 2.

Description: Over view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

Photo 3.

Description: Over view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

Photo 4.

Description: Over view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

Photo 5.

Description: Over view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

Photo 6.

Description: Bottom view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

Photo 7.

Description: Over view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

Photo 8.

Description: Over view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

Photo 9.

Description: Water level view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

Photo 10.

Description: Internal view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

Photo 11.

Description: Water outlet view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

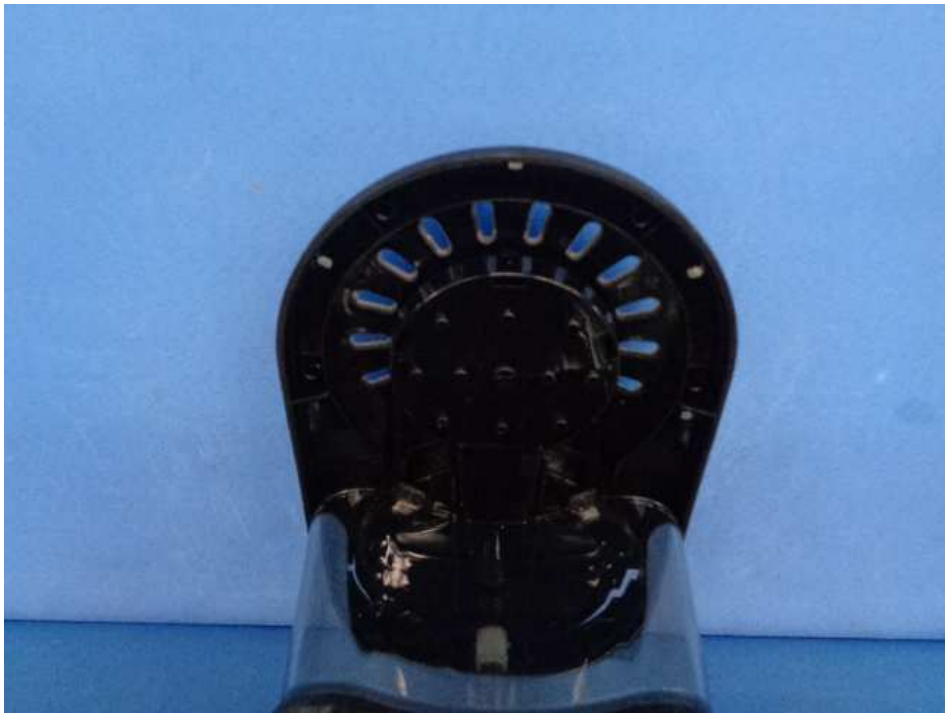

Photo 12.

Description: Internal view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

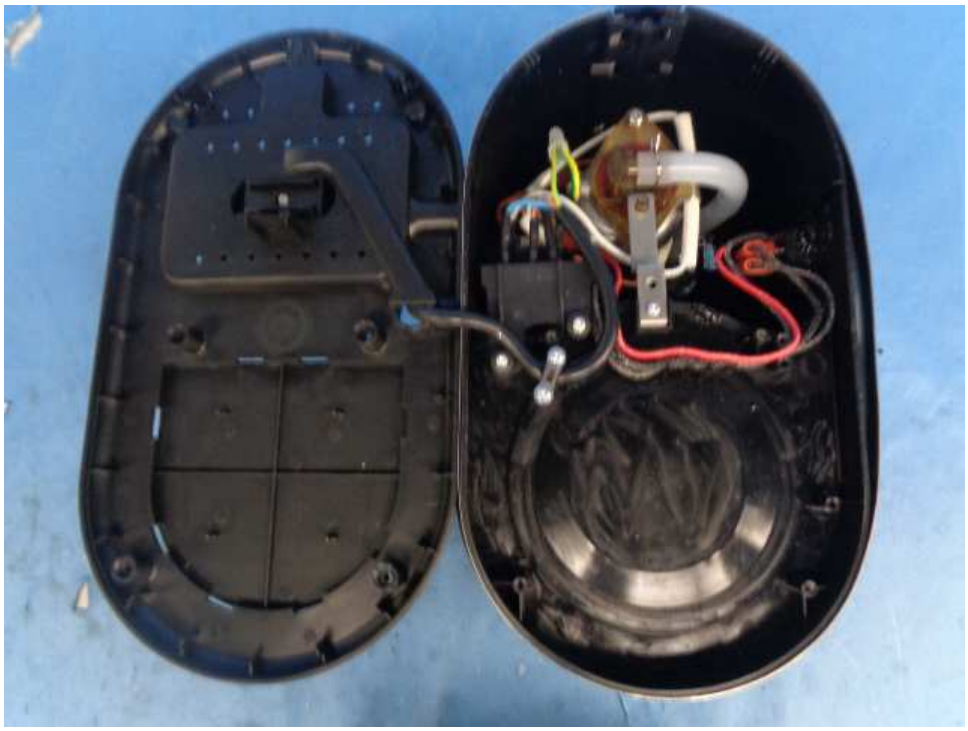

Photo 13.

