

ECS operational staff meeting household appliances decision sheet			OSM HA N°13
Sub cl.	Meeting	Agenda item	Document
8.1	9	7.2	IT 7/95
Standard	EN 60335-1-:2014	Date	2017-02--08
Question	Application of test finger and test pin.		
Decision	The function of a safety switch is to be tested with the test finger of figure 1, applying the forces specified in clause 8 with regard to the accessibility of live parts.		
Explanatory notes	Safety switches may have the function to prevent accessibility to live parts. However, the function of a safety switch is not be tested with the test pin of figure 2.		

ECS operational staff meeting household appliances decision sheet			OSM HA N°15
Sub cl.	Meeting	Agenda item	Document
8	10	7.7	PT 1/96
Standard	EN 60335-1:2014	Date	2017-02--08
Question	Paint as insulation.		
Decision	Paint is not regarded as insulation.		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°20
Sub cl.	Meeting	Agenda item	Document
11	4	8.6	
Standard	EN 60335-1:1994	Date	2017-02--08
Question	Heating test on appliances for permanent connection to fixed terminals (type X attachment)		
Decision	<p>A) The smallest nominal cross-sectional area, as shown in the table of sub-clause 25.8 should be used when testing clause 11 on appliances designed for permanent connection to fixed terminals where the cable or cord would not be supplied and where the instruction sheet would not recommend any specific size.</p> <p>B) Two-thirds of the required torque should be applied to the terminals when carrying out heating tests (table of sub-clause 28.1).</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°22
Sub cl.	Meeting	Agenda item	Document
11	4	8.8	
Standard	EN 60335-1:1994	Date	2017-02--08
Question	Temperature measurement of appliance inlets.		
Decision	Measurement of temperature rise on the pins has to be made by soldering or sticking by adhesive the thermocouple on the external base of the pin outside the appliance.		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°27
Sub cl.	Meeting	Agenda item	Document
13.2	6	8.1.6	FI 3/92
Standard	EN 60335-1:1994	Date	2017-02--08
Question	The measurement of the leakage current of appliances with a 3-phase heating element and a 1- phase motor.		
Decision	When using figure 6 or figure 7, only the switches in the phases other than the phase for the motor are disconnected, if the construction of the appliance permits so. Otherwise all 3 switches are disconnected in turn, the motor being separately supplied. Then the leakage currents are measured separately and the values for the motor and the relevant phase for the heating element are added.		
Explanatory notes	There is a cooling problem when the motor is not supplied.		

ECS operational staff meeting household appliances decision sheet			OSM HA N°30
Sub cl.	Meeting	Agenda item	Document
19	1	3.16	
19	23	4.3	SEC 05/09
Standard	EN 60335-1:2002	Date	2017-02--08
Question	. How to deal with a component with a thermostat or thermal cut-out or both within the same component, having only one temperature sensing device, but operating two or more switch parts in separate circuits.		
Decision	When a part of this component has to be short-circuited during the tests, all switch parts are short circuited; This applies only to electromechanical components		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°42
Sub cl.	Meeting	Agenda item	Document
24.	6	8.1.9	NL 2/92
24.	6	8.1.9	FI 5/92
Standard	EN 60335-1:1994		Date
Question	. The use of high-breaking capacity fuse-links.		
Decision	High-breaking capacity fuse-links shall be used if the short-circuit current is more than 35 A or more than 10 x In.		
Explanatory notes	With low-breaking capacity fuse-links the risk of explosion and consequential hazards exists.		

ECS operational staff meeting household appliances decision sheet			OSM HA N°49
Sub cl.	Meeting	Agenda item	Document
24.1	8	11.2	
Standard	EN 60335-1:1994	Date	
Question	Endurance test for timers.		
Decision	The number of cycles refers to the machine cycles. A cycle is a most onerous program.		
Explanatory notes			



ECS operational staff meeting household appliances decision sheet			OSM HA N°51
Sub cl.	Meeting	Agenda item	Document
22.40	9	15.3	SEC 6/94
Standard	EN 60335-1:1994	Date	2017-02-08
Question	Switches for motor-operated appliances moved while in operation..		
Decision	An electronic switch is acceptable for motor-operated appliances moved while in operation, provided it fulfils all requirements of sub-clause 19.11 of this standard		
Explanatory notes	CLC/TC 61 decision November 1994.		

ECS operational staff meeting household appliances decision sheet			OSM HA N°53
Sub cl.	Meeting	Agenda item	Document
25	5	6.1.15	FI 1/91
Standard	EN 60335-1:1994	Date	2017-02-08
Question	To determine the requirements for plug pins incorporated in appliances.		
Decision	<p>The complete appliance including the plug pins is subjected to the requirements of EN 60335-1. The plug pins are also subjected to EN 50075 or to the requirements of the relevant National Standard including the following tumbling barrel test:  The barrel is turned at a rate of five revolutions per minute. The sample falls from a height of 50 cm onto a steel plate, 3 mm thick, the number of falls being:</p> <ul style="list-style-type: none"> <li>- 100 if the mass of the sample does not exceed 250 g</li> <li>- 50 if the mass of the sample exceeds 250 g.</li> </ul> <p>After the test , the sample shall show no damage within the meaning of this Standard, but it need not be operable.</p>		
Explanatory notes	The requirements of the National Standard may include both dimensions and mechanical strength.		

ECS operational staff meeting household appliances decision sheet			OSM HA N°54
Sub cl.	Meeting	Agenda item	Document
25.23	5	6.1.10	GB 5/91,IT 3/91
25.23	23	4.3	SEC 05/09
25.23	23	8.6	ES 04/09
Standard	EN 60335-1:2002		Date 2017-02-08
Question	. Requirements for insulation of accessible internal conductors.		
Decision	<p>1) A conductor inside an appliance or fixed outside, but which is accessible to the standard test finger shall comply fully with the requirements of double or reinforced insulation unless it is a flexible cord complying with the relevant CLC Standard as specified in clause 25.</p> <p>2) For interconnection cords only approved or equivalent cords shall be used.</p> <p>3) For conductors inside an appliance but which are accessible during a cleaning operation and which are not moved or mechanically stressed during normal use, supplementary insulation can be provided by a single thickness of less than 1.0 mm, if it is in compliance with the requirements for cable sheaths in 22.21 and withstands the electric strength test of 16.4</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°59
Sub cl.	Meeting	Agenda item	Document
27.2	23	4.3	SEC 05/09
27.2	6	8.1.14	NO 2/92
Standard	EN 60335-1:2002	Date	
Question	Is a pressure plate needed for earthing terminals of the pillar type?		
Decision	A pressure plate is not required for pillar type earthing terminals, provided the terminals contain resilient means of protection against accidental loosening.		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°60
Sub cl.	Meeting	Agenda item	Document
27.4	23	4.3	SEC 05/09
27.4	5	6.1.17	IT 5/91
Standard	EN 60335-1:2002	Date	2017-02-08
Question	Verification of the protection against corrosion.		
Decision	A manufacturers declaration may be accepted.		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°70
Sub cl.	Meeting	Agenda item	Document
30.1	1	3.13	
Standard	EN 60335-1:2014	Date	
Question	Where is the temperature for external parts measured?		
Decision	The measurement is made at the hottest point which is normally on the internal surface for ball pressure testing and supplementary measurement for touchable surfaces		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°79
Sub cl.	Meeting	Agenda item	Document
22.42	9	7.9	SE 7/95
Standard	EN 60335-1:2014	Date	
Question	Protective impedance		
Decision	A single Y1 capacitor is not allowed as a protective impedance.		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°194
Sub cl.	Meeting	Agenda item	Document
19.7	11	9.7	NL 3/97
Standard	EN 60335-1:1994	Date	2017-02-08
Question	Miniature fuses for the protection of motors.		
Decision	The test is carried out only with the miniature fuse mounted in series with the motor. No reference to 19.12 for fuses for electronic circuits shall be made.		
Explanatory notes			

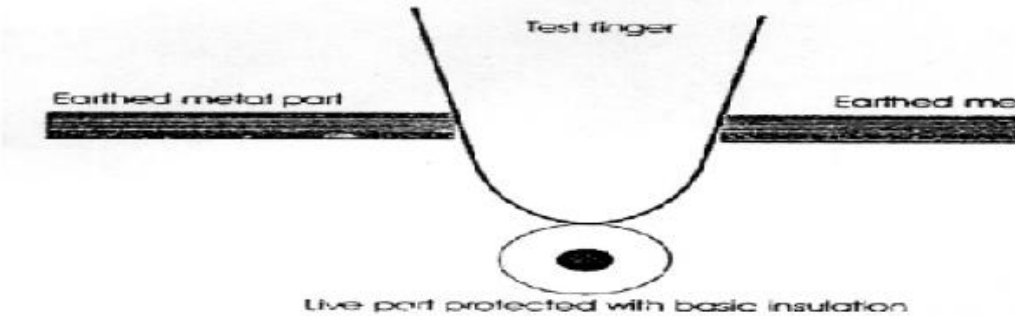


ECS operational staff meeting household appliances decision sheet			OSM HA N°214
Sub cl.	Meeting	Agenda item	Document
2.7.1/2.7.2	14	4.1	CHAIR 1/00
2.7.1/2.7.2	12	6.1.1	IT 5/98
Standard	EN 60335-1:1994	Date	2017-02-08
Question	Detachable and non detachable parts: parts and components in conformity with sub-clause 22.11, but which are removable by hand.		
Decision	Parts removable by hand, which are in conformity with sub-clause 22.11 are not considered as being detachable. A part is only detachable if it is removable without the aid of tool and does not comply with sub-clause 22.11		
Explanatory notes	This decision has been taken by CLC/TC 61 (June 2000) and it is different from that taken by OSM/HA.		

ECS operational staff meeting household appliances decision sheet			OSM HA N°215
Sub cl.	Meeting	Agenda item	Document
8.2	13	4	CHAIR LUBLJ 2/99
8.2	12	6.1.4	IT 4/98
8.2	23	6.4.2	SEC 05/09
Standard	EN 60335-1:2002	Date	2017-02-08
Question	Interpretation of sub-clauses 8.2 on fluorescent lamps located behind detachable cover		
Decision	<p>1)The Standard has to be met. In class II construction it is not allowed to touch basic insulation.</p> <p>2)If a tool is needed to removed the cover ( it is considered detachable if there is an instruction according to sub- clause 2.7.2) the basic insulation may be accessible after removal of the cover.</p>		
Explanatory notes	<p>1)CLC/TC61 confirmed the decision (June 1999).</p> <p>2)After discussion in 13th OSM/HA meeting This decision has been updated after the 23rd OSM/HA meeting.</p>		

ECS operational staff meeting household appliances decision sheet			OSM HA N°216
Sub cl.	Meeting	Agenda item	Document
19.13	12	6.1.7 and 6.11.4	(FR)1/98 and (IT)4/9
19.13	13	7.1	(Chairman)1/99
Standard	EN 60335-1:1994		Date 2017-02-08
Question	If during all the tests of clause 19 a non resetting thermal cut out operates, is the appliance considered still be able to operate?		
Decision	<p>1)If the user can reset the thermal cut- out, the appliace is considered to be operable.</p> <p>2)If the user can not reset the thermal cut-out or if the appliance becomes out of order, the solution in IEC 60335-1/A2:1999 sub-clause 4.2 first paragraph is followed, which means that sub-clause 20.2 is carried out on a separate sample.</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°219
Sub cl.	Meeting	Agenda item	Document
29.1	12	6.1.17	GB 1/98
Standard	EN 60335-1:1994		Date 2017-02-08
Question	Creepage and clearance distances across parts of same polarity until when a cut out operates during clause 19.		
Decision	<p>In this situation the live parts of thermal cut out in the open position are considered as parts of different polarity.</p> <p>When measuring the distances should be checked according to the component standard. If the cut out does not operate for all the tests of all clauses, the distances are not measured because there is no open circuit and no parts of different polarity.</p>		
Explanatory notes	This decision is in line with the similar one taken by CTL		

ECS operational staff meeting household appliances decision sheet			OSM HA N°231
Sub cl.	Meeting	Agenda item	Document
8.2	14	4.1	(Hels/Chair)1/00
8.2	23	6.4.2	(SEC)05/09
8.2	13	9.3	(FR)1/99
Standard	EN 60335-1-2002		Date 2017-02-08
Question	Accessibility of basic insulation through opening in earthed metal enclosure having paint coating.		
Decision	<p>If the opening is such that the basic insulation is accessible without making contact at the same time with the earthed metal parts, it is considered as a class II construction and thus not acceptable.</p> <p>If the basic insulation and the earthed metal parts are accessible at the same time, this is acceptable, as the earthing is one if the protection means.</p> 		
Explanatory notes	<p>CLC/TC 61 confirmed (June 2000).</p> <p>This decision has been updated after the 23rd OSM/HA meeting.</p>		

ECS operational staff meeting household appliances decision sheet			OSM HA N°234
Sub cl.	Meeting	Agenda item	Document
24.1.4	13	9.10	IT 2/99
Standard	EN 60335-1:1994	Date	2017-02-08
Question	Ambient temperature of transformers marked with T		
Decision	T marking of a transformer shall not necessarily to be followed if the transformer complies with the requirements of the standard.		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°236
Sub cl.	Meeting	Agenda item	Document
29.2	14	4.1	(Hels/Chair)1/00
29.2	13	9.14	(FR)3/99
Standard	EN 60335-1:2012		Date 2017-02-08
Question	<p>The requirement of EN 61558 for distance through insulation between primary and secondary winding is 1 mm. According to EN 60335-1:1994, if the secondary winding is accessible there is requirement for 2 mm for distance through insulation of primary and secondary winding. In general the delegates agreed unanimously that in this case transformers are accepted when tested or certified according to EN 61558 or annex G, even if the standard is not very clear regarding the subclause of annex G.</p>		
Decision	The transformer standard is applicable		
Explanatory notes	CLC/TC 61 confirmed (June 2000) that an editorial correction, to change annex ZD sub-clause 29.1 to clause 29, is needed		

ECS operational staff meeting household appliances decision sheet			OSM HA N°238
Sub cl.	Meeting	Agenda item	Document
17	13	9.19	(IT/Ljubljana)6/99
Standard	EN 60335-1:1994	Date	2017-02-08
Question	<p>1)In case of transformer mounted on an appliance, shall the short-circuit on the secondary winding always be carried out, if the transformer is not in compliance with specific standard ( e.g.EN61558-2-6/EN 62558-2-16)?</p> <p>2)If on the secondary winding a protection device like a fuse-link is connected, is it correct to introduce the short-circuit after the protection device?</p>		
Decision	<p>1)No, the note 1 and 2 of clause 17 have to be considered.</p> <p>2)Yes, if between the winding and the protection device there is no possibility of a short-circuit to occur.</p>		
Explanatory notes			

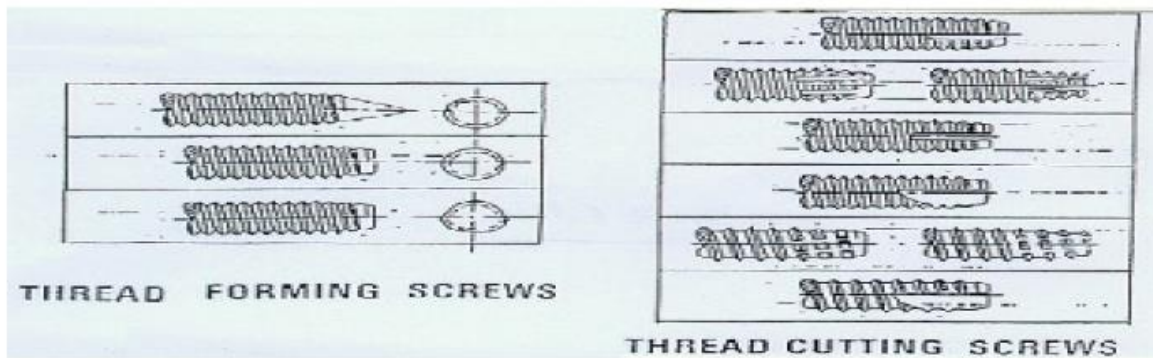
ECS operational staff meeting household appliances decision sheet			OSM HA N°249
Sub cl.	Meeting	Agenda item	Document
8-20	15	6.3	(Chair)1/01
8-20	23	6.4.2	(SEC)05/09
8-20	14	9.2	(SI)1/00
Standard	EN 60335-1:2002 EN 60335-1 :2012	Date	2017-02-08
Question	<p>For removing or opening a cover, a door, etc., mechanically operated interlock switches can be used for protection against electric shock and accessibility of moving parts.</p> <p>Which are the requirements for interlock switches regarding distances contact gaps and reliability of cycling operations of switches for fixed appliances and appliances provided with plug which provide:</p> <p>1) protection against electric shock and energy hazards, or 2) protection against dangerous moving parts?</p>		
Decision	<p>1) It is not acceptable to get access to live parts after operation of an interlock switch without a tool even if is at least 3mm between the contact gaps and with all poles disconnection. In that situation it is still considered to be live. Only certain parts 2 (e.g.air cleaners and insect killers) this is allowed;</p> <p>2)At least a micro switch (&lt; 3 mm) and minimum one pole disconnection to obtain the protection against mechanical hazards.</p> <p>The interlock switches are tested according to sub-clause 24.1.3: switched under load for 10.000 cycles, switched without load for 100 cycles.</p>		
Explanatory notes	<p>CLC/TC61 confirmed on May 2001. This decision has been updated after the 23rd OSM/HA meeting</p>		



ECS operational staff meeting household appliances decision sheet			OSM HA N°271
Sub cl.	Meeting	Agenda item	Document
28.1	15	5.1	OSM/CTL Dec 01/0
Standard	EN 60335-1:1994	Date	2017-02-08
Question	Shall the test on the screws with a thread in insulating material be carried out 10 times consecutively or with a pause between each time?		
Decision	With a pause between each time; attention should be paid that there is an adequate cooling time after applying each torque.		
Explanatory notes			

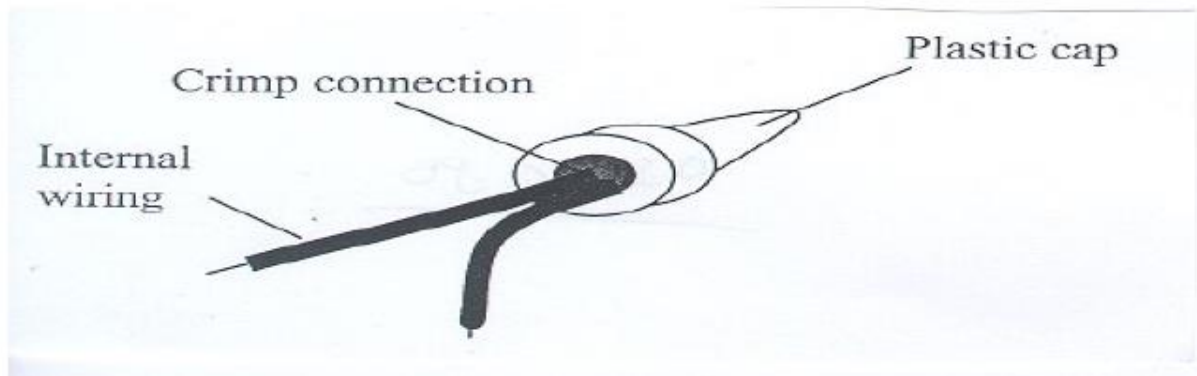
ECS operational staff meeting household appliances decision sheet			OSM HA N°273
Sub cl.	Meeting	Agenda item	Document
24.1.4	15	5.1	OSM/CTLDec01/01
Standard	EN 60335-1:1994	Date	2017-02-08
Question	<p>Is it allowed to put an on-off switch on the plug of a household appliance of IPX4 construction?  As far as the plug is to be considered as a full part of the appliance itself, must it be submitted to the relevant test for IPX4?</p>		
Decision	<p>If a switch is not required in the relevant parts 2, a switch could anyway be used on the plug.  In such a case the switch is tested as a part of the appliance with regard to humidity test, but the plug is subjected to the IPX4 test only if an appropriate plug is required for the appliance.</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°274
Sub cl.	Meeting	Agenda item	Document
28.3	15	5.1	OSM/CTLDec01/01
Standard	EN 60335-1:1994	Date	2017-02-08
Question	Examples of threaded-cutting and threaded forming screws.		
Decision	In the following figure examples of threaded-cutting and threaded forming screws are given.		
Explanatory notes			



ECS operational staff meeting household appliances decision sheet			OSM HA N°277
Sub cl.	Meeting	Agenda item	Document
27.4	15	5.1	OSM/CTLDec01/01
Standard	EN 60335-1:1994	Date	2017-02-08
Question	<p>The checking of the risk of corrosion resulting from contact between earthing terminal and the copper of earthing conductor or other metal parts is not always easy to perform only by inspection.  Some standards (e.g. IEC 60950/1990, annex J) make reference to the table of electrochemical potential.  Is it allowed to use this table and what is the practice to check compliance to this requirement?</p>		
Decision	<p>The table of electrochemical potential may be used to verify compliance with requirement of subclause 27.4.  Information given by the manufacturer may be also acceptable to verify compliance.</p>		
Explanatory notes	<p>The decision will be passed to TC 61.  This decision is identical to CTL decision nr. 276.</p>		