Description: Internal view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

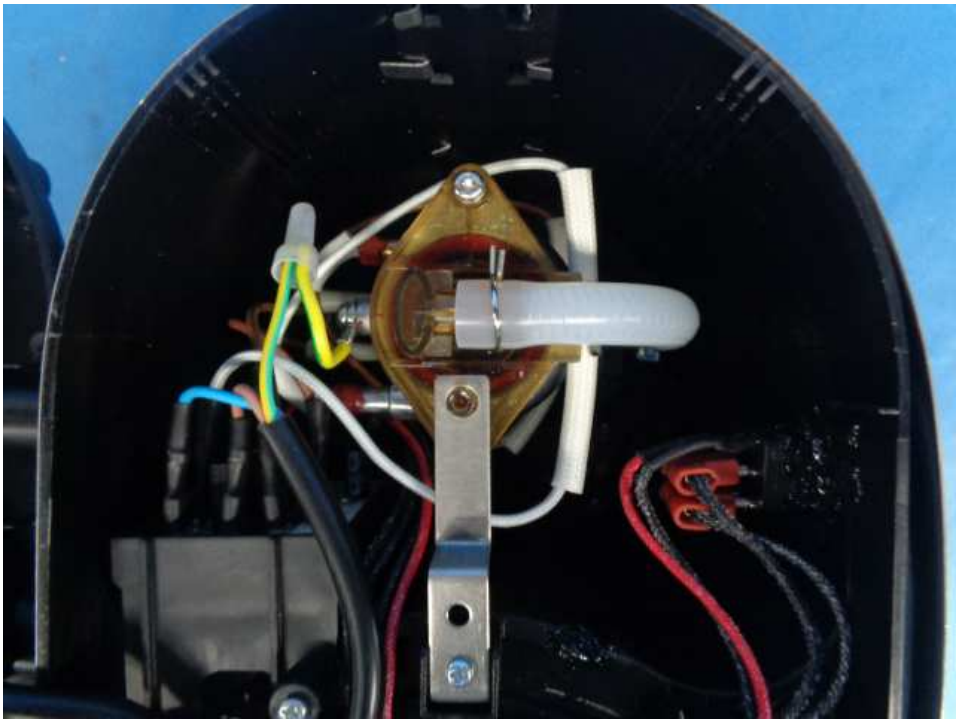

Photo 14.

Description: Internal view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

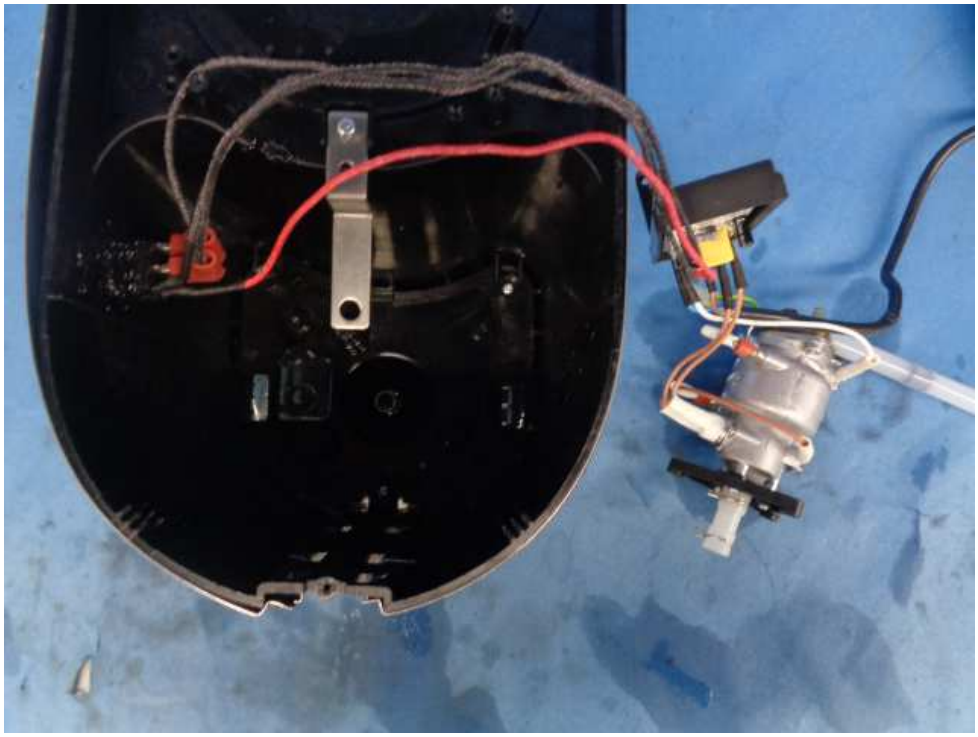

Photo 15.