ECS operational staff meeting household appliances decision sheet			OSM HA N°280
Sub cl.	Meeting	Agenda item	Document
30	15	5.1	OSM/CTLDec01/01
Standard	EN 60335-1:1994	Date	2017-02-08
Question	<p>The figure below shows a crimp connection used for internal wiring, the plastic cap provides basic insulation.</p> <p>Does the plastic cap retain live parts in position so you have to make a ball pressure test at 125°C (sub-clause 30.1) and a glow wire test at 850°C (for unattended appliance, current more than 0,5A)?</p>		
Decision	<p>The plastic cap does not retain in position live parts, so the ball pressure test is not applicable. Subclauses 30.2.2 and 30.2.3 apply to the plastic cap, so the glow wire test has to be carried out if the connection is carrying a current &gt;0,5 a in normal use, for appliances other than hand-held appliances, with the following values:</p> <ul style="list-style-type: none"> <li>- 650°C for appliances operated while attended</li> <li>- 750°C for other appliances (excepts if tests of annex L are performed on the connection)</li> </ul>		
Explanatory notes	This decision is identical to CTL decision nr.264		



ECS operational staff meeting household appliances decision sheet			OSM HA N°292
Sub cl.	Meeting	Agenda item	Document
8.1	19	6.20	(FR)1/05
8.1	15	9.5	(FR)02/01
Standard	EN 60335-1:1994 EN 60335-1 :2012	Date	2017-02-08
Question	How to check appliances including luminaries or part of luminaries?		
Decision	If the luminaire and household appliance have the same function (i.e. refrigerator, range hood, oven, ceiling fan combined with lampholder) the appliance shall comply with EN 60335-1 as far as protection against electric shock is concerned. In case of a luminaire and household appliance having different functions EN 60598-1 applies for lighting function and EN 60335-1 applies for household function		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°293
Sub cl.	Meeting	Agenda item	Document
29.1	15	9.17	(NL)02/01
Standard	EN 60335-1:1994 EN 60335-1:2012	Date	2017-02-08
Question	In table 13 there are no values for creepage distances and clearances for working voltage between 250 V and 480 V for reinforced insulation. Which values shall be considered in this case?		
Decision	The values are determinate by extrapolation, with the following formula: $8 \times (\text{working voltage})/250$		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°335
Sub cl.	Meeting	Agenda item	Document
2	18	4.2	OSM/CTL /list.2004
Standard	EN 60335-1:2002 EN 60335-1 :2012	Date	2017-02-08
Question	What requirements apply to telecommunication interface circuits installed in household appliances (e.g.: Modem) as far as the insulation and distances between these circuits and other parts are concerned?		
Decision	<p>The standard EN 41003 shall be used in the evaluation of interface unit (e.g. Modem) fitted in the appliances in the scope of IEC 60335-1 series.</p> <p>In alternative, a modem unit already tested and certified according to IEC 60950 should be accepted taking into account the more severe requirements of the product standard, if any.</p> <p>- TLC circuits are usually covered by IEC 60950 which contains all the requirements</p>		
Explanatory notes			



ECS operational staff meeting household appliances decision sheet			OSM HA N°336
Sub cl.	Meeting	Agenda item	Document
10.1	18	4.2	OSM/CTL /lst.2004
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>Over what representative period is the power input measured for an appliance incorporating a PTC heating element?</p> <p>Rationale:  If the power input varies throughout the operating cycle, the power input is determined as the mean value of the power input occurring during a representative period.  For appliances with a PTC heating element, the initial power input is very high and this reduces as the PTC heating element heats up</p>		
Decision	<p>The representative period cannot be defined in Part 1. It depends on the appliance. The input power should be measured when steady conditions are reached or at the end of the duration specified in clause 11.7 of the Part 2s, whichever shorter.</p>		
Explanatory notes	<p>This decision is identical to CTL decision n. 554, approved at the 41st CTL meeting 2004.</p>		

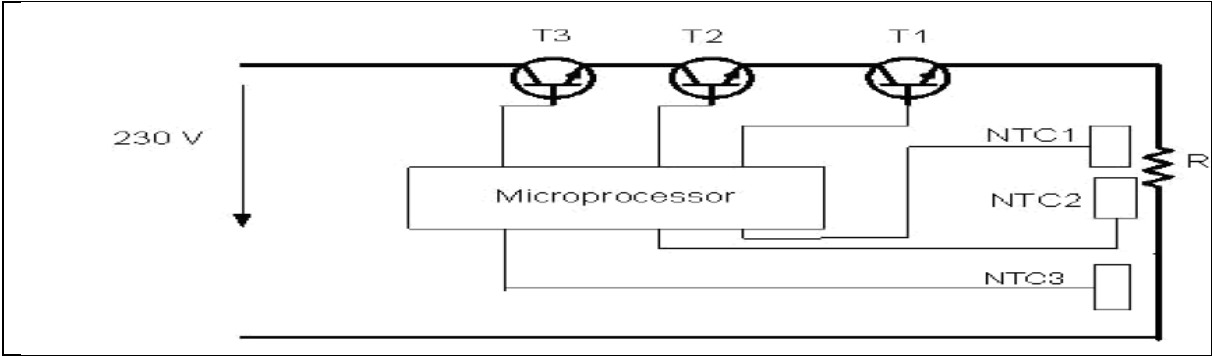
ECS operational staff meeting household appliances decision sheet			OSM HA N°352
Sub cl.	Meeting	Agenda item	Document
30.2.3.1	18	5.2	(IT)1/04
Standard	EN 60335-1:2002 EN 60335-1 :2012	Date	2017-02-08
Question	<p>The sub-clause 30.2.3.1 requires the glow wire test on three specimen according to IEC 60695-2-12 to verify the GWFI of 850 °C of insulating materials supporting connections for current exceeding 0,2A and of parts of insulating material within a distance of 3 mm of such connections.</p> <p>As there are many difficulty to receive from the manufacturers the three specimen required for the GWFI test, is it possible to accept a declaration of the manufacturer, with reference to the thickness and colour, that the plastics used have a GWFI of 850 °C?</p> <p>Or the document 61/2560/DC which has be discussed during the IEC/TC61 meeting in Kuala Lumpur has to be taken into account, even if it is not yet formally endorsed by the CLC/TC61</p>		
Decision	<p>The glow wire test may be used as alternative of GWFI test, according to the document 61/2560/DC.</p> <p>The alone declaration of the component manufacturer concerning GWFI test is not accepted.</p>		
Explanatory notes	<p>The majority decided to accept only test reports and certifications from the CBTL and additionally to ask the component manufacturer for a declaration or identity of the material used including colour.</p> <p>This decision has been considered definitive because a period of 1 month after the Istanbul meeting passed without that no OSM/HA member have sent a new proposal to the others.</p>		

ECS operational staff meeting household appliances decision sheet			OSM HA N°362
Sub cl.	Meeting	Agenda item	Document
19	19	5.2	
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>Many part two Standards introduce additional sub-clauses for clause 19 and these are numbered 19.101, 19.102 etc.  These sub-clauses are published in the Standards at the end of clause 19, after the sub-clause 19.13.  Should these additional sub-clauses be conducted after the assessment and tests of sub-clause 19.13, or should sub-clause 19.13 be conducted as the last test of clause 19?</p>		
Decision	<p>According to 19.1 the compliance criteria is included in 19.13 for all 19 sub-clauses, unless otherwise is specified in the sub-clause of the relevant part 2 or if it is evident that this sub-clause have his own compliance criteria and 19.13 is not applicable</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N369
Sub cl.	Meeting	Agenda item	Document
22.21 and 22.32	19	8.5	(DE)3/05
Standard	EN 60335-1:2002 EN 60335-1 :2012	Date	2017-02-08
Question	<p>A oil filled room heater of Class II has a heating element in class II construction. This construction consists of two layers of independent insulations of magnesium oxide which will be used as basic and supplementary insulation. According to note 2 of clause 22.21 magnesium oxid will be not considered as hygroscopic material. The magnesium oxide is tightly sintered and in line with the tests of subcl. 22.32 . The end of the heating element (side of the connectors) is protected by a sealing agains moisture.</p> <p>Is this construction acceptable because in line with cl. 22.21 and 22.32?</p>		
Decision	Yes, the construction proposed is acceptable because in line with the standard.		
Explanatory notes			


ECS operational staff meeting household appliances decision sheet			OSM HA N°372
Sub cl.	Meeting	Agenda item	Document
19.11	20	5.2	WG-OSM/CTL01/06
Standard	EN 60335-1 :2002 EN 60335-1 :2012	Date	2017-02-08
Question	<p>Reports from different Testing Laboratories and clients expose essential differences in interpretation and testing practice between laboratories and/or Certification Bodies.</p> <p>Actually, the practice of one Certification Body is now being a market factor. Based on above concerns we ask for clarification:</p> <p>1: Shall Cl. 19.11 be strictly followed or can solutions given under 2. be accepted.</p> <p>2: Can any of the decisions (made by OSM/EE) be accepted?</p> <ul style="list-style-type: none"> <li>- A: VDR's across the mains are accepted if the VDR is separately certified according to IEC 61051- 1 or according to CECC 42200.</li> <li>- B: VDR across the mains with a protective device to guard against short-circuit is acceptable.</li> <li>- C: If A and B are acceptable, should, because of the fact that VDR's may burn or burst during lifetime due to an increasing temperature stress caused by increase of leakage current with a number of switching cycles in the VDR, a thermal interrupting device on the VDR connected in series with the VDR be required.</li> </ul>		
Decision	<p>1. VDR's are not short-circuited if they are used within their manufacturer's declared specification, when tested according to Sub-clause 19.11.2 of IEC60335-1(1991).</p> <p>2. VDR's are short-circuited regardless of compliance with IEC61051-1, when tested according to Sub-clause 19.11.2 of IEC60335-1(2001).</p>		
Explanatory notes	<p>There exist differences for handling VDR's between IEC60335-1(1991) and IEC60335-1(2001) when applying those standards. This issue is brought to TC 61 and following questions and answers are confirmed in Delft meeting 2005:</p> <p>Q1. Is there any reason to differentiate the requirements for VDR's between Third (1991) and Forth (2001) edition of IEC60335-1?</p> <p>A1: Yes, the VDR's can fall at short-circuit at the end of the life and therefore there is a differentiation to accomodate this situation in the fourth edition</p> <p>Q2. According to the current standards, is the following interpretation correct?</p> <ul style="list-style-type: none"> <li>- VDR's are not short-circuited if they comply with IEC61051-1 and are used within their manufacturer's declared specification, when tested according to Sub-clause 19.11.2 of IEC60335-1(1991).</li> <li>A2.1 The interpretation is not correct because they do not have to comply with 61051-1. they only have to be used with the manufacturers specification.</li> <li>- VDR's are short-circuited regardless of compliance with IEC61051-1, when tested according to Subclause 19.11.2 of IEC60335-1(2001).</li> <li>A2.2 Yes this interpretation is correct</li> </ul> <p>This decision is the same of the CTL DSH 568</p>		

ECS operational staff meeting household appliances decision sheet			OSM HA N°379
Sub cl.	Meeting	Agenda item	Document
19.11.1/2/3/4	22	5.2.1	(SEC)04/08
19.11.1/2/3/4_22.4 6	20	6.4	(ES)01/06
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>Question 1: In the constructions showed in the figure, a part of an electronic circuit (NTC1+micro+T1) operates as a thermostat for the heating element R. The heating element does not have incorporated protection elements. During the application of 19.11.2, (short circuit in the transistor T1) other part of the electronic circuit (NTC2+micro+T2) operates as a thermal cut-out. a.- According to the standard, has the part (NTC2+micro+T2) to be considered as a PEC? b.- In that case, are the clauses 19.11.3 (additional fault), 19.11.4 (immunity) and 22.46 (software classification) applicable? c.- Considering that the thermostat software and the thermal cut-out software are separated parts of the code, which software class is applicable to the thermostat and which one to the thermal cut-out?</p> <p>Question 2: In the same construction, the manufacturer changes the parameters of NTC2 in such a way that (NTC2+micro+T2) do not operate as a thermal cut-out but as redundant thermostat (in the same temperature than the normal thermostat. In the same conditions of the test in 19.11.2 (short circuit of T1) the heating element operates as in normal operation d- According to the standard, has the electronic circuit or some of its parts to be considered as a PEC? e.- In that case, are the clauses 19.11.3 (additional fault), 19.11.4 (immunity) and 22.46 (software classification) applicable? f- Considering that the thermostats have separated software, which software classes are applicable?</p>		
Decision	<p>Question 1: a- YES b- All sub-clauses are applicable c- Taking into account that short circuit of T2 has to be considered in 19.11.2, then the thermostat shall be consider as a PEC too and software class B shall be required for both. Question 2: d- YES, the temperature control of the circuit (T1+T2+micro+NTC1+NTC2) has to be considered as a PEC e- All sub-clauses are applicable f- Both software have to be class B</p>		
Explanatory notes	The figure is just a simplified scheme. The intention of the figure is not to analyse the compliance of it, but only to define the tests that have to be applied to it.		



ECS operational staff meeting household appliances decision sheet			OSM HA N°380
Sub cl.	Meeting	Agenda item	Document
27.1	20	6.12	(SE)04/06
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	Can a ball-bearing be considered as a reliable connection to earthed metal parts such as a motor shaft. According to CTL DSH 263 and OSM/HA 288 it is not accepted for electric tools.		
Decision	A ball - bearing can be considered as a reliable earth connections for household appliance if comply with earth requirements of the standard.		
Explanatory notes			



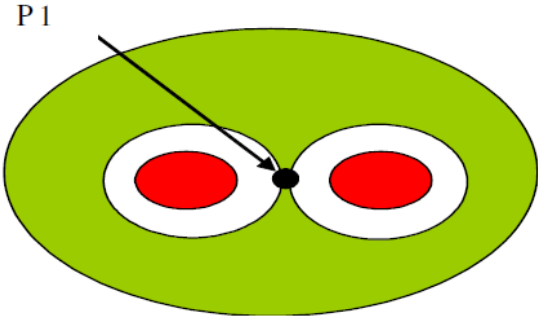
ECS operational staff meeting household appliances decision sheet			OSM HA N°381
Sub cl.	Meeting	Agenda item	Document
30.2.2 and 30.2.3	20	6.15	(ES)04/06
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>In the photographs included below a construction is shown with material not resistant to the glow wire test at 750°C/850°C (PP marked) and a terminal block fixed in 3 pins moulded on that material.</p> <p>In order to separate the connection area from the PP plastic part, a piece of a different material has been interposed. The pins fixing the terminal block is still of PP material and is within a distance of less than 3 mm.</p> <p>Should the PP material in this construction be tested with glow wire test at 750°C/850°C?</p>		
Decision	<p>The material shall be tested if it is less 3 mm from the connection. The 3 mm distance has to be measured from the point of connection between the wire and the screw inside the terminal and not from other terminal part.</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°383
Sub cl.	Meeting	Agenda item	Document
30.2.3.2	20	6.16	(IT)01/06
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	In case of an appliance having grids or opening which permit to the flame to exit from the appliance as the distance between the external parts and the connection is less than 50 mm (considering the envelope of the vertical cylinder having a diameter of 20 mm and a high of 50 mm) , how shall be considered the parts in contact with the external surface of the appliance, if is not defined the material within the cylinder envelope?		
Decision	Taking into account the previous discussion in IEC/TC61 about the matter (see minutes of Cape Town meeting 2005 and the relevant Cape Town Chairman Report), it is considered that the flames out the appliance have not taken into account. In case of the drawing, if the enclosure complies with the needle flame, then the appliance withstands the clause 30 test		
Explanatory notes			


ECS operational staff meeting household appliances decision sheet			OSM HA N°384
Sub cl.	Meeting	Agenda item	Document
30.2.3.1	20	10.5	(ES)05/06
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>Sub-clause 30.2.3.1 reads: "parts of insulating material supporting connections that carry a current exceeding 0,2 A during normal operation, and parts of insulating material within a distance of 3 mm of such connections, shall have a glow-wire flammability index of at least 850°C according to IEC 60695-2-12, the test sample being no thicker than the relevant part"</p> <p>Certain motors, have a nominal current around 0,2 A (for example, the pump of a washing machine), but during a certain time (for instance, because changes in the load, or the in-rush current) the current exceeds the limit of 0,2 A.</p> <p>Shall the current in these periods of the motor be ignored, independently of its duration, in order to compare with the 0,2 A limit?</p>		
Decision	The current to be considered will be the average current in the relevant operating period.		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°393
Sub cl.	Meeting	Agenda item	Document
29.2	21	4	OSM/HA(SEC)02/0
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>We have found situations in which a PCB has a high declared CTI (400 or higher) and when tested it passes the test in the component side of the PCB (not lacquered) but it does not pass the test in the printed circuit side (and SMD components side) (lacquered or varnished, typically in green colour).</p> <p>1 - Shall both sides have to comply with the relevant CTI (if the corresponding creepage distance requires it)?</p> <p>2 - On the other hand, it could be said that the varnish over the tracks of the PCB allows to consider that the creepage distance is not applicable, in such a way that the CTI would not be necessary. In our opinion, this consideration is not correct. Do you agree?</p> <p>3 - In any case, if the manufacturer wants to reduce the distances (below the limits for the relevant CTI and pollution degree), he could improve the pollution degree category by using a coating (annex J compliant) and so he might apply the corresponding column (pollution degree 1) in the tables 17 or 18. do you agree?</p> <p>4 - Even in the case that we receive a CTI certified raw material (PCB), the varnished side of the final mounted PCB should be tested for the relevant CTI (unless a certificate of it is provided). Do you agree?</p>		
Decision	<p>1- If the varnish covers completely the PCB over the soldered components, no CTI is required for the varnish. CTI is required for the PCB under the varnish, and the corresponding distances must be required (according to the varnish type 1 or 2).</p> <p>2- If there are relevant parts not varnished (for instance, soldering points), the varnish has to comply with the corresponding CTI (creepage distance) in addition to the requirements under the varnish for the PCB.</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°396
Sub cl.	Meeting	Agenda item	Document
19	21	5.3	OSM/HA(Sec)02/07
19	20	6.13	(SE)02/06
19	23	6.4.1	(SEC)05/09
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	Can VDR resistors be connected from live parts to earthed metal parts and , if yes, under which condition they can be accepted?		
Decision	VDR resistors between live parts and earth can be accepted if the appliance complies with the insulation requirements of the standard (i.e. clauses 13, 16 and 19) and the varistor has a weak part in any part of the circuit in series, as varistors are not reliable safety components and can short circuit at any time.		
Explanatory notes	CLC/TC61 agreed (November 2006). This decision has been updated after the 23rd OSM/HA meeting.		

ECS operational staff meeting household appliances decision sheet			OSM HA N°400
Sub cl.	Meeting	Agenda item	Document
11.8/19.13	21	5.4	SM/HA(Sec)02/07
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	Which part of the supply cord shown below should be measured for determining the temperature rise required for "Insulation of the supply cord" in Table 3 and 9 of Clause 11 and 19 respectively ?		
Decision	P1 shall be measured for the test of Clause 11 at the separation point of the supply cord inside the appliance. For the test of sub-clause 19, P1 shall also be measured. However, it shall be measured at highest point of temperature closest to the external surface of the appliance.		
Explanatory notes	In general, the maximum temperature rise of the insulation of the power supply cord is obtained for both cases at the point of entranceway in the appliance. However, in the test of Clause 19, the concerns are hazards, such as ignition of surroundings, rather than the deterioration of insulation between wires as in the test of clause 11. This decision is the same of CTL DSH 625		
 <p style="text-align: center;"><b>Cross Section of Supply cord</b></p> <p>Red colored: Current carrying part White colored: Insulation Green colored: Sheath</p>			

ECS operational staff meeting household appliances decision sheet			OSM HA N°403
Sub cl.	Meeting	Agenda item	Document
7.15	21	6.6	(FR)01/07
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>Some appliances are composed by a class III part supplied by a class II plug transformer through a removable cord connection. The clause 7.15 indicates that "The markings specified in 7.1 to 7.5 shall be on a main part of the appliance" We have seen some differences in the application of the markings between testing houses:</p> <p>1) Shall the symbol corresponding to the class II be applied ? On which part of the appliance ? 2) May the markings specified in 7.1 to 7.5 be placed on the transformer, with only the reference of model on the class III part ?</p> <p>Our proposal is to answer Yes to the 2 questions and to consider that the class II symbol shall be placed on the transformer, but we would want to have the opinion of other delegates.</p>		
Decision	<p>The majority agree that the marking may be in the power supply unit under the following conditions:</p> <ul style="list-style-type: none"> <li>- the appliance is delivered as one appliance with two parts, a power supply unit and a class III apparatus.</li> <li>- the power supply is specially designed for the class III apparatus and has the model or any other relevant identification of the class III part written on it.</li> <li>- the class III apparatus has the same model marking as the power supply unit and the instructions shall include that only the power supply unit delivered with it can be used.</li> <li>- special markings required in the relevant part 2 for the class III part shall be marked on it.</li> </ul>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°404
Sub cl.	Meeting	Agenda item	Document
19.5	21	6.8	(IT)01/07
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	Shall the heating element shown in the photo, and commonly used for defrosting heating element in refrigerators be considered as a "tubular sheathed or embedded heating element" and consequently is the test of sub- clause 19.5 applicable?		
Decision	Heating elements insulated by PVC, or other similar cable insulation is not considered to be tested according to 19.5 which refers to a special insulation that may be affected by humidity conditions.		
Explanatory notes			
			