Description: Heating element view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

Photo 16.

Description: PCB box view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

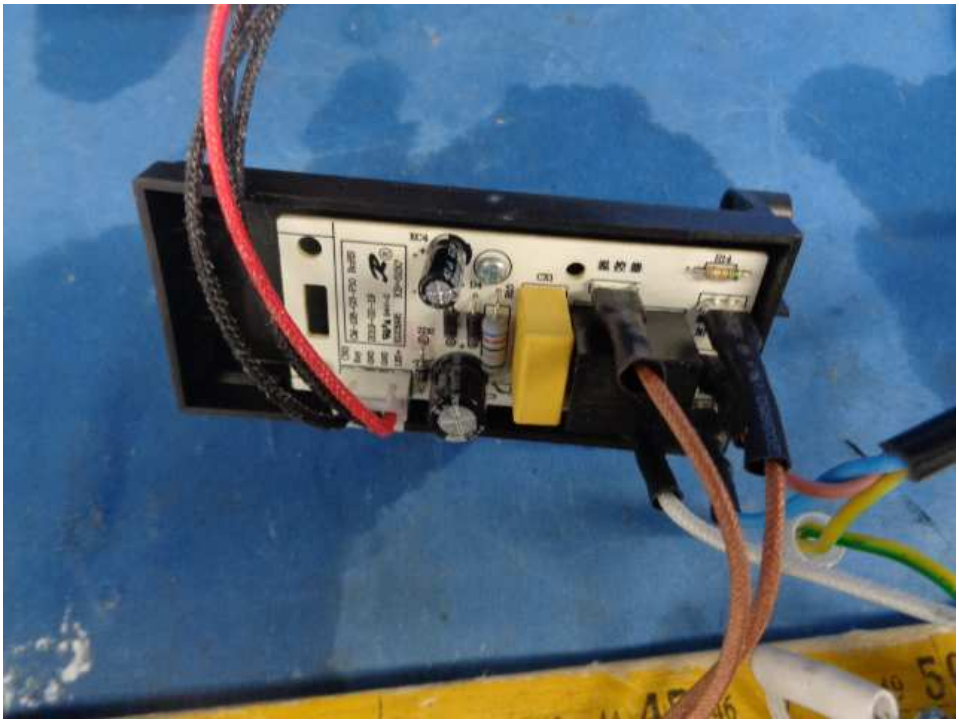

Photo 17.

Description: PCB box view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

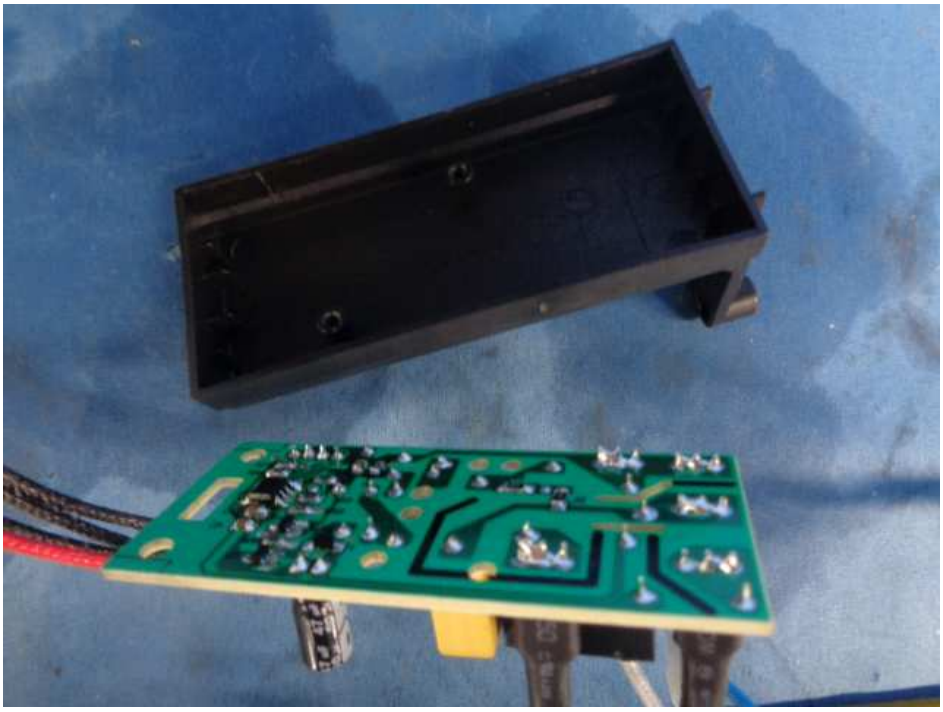

Photo 18.