ECS operational staff meeting household appliances decision sheet			OSM HA N°405
Sub cl.	Meeting	Agenda item	Document
19.11.2	22	5.2.1	(SEC)04/08
19.11.2	21	6.11	(ES)03/07
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>In 19.11.2 of IEC 60335-1 (Ed 4.2) the a) to g) failure conditions apply to circuits continuously connected to the supply mains, for example, stand-by circuits. The questions are in relation with the conditions that has to be assessed after 19.11.2 failure tests in stand-by mode operation: Are tests of clause 19.11.3 and 19.11.4 applicable after the first failure of 19.11.2 ?</p>		
Decision	<p>The tests in 19.11.2 have to be done in a specific order in such a way that first a hardware failure according to 19.11.2 is applied in the PEC and then secondly the relevant test of clause 19 protected by this PEC is carried out. It must be understood that if a hardware failure according to 19.11.2 is applied in the PEC under consideration causes a shut down then as per 5.3 it is meaningless to apply the relevant test of clause 19 protected by this PEC. However, it must also be understood that the PEC providing the protection during the relevant test of clause 19 will have to be tested according to 19.11.2 as an electronic circuit. If during this test a shut down occurs, 19.11.3 requires that this 19.11.2 test is repeated with a fault in the circuit that caused the shut down</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°406
Sub cl.	Meeting	Agenda item	Document
19.11.4.1.to 19.11.	21	6.12	(IT)02/07
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	Shall the tests from 19.11.4.1 to 19.11.4.8 be performed on appliances having an electromechanical switch in series with a switch with an OFF position obtained by electronic disconnection or a switch that can be placed in the stand-by mode?		
Decision	If the switch allows leaving the appliance in stand-by mode, then 19.11.4 is applicable		
Explanatory notes			


ECS operational staff meeting household appliances decision sheet			OSM HA N°407
Sub cl.	Meeting	Agenda item	Document
19.11.4.4	21	6.13	(FR)02/07
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>When performing the tests of clause 19.11.4.4 (surges), the standards requires to disconnect the heating elements. ("Earthed heating elements in class I appliances are disconnected during this test").</p> <p>In case where the heating element is so integrated in the appliance that the disconnection was not possible and, where, due to the construction and the operating control system, the manufacturer is not able to realise a specific sample operating with the heating element disconnected, when applying the test with the heating resistance connected, the insulation between earth and the heating element is destroyed, can the test be not performed?</p>		
Decision	<p>It was decided that the electromechanical components are not considered to be tested for failure in 19.11.4, but if the failure affects the electronics, then it shall comply with the requirement of the standard.</p>		
Explanatory notes			

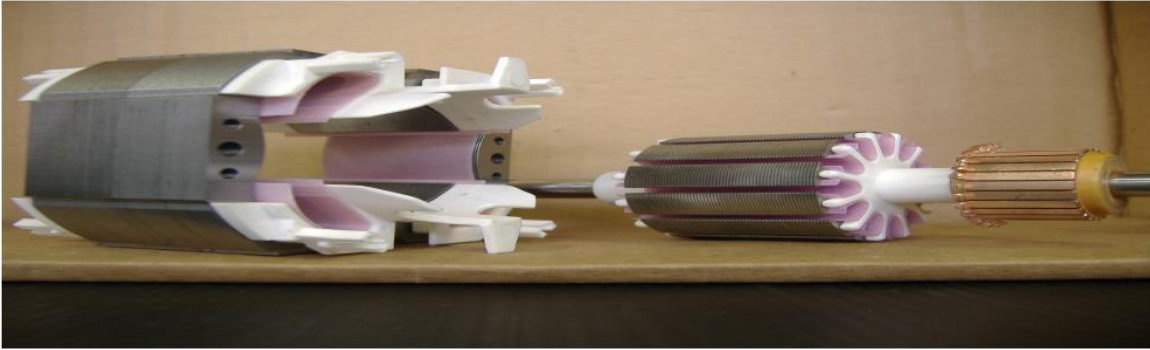
ECS operational staff meeting household appliances decision sheet			OSM HA N°408
Sub cl.	Meeting	Agenda item	Document
22.33	22	5.2.1	(SEC)04/08
22.33	21	6.14	(CH)05/07
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>There are many products on the market, where flow meter and cloudiness/dullness sensors are used and in which the reinforced insulation between water and live parts is used. These sensors are placed in water. In such applications (coffeemakers, dishwashers) it is possible to have contact with water. In all applications the water container are connected to protective earth. This means, cl. 22.33 is for appliances, such as coffeemaker with an instant heater connected to the earth not applicable. Same situation is in dishwashers, where the water container is earthed.</p> <p>Is in the descript cases sub-clause 22.33 the 2nd paragraph applicable?</p>		
Decision	Liquid in connection with earthed metal parts are not considered to be electrically accessible in case of insulation failure.		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°416
Sub cl.	Meeting	Agenda item	Document
20.2	22	5.2.1	(SEC)04/08
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	Which test probe is correct to check the protection for moving parts according to sub-clause 20.2? The clarification of the length of the stop face is necessary, due to its influences of the test result.		
Decision	Figure 1 is used for the test according to sub-clause 20.2 based on modified test probe B of 61032(1997) +Corrigendum1 (2003).		
Explanatory notes			
<p>Figure 1: A cylindrical test probe with a diameter of 50 mm and a length of 180 mm. It has a stop face at the top.</p> <p>Figure 2: A cylindrical test probe with a diameter of 50 mm and a thickness of 5 mm. It has a stop face at the top.</p>			

ECS operational staff meeting household appliances decision sheet			OSM HA N°417
Sub cl.	Meeting	Agenda item	Document
19.13	22	5.2.1	(SEC)04/08
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	Isn't it necessary to discriminate the limit for Insulation of the supply cord in Table 9 of 19 between those with T marking and without T marking?		
Decision	TC 61 recommendation shall be referred as follows: - Insulation of the supply cord without T marking, or with T marking up to 75 °C...150K - Insulation of the supply cord with T marking above 75 °C...T+75K		
Explanatory notes	The enquiry was originated based on the decision for agenda item 6a of 61/3211/RM and made according to 61/3114A/INF. This decision is the same of CTL DSH 626		

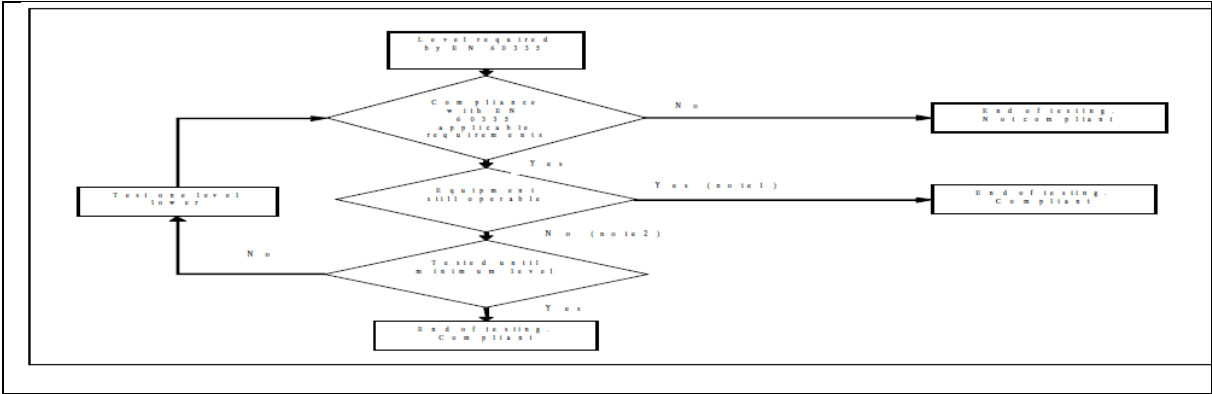


ECS operational staff meeting household appliances decision sheet			OSM HA N°
Sub cl.	Meeting	Agenda item	Document
8.1.5	22	6.2	(ES)07/08
Standard	EN 60335-1:2002 EN 60335-1:2012 EN 60335-2-23 ???	Date	2017-02-08
Question	<p>In the photograph below it is shown a hand dryer of those typically encountered in offices, restaurants, hotels etc. They usually have similar characteristics and mounting method:  The external cover has to be retired, the body of the apparatus is fixed to the wall, the cabling from the installation is passed through a hole in the back side of the apparatus and connected to the terminals of the apparatus.  It can be noticed that a printed circuit board with its components (live parts) gets accessible, besides the terminals, when the front cover is retired in order to connect the apparatus to the installation cabling.  Question: is this construction in agreement with the clause 8.1.5</p>		
Decision	The reference to "before the installation" in 8.1.5 means before removing covers that give access to electrical equipments.		
Explanatory notes			
			

ECS operational staff meeting household appliances decision sheet			OSM HA N°421
Sub cl.	Meeting	Agenda item	Document
11 / 19	22	6.3	(GB)05/08
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>We would like the opinion of the OSM members as to the class of insulation that should be assigned to a motor where different insulation class materials are used within its insulation system.</p> <p>We would also like you comments on the manufacturer's claim that the class B materials parts, as shown in the photographs, are only there to assist in the winding process and do not contribute to the insulation system, and once wound and varnished the coils become solid and cannot come in contact with the laminations even if the class B components were removed. They therefore classify the motor as class F.</p>		
Decision	<p>Unless it is possible to demonstrate that the material can be removed with no consequence for the operation or compliance of the motor, all insulation in contact with the winding have to be considered to define the insulation class and the lower class define the class of the each part.</p> <p>In the example shown in the photo, the rotor is considered class B or equivalent because white part is in contact with the winding then is used as insulation and the stator is considered class F or equivalent because white part is not in contact with the winding then is not used as insulation</p>		
Explanatory notes			
			



ECS operational staff meeting household appliances decision sheet			OSM HA N°428
Sub cl.	Meeting	Agenda item	Document
19.11.4.4	23	6.2	(SEC)04/09
19.11.4.4	22	6.6	(ES)04/08
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>Sub-clause 19.11.4.4 (surges) requires test level 3 for coupling from line to line and test level 4 for coupling from line to earth. The test has to be performed according to IEC 61000-4-5. Clause 5 of IEC 61000-4-5 "Test Levels" includes a paragraph that reads "All voltages of the lower test levels shall be satisfied". According to this paragraph it seems clear that (for surges) the compliance with a determined test level requires the testing and compliance with the lower test levels. On the other hand we haven't found a similar requirement in the test specifications of the other types of disturbances (different from surges) to test for lower levels than those specified. Questions: 1- Do you agree with the description of the situation? 2- Would you consider appropriate that the standard EN 60335-1 required the extension of the criteria for surges to other types of perturbations? 3- A sequence for the surges test is proposed in the following flowchart (next page) in order to reduce the testing where possible. Do you consider it adequate? Note 1: If the equipment complies with the requirements of the standard and is still fully operational, then it can be considered that lower level surges will be less stringent and they can be omitted. Note 2: If the equipment gets broken, it could happen that a lower level surge does not have enough energy to break the equipment but the energy is enough to put the equipment in an unsafe state.</p>		
Decision	<p>Q1- Yes Q2- No Q3- in principle agree with the flow chart. The test has to be done in all levels required but be done in a separate control if it is evident that this cover the test on the appliance, according to the note 2 of 5.2 and last paragraph of 5.3 of part 1.</p>		
Explanatory notes	<p>This question was proposed for discussion in the CTL in the last MT23 meeting in New Zealand on April 2008. The intention in the OSM/HA is to agree a common way for testing to be proposed to the CTL. Note 1: If the equipment complies with the requirements of the standard and it has not been broken, then it can be considered that lower level surges will be less stringent and they can be omitted. Note 2: If the equipment gets broken, it could happen that a lower level surge does not have enough energy to break the equipment but the energy is enough to put the equipment in an unsafe state Note 3: the decision Q3 has been modified according to the decision taken by the OSM/HA in Paris on 2009.</p>		



ECS operational staff meeting household appliances decision sheet			OSM HA N°432
Sub cl.	Meeting	Agenda item	Document
3.3.6, 22.7 and 22.	23	7.1	(BE)03/09
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>We have had discussion if one Y1 capacitor can be accepted as protective impedance or not.</p> <p>According to standard IEC 60335-1:2001, this construction is not acceptable. The same requirement is valid for tools, sub-clause 21.36 in standard IEC 60745-1:2006 requires two separate components.</p> <p>Some requirements in standard IEC 60335 is stricter than in component standards and in these cases we have to follow the appliance (end product) standard.</p> <p>Also in the standard of transformer IEC/EN 61558-2-6 this has been apparently been accepted in order to accept one Y1 capacitor. Based on the IEC 61558-1 19.8 during OSM LUM meeting.</p>		
Decision	<p>According to note 3 of 24.1 of part 1 if the safety extra low voltage can be accessible it should be required to comply with the requirements of double insulation (cl. 29)and cl. 22.42, protective impedance (two Y capacitors).</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°436
Sub cl.	Meeting	Agenda item	Document
3.8.3	23	9.1	(IT)05/09
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>Since the second edition of IEC 60335-1:1976 (HD 251.S2) up to now (EN 60335-1:2002) the definition of visibly glowing heating element has been never substantially changed:          "Heating element that is partially or completely visible from outside of the appliance and has a temperature of at least 650 °C when the appliance has been operated under normal operation at rated power input until steady stated conditions have been established".          Our understanding is that 650 °C stated in the definition is the temperature at which the heating live wire becomes "visibly glowing".          Now, in many appliances (room heaters, toasters, table ovens) heating elements incorporated in tube glass (e.g. halogen lamps) are used to produce heat and, considering the above definition, the temperature of the glass of the lamps does not reach 650 °C.          Our question is: is this type of heating element (halogen lamp) considered a visibly glowing heating element?          This issue seems to be clarified in A2 of EN 60335-2-30/,2003, note of sub-clause 3.106 (the heat lamp is not considered to be a visibly glowing heating element) but we are not sure if this note is only referred to ceiling mounted heat lamp appliance or to all room heaters having this type of heating element.          We would like to know the opinion of the delegates.</p>		
Decision	<p>The 650 °C is considered to be a condition for the wire that glows, not for the lamp surface, consequently an halogen lamp may be a visibly glowing heating element, but is it possible to have a room heater with this lamp and not considering it as a visibly glowing radiant heater if comply with the requirements of the other room heaters.</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°437
Sub cl.	Meeting	Agenda item	Document
8	23	9.2	(NL)03/09
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>Considering that since the original text mentions after the application of the test finger in with 20 N straight position: "If the probe then enters the opening, the test is repeated with the probe in angled position.", it means that the repeated test finger test is carried out with a force not exceeding 1 N (= without appreciable force).</p> <p>What is the force to be used for the repeated test finger test after having applied the 20 N with the test finger in straight position?</p>		
Decision	<p>The majority of interpretations is that after the test finger in straight position penetrates with 20 N the test finger can be angled trying to touch the relevant parts.</p>		
Explanatory notes			


ECS operational staff meeting household appliances decision sheet			OSM HA N°438
Sub cl.	Meeting	Agenda item	Document
19.7	23	9.4	(DE-VDE)02/09
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>Due to wear, broken or damaged metal parts such as springs, snap rings, gears, bearings etc. the transmission in the high pressure system can be blocked. With regard to a comprehensive risk analysis the mechanical blockage of the externally accessible spindle has to be simulated in order to ensure compliance with the requirements of section 19.</p> <p>At the verification of a damage event it was observed that the possibility of a blocking of the transmission has not been taken into account for the risk analysis and, as a result, the motor caught fire within very short time (&lt;15s). An appropriate protection device was not available at this appliance.</p> <p>Has to be considered the potential risk of a direct blocking of the transmission and therewith of the motor be taken into account when testing the appliance according to sub clause 19.7?</p>		
Decision	<p>If the second dashed item cl. 19.7 condition applies, the locking shall be done on the most unfavourable mechanical part of the transmission but not the rotor itself.</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°441
Sub cl.	Meeting	Agenda item	Document
29	23	6.2	(SEC)04/09
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>It is stated in clause 29.2 of EN 60335-1:2002 that insulating material in connection with required creepage distances has to be of material group I, II, IIIa or IIIb.</p> <p>For example, there may be 10 different relevant materials in a simple motor, all of which have to be tested unless the materials are already separately certified for CTI. Often we hear from customers that they have to deliver certificates or special prepared test samples in case the parts are not satisfactory for testing, due to size or shape.</p> <p>Is it always necessary to verify that the material group is at least of material group IIIb.?</p>		
Decision	Yes, it is always necessary to verify that the material group is at least of group IIIb.		
Explanatory notes	<p>The testing and getting the test samples is costly and time consuming. Therefore, it was necessary to clarify the procedure.</p> <p>This decision is similar to CTL-PDSH 0714 approved by CTL in Beijing on 2009.</p>		

ECS operational staff meeting household appliances decision sheet			OSM HA N°449
Sub cl.	Meeting	Agenda item	Document
11.8+Table 3	24	6.2	(SEC)05/10
Standard	EN 60335-1 :2002 EN 60335-1 :2012	Date	2017-02-08
Question	<p>IEC60335-1 clause 11.8 table 3 states:          "For supply cords without temperature rating the test limit is still and has always been 50K rise".          Lately a test lab has rejected a vacuum cleaner since they interpret the supply cord as being a cord with cord sheaths used as supplementary insulation.          Therefore the 35K rise limit was applied and consequently the appliance was rejected since the cord temperature was not meeting this limit.          What is the right temperature rise limit to apply for a standard supply cord not having a temperature rating? The cord used for this appliance is of the type HO5VV-F (CENELEC) which is similar to 60227 IEC 53.</p>		
Decision	<p>Based on the definition in the in IEC 60335-1 the temperature limit to apply is 50K rise, as it is mentioned in table 3, for the following reason:          - Cord sheaths are cords with an additional sheath on the supply cord and that additional sheath has to be regarded as supplementary isolation. The normal cord without that additional sheath has been used in all other already approved and certified appliances.          The 50K rise requirement is explicitly mentioned as the requirement for supply cords</p>		
Explanatory notes	<p>This interpretation of IEC 60335-1 was confirmed at the TC61 Meeting in Oslo, May 2009.          This decision is similar to CTL DSH 0742, approved by CTL Plenary Meeting on may 2010.</p>		



ECS operational staff meeting household appliances decision sheet			OSM HA N°451
Sub cl.	Meeting	Agenda item	Document
25.14	24	6.3.1	CLCTC61SEC1769
Standard	EN 60335-1:2002 EN 60335-1:2012	Date	2017-02-08
Question	<p>Subclause 25.14 of EN60335-1 requires flexing test in order to check the protection of the supply cord against excessive flexing where it enters the appliance, when the supply cord is moved while in operation.</p> <p>In some cases, the manufacturer proposes several cable suppliers with different references but same category and same section. (example: H03RT-F 0.75mm<sup>2</sup>)</p> <p>When the manufacturer proposes alternative cables with same category and same section, do we have to perform test of clause 25.14 on these alternative cables?</p> <p>If in some appliances can be assessed that different cables may gives different results in 25.14 and considering that is difficult in practise to repeat the test each time that the cable is changed and impossible if the connection Type is X, the majority opinion is that a more reproducible test for this requirement is needed, or a clarification of how the appliance can meet the requirement without considering the different cables (for example, no strands broken, or additional cycles, etc)</p>		
Decision	The majority is in favour not to restrict the certification to specific tested cables for the flexing test. All cable with the same characteristic may be accepted.		
Explanatory notes	<p>CLC/TC61 in Sofia on November 2009 took the following position:</p> <p>The problem was noted. FR NC was invited to make a specific proposal for modification to IEC/TC 61, giving evidence of different results had with different types of cables. During the meeting it was mentioned that one possible solution could be to have a limitation on the allowance of having broken strands, in particular for type X attachment</p>		

ECS operational staff meeting household appliances decision sheet			OSM HA N°457A
Sub cl.	Meeting	Agenda item	Document
25.2	24	7.9	(NO)02/2010
25.2	30	4.1.1	Questions between meetings
Standard	EN 60335-1:2002 EN 60335-1:2012 EN 60335-2-13	Date	2017-02-08
Question	<p>This appliance (see photo) consists of two independent parts mounted together into one appliance.</p> <p>There is no electrical connection between the two parts, and each part has its own supply cord and plug.</p> <p>The question is if this construction complies with the requirement of 25.2 : "Appliances, ..., shall not be provided with more than one means of connection to the supply mains".</p>		
Decision	<p>it is accepted that may be considered as two separate appliances. Consequently two rating plates have to be put on it.</p> <p>The construction is accepted since the unit is considered to be two separate appliances that can be easily removed and be used as stand alone and therefore accepted the use of 2 supply means.</p> <p>Consequently two rating plates have to be put on.</p> <p>If the 2 internal appliances cannot be operated as a stand-alone then the unit is considered as one appliance and therefore §25.2 applies (considered as a portable appliance )</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°461
Sub cl.	Meeting	Agenda item	Document
11.3+19.7	25	7.1.2	OSM HA (BE 01)
Standard	EN 60335-1 :2012		Date 2017-02-08
Question	<p>According IEC 60335-1 Temperature rises of windings are determined by the resistance method unless the windings are non-uniform or if it is difficult to make the necessary connections, in which case the temperature rise is determined by means of thermocouples.</p> <p>When will the temperature rise determined by the resistance method and in what cases by thermocouples ?</p>		
Decision	<p>Depending on the construction of the appliance and/or motor both type of measurement can be done.</p> <p>The resistance method is the reference method and should be performed if possible. This method takes preference.</p> <p>The measurement with thermocouple shall only be done if the resistance method is technically not possible(time to access the winding is too large, opening the construction has too much influence on the result..)</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°468
Sub cl.	Meeting	Agenda item	Document
22.31/26.11	25	7.1.8	OSMHA2011
Standard	EN 60335-1 :2002 EN 60335-1 :2012	Date	2017-02-08
Question	Wires connected by soldering for Class II appliances and class II constructions and soldered external conductors		
Decision	Hooking can not be accepted as only fixing mean in case where supplementary and/or reinforced insulation could be reduced and for external conductors. Supplementary fixing is required near the terminal (independently of the soldering)		
Explanatory notes	This decision sheet replace decision sheet 35		