Description: Power PCB view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

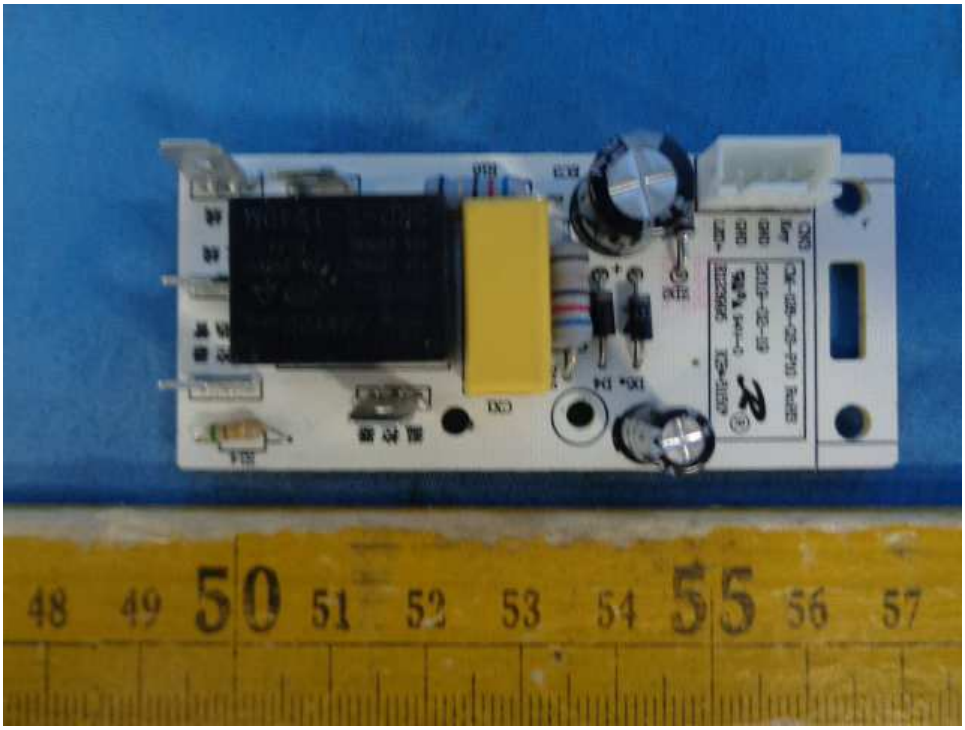

Photo 19.

Description: Power PCB view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)

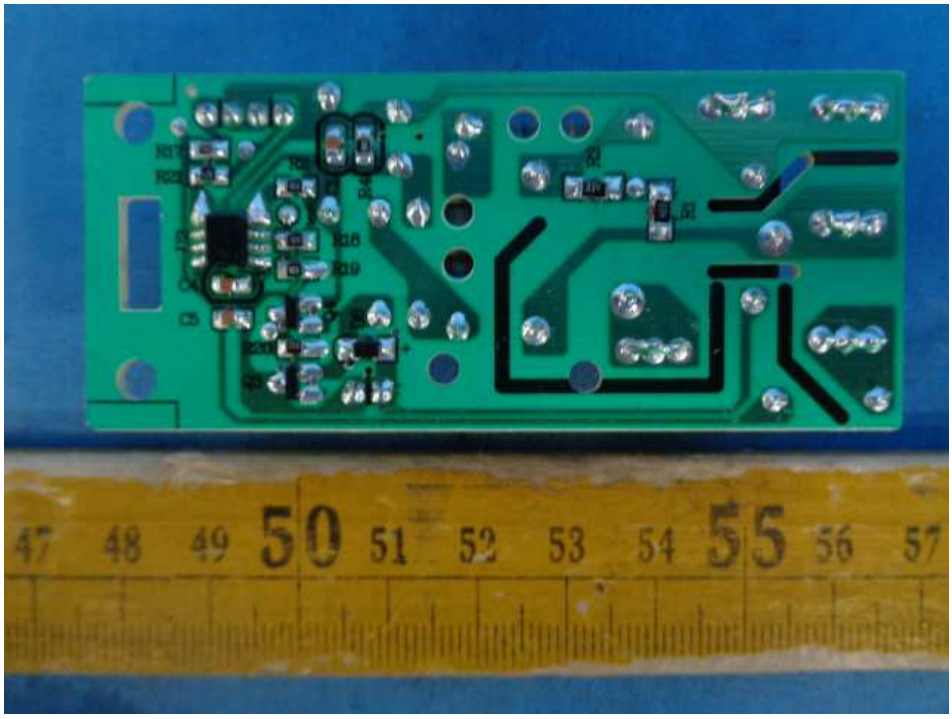

Photo 20.

Description: Ground connection view of BV1500TS-*(*=CEV, CEB, SAA, SA or 01)