ECS operational staff meeting household appliances decision sheet			OSM HA N°470
Sub cl.	Meeting	Agenda item	Document
24.1	26	7.1.4	FI 02/2012
Standard	EN 60335-1 :2002 EN 60335-1 :2012	Date	2017-02-08
Question	<p>”Components shall comply with the safety requirements specified in the relevant standards as far as they reasonably apply.”  Same Clause from the IEC 60335-1 Ed.5:  “Components shall comply with the safety requirements specified in the relevant IEC standards as far as they reasonably apply.”  Is it acceptable to approve component in the appliance that is tested and certified according eg. UL standard (or other relevant national standard).</p>		
Decision	<p>No ,only relevant IEC/EN/HD standard can be accepted.  UL standard can be accepted if the UL standard is equivalent to the IEC/EN HD standard</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°471
Sub cl.	Meeting	Agenda item	Document
22.42	28	5.1.3	TUV SUD 02/2013
Standard	EN 60335-1 :2012	Date	2017-02-08
Question	<p>Requirements for power supplies for SELV appliances using Y capacitor(s) as protective impedance related to different cases; no batteries involved; SELV is required due to accessibility of the secondary voltage.</p> <p>1.) Power supply with SELV output is integral part of an appliance  2.) Power supply with SELV output is external part of an appliance and connected by a fixed connected interconnection cable.  3.) Power supply with SELV output is external part of an appliance and connected by a SELV plug and socket  3a.) Power supply and class III appliance are sold in the same box; manual requires that only this particular power supply shall be used.  3b.) Power supply and class III appliance are sold in the same box; manual does not contain any requirements regarding power supplies.  3c.) Power supply and class III appliance are sold separately but from the same supplier; manual requires that only this particular power supply shall be used.  3d.) Power supply and class III appliance are sold separately but from the same supplier; manual does not contain any requirements regarding power supplies.  3e.) The class III appliance is sold as standalone product. The SELV power supply needed is referred to in the manual as:  <i>“Only to be used together with the power supply type XXX from YYYY”.</i>  3f.) The class III appliance is sold as standalone product. The SELV power supply needed is referred to in the manual as:  <i>“Only to be used together with a certified power supply with 12V/1A SELV”</i>  3g.) The class III appliance is sold as standalone product. The SELV power supply needed is referred to in the manual as:  <i>“Only to be used together with a IEC/EN 60335 certified power supply with 12V/1A SELV”</i>  Concerning the fact that IEC/EN 60335-1, clause 22.42 requires as protective impedance two Y capacitors in series and other product standards like IEC 60950-1 or IEC 61558-2-16 accepts only one Y-capacitor only IEC 60335 certified power supplies would be sufficient for a.m. cases.  Q1) What is required from the CBTL and the issuing NCB to ensure compliance with IEC/EN 60335-1, clause 22.42.</p>		
Decision	<p>1) acceptable if complying with §22.42  2) acceptable if complying with §22.42  3a) acceptable if complying with §22.42  3b) not acceptable according 7.12(The instructions for appliances having a part of class III construction supplied from a detachable power supply unit shall state that the appliance is only to be used with the power supply unit provided with the appliance.)  3c) acceptable if complying with §22.42  3d) not acceptable according 7.12 last paragraph.  3e) acceptable if complying with §22.42  3f) acceptable  3g) acceptable.</p>		

Explanatory notes	According to IEC/EN 60335-1, clause 22.42 a safe operation of a SELV class III appliance is possible only with a power supply using two Y capacitors as protective impedance. For certification of such appliances all possible measures have to be taken to ensure that only such power supplies are used.

ECS operational staff meeting household appliances decision sheet			OSM HA N°472
Sub cl.	Meeting	Agenda item	Document
19.9	28	5.1.16	LCOE 02/2013
Standard	EN 60335-1 :2012		Date 2017-02-08
Question	Q1) Range hood motors, fans, and "this" type of motors must be tested for clause 19.9 (running overload test)?		
Decision	Only motors that are intended to be remotely or automatically controlled or liable to be operated continuously shall comply to this clause. NOTE : liable to be operated continuously : products which are designed to run continuously		
Explanatory notes			




ECS operational staff meeting household appliances decision sheet			OSM HA N°473
Sub cl.	Meeting	Agenda item	Document
24	28	5.2.1	VDE15/03/2013
Standard	EN 60335-1 :2012	Date	2017-02-08
Question	<p>Q1) Are installation couplers acc. to IEC 61535 an appropriate provision for the Connection of tubular motors to the fixed installation? (see attached photo)</p> <p>Q2) If yes, Have installation couplers to be considered as part of the drive or as part of the fixed installation?</p>		
Decision	<p>Q1) Yes , only if they are part of the appliance. The female and male part needs to be delivered and are considered as part of the appliance. (construction component(male part) + supply cord(female part).) The component has to comply with the 60335 standard including §8, 30...</p> <p>Q2) part of the drive.</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°476
Sub cl.	Meeting	Agenda item	Document
7.12	30	5.5.1	VDE1/2016
Standard	EN 60335-1 :2012	Date	2017-02-08
Question	§7.12 requires that the instructions shall include a warning restricting the use of the appliance to children above 8 years. Some parts 2 modify this requirement by indicating others ages. When instruction of the appliance includes the warning limiting the use of the appliance with a limit different but higher than required by the standard (for example 14 years instead of 8 years). Is this instruction in line with the standard ?		
Decision	no , manufacturer can not modify the age requested in the standard. EN 60335-2-x defines the age otherwise EN 60335-1 applies		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°477
Sub cl.	Meeting	Agenda item	Document
24.1.4	29	5.1.5	BE01/2015
24.1.4	30	7.1	BE01/2015
Standard	EN 60335-1:2012	Date	2017-02-08
Question	<p>24.1.4 The relevant standard for automatic controls is IEC 60730-1 together with the relevant part 2.</p> <p>The number of cycles of operation for automatic controls that operate during the test of Clause 11 need not be declared for 6.10 and 6.11 of IEC 60730-1, if the appliance meets the requirements of this standard when they are short-circuited. Does this mean that a appliance which meets the requirement of 19.4 (short-circuit of the automatic control) the automatic control needs not to be verified according §24.1.4?</p> <p>What about a electronic circuit with a relay for the switching action?</p> <p>If complies with 19.14, does it then need to be retested acc. 24.1.4?</p> <p>We have an electronic circuit as thermal regulation for §11. We have performed 19.4 and 19.14, which short-circuits the automatic control (required in the standard).</p> <p>Does the above mean we do not have to check 24.1.4?</p> <p>Is 24.1.4 only applicable for appliance where §19.4 is not applicable?</p>		
Decision	<p>Cycles in §24.1.4 in general are not applicable for electronic circuits (except to the relays incorporated).</p> <p>When applicable, the number of cycles of operation for automatic controls that operate during the test of Clause 11 need not be tested as requested for 6.10 and 6.11 of IEC 60730-1, if the appliance meets the requirements of this standard when they are short-circuited.</p> <p>“The requirements of this standard” written in the above means complete standard (incl. §11). If the appliance pass §11 and the other standard clauses with the control short-circuited, no requirements for cycles are applicable.</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA 478-2017
Sub cl.	Meeting	Agenda item	Document
3.4.2 7.12 22.56	OSMHA 2017	4.2.1	UL-DEMKO 07-12-2016
Standard	EN 60335-1:2012	Date	2017-04-21
Question	<p>Cl. III appliance under the scope of EN 60335-1 is equipped with a USB-type connector for the connection to the power supply. Although a power supply complying with 60335 SELV requirements (61558-2-16 + cl. 22.42 etc) we are having some doubts about this construction. Most of the power supplies are designed to/complying with EN 60950 (at best...) and due to the broad use of such power supplies for the various mobile devices (tablets, phones etc) several pieces of such power supplies are found in almost every home and as such there is a very high likelihood of the 60335-appliance ending up being connected to a EN 60950 compliant power supply rather than the intended device (complying with 60335/61558). This would lead to an appliance no longer complying with EN 60335 and a potential for a compromise of safety in terms of 60335.</p> <p>What is the opinion of OSM HA ¿</p>		
Decision	<p>This is covered by</p> <ul style="list-style-type: none"> <li>- <b>§3.4.2 definition</b> ,</li> <li>- §7.12 (The instructions for appliances having a part of <b>class III construction</b> supplied from a <b>detachable power supply unit</b> shall state ...The instructions for <b>class III appliances</b> shall state .....,and</li> <li>- §22.56(A2)</li> </ul> <p>This kind of appliance.(cl.II appliance with a detachable cl.III construction with only USB supply connector) can be accepted since they are covered by the requirements of EN 60335-1 (in particular see above requirements).</p> <p>C I.III appliance with only USB supply connector can not be accepted. (see § 22.56)</p> <p>IEC 60335-1:A2</p> <p>Appliance which requires a connection to SELV transformer can not be regarded as cl.III appliance since according §22.56 it always has to be supplied with a detachable power supply part, in which case it becomes a cl.II appliance with a cl.III construction.(§6.1)</p> <p>But a battery operated appliance can be considered as cl.III appliance.</p> <p>The decision to mark the appliance is up to the manufacturer .It is not mandatory. (§7.1)</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N°01/2019
Sub cl.	Meeting	Agenda item	Document
8.2	....	5.4.1	OSMHA BE 04/2018
Standard	EN 60335-1 : 2012 +A11 :2014+A13 :2017+A1 :2019+A2:2019+A14:2019	Date	2019/11/21..
Question	<p>We have a question related with class II appliance&amp; class II construction. A client wants to produce portable induction hob, The appliance have ventilation openings showed below, The appliance is class II, and has plastic enclosure. IEC 60335-1 clause 8.2 says</p> <p><b>8.2 Class II appliances and class II constructions</b> shall be constructed and enclosed so that there is adequate protection against accidental contact with <b>basic insulation</b> and metal parts separated from <b>live parts</b> by <b>basic insulation</b> only.</p> <p>It shall only be possible to touch parts which are separated from <b>live parts</b> by <b>double insulation</b> or <b>reinforced insulation</b>.</p> <p><i>Compliance is checked by inspection and by applying test probe B of IEC 61032 in accordance with the conditions specified in 8.1.1.</i></p> <p><i>Test probe B of IEC 61032 is applied to built-in appliances and fixed appliances only after installation.</i></p> <p>And EN 60335-1 clause 8.2 says</p> <p><del>8.2</del> <b>Modification</b></p> <p>In the third sentence, replace "test probe B of EN 61032" by "test probes of EN 61032".</p> <p><del>18</del> In the fourth sentence, replace "test probe B of EN 61032 is" by "test probe B and probe 18 of</p> <p>Below enclosure openings allows to enter prob 17 (0,5 mm diameter wire) of EN 61032(test probes), According to IEC 60335-1 this is ok, but according to EN 60335-1 this is not allowed</p>  <p>isn't it.?</p>		
Decision	the conclusion is correct because in Am2 the test probes B and 18 are considered in according to clause 8.1.1. The test probe 17 is not considered		
Explanatory notes	Confirmed by CLC TC 61 2018		

ECS operational staff meeting household appliances decision sheet			OSM HA N°02/2019
Sub cl.	Meeting	Agenda item	Document
7.10	....	5.1.7	OSM HA IT01/2018
Standard	EN 60335-1 : 2012 +A11 :2014+A13 :2017+A1 :2019+A2:2019+A14:2019	Date	2019/11/21
Question	<p>We have to test an appliance whose operation (start and stop) is commanded through voice control by the user pronouncing appropriate words. The appliance recognizes the vocal commands till a considerable distance.</p> <p>Q1) Should the appliance give an audible and visual feedback so that it can be seen and heard by the user at that distance?</p> <p>Q2) If the answer to Q1 is YES: what about the visual feedback, if the user is out of sight of the appliance?</p>		
Decision	<p>Q1 - yes, the voice control is considered remote communication and remote operation (in accordance to the Wellington decision). See clause 3.1.12 of EN 60335-1 ed 5.2 (remote operation definition)</p> <p>Q2 - No, because the voice control shall not be compliant with clause 7.10 but must be compliant with clause 22.51</p>		
Explanatory notes	<p>Answer confirmed by CLC TC 61 2018</p> <p>See also minutes of 2016 OSM/HA meeting, item 6.4, about remote control: <i>Decision: Remote control have to comply with the same requirements as a on/off.</i></p> <p>In case of a voice control, that operates out of sight of the appliance, there isn't any device that could satisfy the requirement relevant to visual feedback and the audible feedback should have to be very loud.</p>		

ECS operational staff meeting household appliances decision sheet			OSM HA N°03/2019
Sub cl.	Meeting	Agenda item	Document
10	....	5.1.15	OSMHA BE/04/2019
Standard	EN 60335-1 : 2012 +A11 :2014+A13 :2017+A1 :2019+A2:2019+A14:2019	Date	2019/11/21
Question	What is the best practice of measuring the power input of appliances having electronic controls. The measurement of the power input can have different results based on the measurement methods.		
Decision	According 61/5396e/INF the sampling rate for typical input current from a 50 Hz supply to get sufficient accuracy of the rms value of current should be sampled at interval of no more than 0,2 ms (5000 Hz).		
Explanatory notes	<p>See also Power input guide measurement-61_5396e_INF</p> <p>The problem is that this method is very theoretical , and time consuming. Furthermore for the following §11-19 test (1.15 x , 1,24 x Pn) , this will be very complicated.(since you will have to verify the same criteria).</p> <p>It is a complicated issue , for something which should be simple. Certainly considering we are working with calibrated test equipment.</p>		

ECS operational staff meeting household appliances decision sheet			OSM HA N°05/2019
Sub cl.	Meeting	Agenda item	Document
22.5	....	6.1.2	ES-01 AG28 OSM HA 2019
Standard	EN 60335-1 : 2012 +A11 :2014+A13 :2017+A1 :2019+A2:2019+A14:2019	Date	2019/..
Question	<p>§22.5 requires performing the test of 19.11.4.3 and 19.11.4.4 before the discharge test.</p> <p>In clause 19, for the tests of 19.11.4, it is required to disconnect surge protective devices.</p> <p>Shall surge protective devices be disconnected in 22.5 before the tests of 19.11.4.3 and 19.11.4.4?</p>		
Decision	<p>For performing the tests of 22.5 Surge protective devices shall be disconnected before performing the tests of 19.11.4.3 and 19.11.4.4 (unless they incorporate spark gaps),</p>		
Explanatory notes			



ECS operational staff meeting household appliances decision sheet			OSM HA N°01/2020
Sub cl.	Meeting	Agenda item	Document
27.3	OSMHA 2019	5.1.7	FR/04/2019
Standard	EN 60335-1:2012		Date 2019/03/27
Question	<p>We have to test an appliance whose operation (start and stop) is commanded through voice control by the user pronouncing appropriate words. The appliance recognizes the vocal commands till a considerable distance.</p> <p>Q1) Should the appliance give an audible and visual feedback so that it can be seen and heard by the user at that distance? Q2) If the answer to Q1 is YES: what about the visual feedback, if the user is out of sight of the appliance?</p>		
Decision	<p>Q1 - yes, the voice control is considered remote communication and remote operation (in accordance to the Wellington decision). See clause 3.1.12 of EN 60335-1 ed 5.2 (remote operation definition) Q2 - No, because the voice control shall not be compliant with clause 7.10 but must be compliant with clause 22.51</p>		
Explanatory notes	Confirmed by CLC TC 61		

ECS operational staff meeting household appliances decision sheet			OSM HA N° 03/2020
Sub cl.	Meeting	Agenda item	Document
8.2	OSMHA 2018	5.4.1	BE-04-2018
Standard	EN 60335-1 :2012		Date 2019/03/27
Question	<p>We have a question related with class II appliance&amp; class II construction. A client wants to produce portable induction hob, The appliance have ventilation openings showed below, The appliance is class II, and has plastic enclosure. IEC 60335-1 clause 8.2 says</p>		

**8.2 Class II appliances and class II constructions** shall be constructed and enclosed so that there is adequate protection against accidental contact with **basic insulation** and metal parts separated from **live parts** by **basic insulation** only.

It shall only be possible to touch parts which are separated from **live parts** by **double insulation** or **reinforced insulation**.

*Compliance is checked by inspection and by applying test probe B of IEC 61032 in accordance with the conditions specified in 8.1.1.*

*Test probe B of IEC 61032 is applied to **built-in appliances** and **fixed appliances** only after installation.*

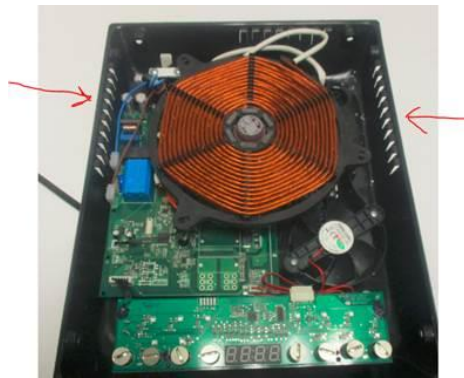
And EN 60335-1 clause 8.2 says

~~8.2~~ **Modification**

In the third sentence, replace "test probe B of EN 61032" by "test probes of EN 61032".

**NOTE** In the fourth sentence, replace "test probe B of EN 61032 is" by "test probe B and probe 18 of EN 61032 are".

Below enclosure openings allows to enter prob 17 (0,5 mm diameter wire) of EN 61032(test probes), According to IEC 60335-1 this is ok, but according to EN 60335-1 this is not allowed isn't it.?



Decision	
Explanatory notes	


ECS operational staff meeting household appliances decision sheet			OSM HA N°05/2020
Sub cl.	Meeting	Agenda item	Document
8.1.4, 22.27, 22.42	OSMHA2019	5.1.5	DEKRA/01/2019
Standard	EN 60335-1 :2012	Date	2019/03/29
Question	Protective impedance:  Clause 8.1.4:		


	<p>If protective impedance is used, the current between the part and the supply source shall not exceed 2 mA for d.c., its peak value shall not exceed 0,7 mA for a.c.</p> <p>Clause 22.27: Parts connected by protective impedance shall be separated by double insulation or reinforced insulation.</p> <p>Clause 22.42: Protective impedance shall consist of at least two separate components. If any one of the components is short-circuited or open-circuited, the values specified in 8.1.4 shall not be exceeded. Component impedances shall be unlikely to change significantly during the lifetime of the appliance. <i>Compliance is checked by inspection and by measurement and if necessary, for resistors and capacitors by the following tests. Resistors are checked by the test of 14.1 a) in IEC 60065 and capacitors are checked by the tests for class Y capacitors in IEC 60384-14 appropriate to the rated voltage of the appliance</i></p> <p>What insulation requirements apply for the individual components out of which a protective impedance consists? E.g. would it be acceptable if one of the components in a protective impedance provides RI while the second component provides FI only?</p>
Decision	<p>The components shall comply with §22.27. Therefore each component need to be at least basic insulated in combination with reinforced or supplementary insulation for the second component.</p> <p>The protective impedance is for protection against electric shock purpose (in line §8.1.4) .So functional insulation can not be applied (since acc§3.3.5 functional insulation is only necessary for proper functioning of the appliance and not for protection against electric shock).</p>
Explanatory notes	<p>According 22.42 a protective impedance shall consist of 2 components. Clause 22.27 states that protective impedance shall provide double insulation (DI) or reinforced insulation (RI). This however means that the two components in series from which the protective impedance is made up, shall provide DI/RI. The insulation requirement for each individual component of the protective impedance is not clearly described in the standard.</p>

ECS operational staff meeting household appliances decision sheet			OSM HA N° 06/2020	
Sub cl.	Meeting	Agenda item	Document	
10	OSM HA 2019	5.1.15	BE/04/2019	
Standard	EN 60335-1/2012	Date	2019/..	
Question	<p>We have a discussion with a testing lab regarding the measurement of the power input for straightener.</p> <p>These appliance have electronic regulations. When measuring the power input we can have different results based on the measurement methods. Especially based on the power input guide measurement-61_5396e_INF</p> <p>The testing lab will proceed as following :</p>			


	<p>They performing the measuring and then create an excel with results. Then they check with a sorting tool all the same values of which they than check the total of number of measurement .If the total number of same values is more than 10% of the total measurement than this value is to be considered.So if we take the simple mean value we would have about 40 W , while with the above method it would be 80 W.The method does not consider the fact that you have peak , followed by 0 values (or low values). The problem is that this method is very theoretical , and time consuming. Furthermore for the following §11-19 test (1.15 x , 1,24 x Pn) , this will be very complicated.(since you will have to verify the same criteria).It is a complicated issue , for something which should be simple. Certainly considering we are working with calibrated test equipment.</p>
Decision	<p>According 61/5396e/INF the sampling rate for typical input current from a 50 Hz supply to get sufficient accuracy of the rms value of current should be sampled at interval of no more than 0,2 ms (5000 Hz).</p>
Explanatory notes	

ECS operational staff meeting household appliances decision sheet			OSM HA N° 07/2020
Sub cl.	Meeting	Agenda item	Document
22.5	OSMHA 2019	6.1.2	ES01_2019
Standard	EN 60335-1 :2012	Date	2020/10/14
Question	<p>22.5 requires performing the test of 19.11.4.3 and 19.11.4.4 before the discharge test.  In clause 19, for the tests of 19.11.4, it is required to disconnect surge protective devices.  Shall surge protective devices be disconnected in 22.5 before the tests of 19.11.4.3 and 19.11.4.4?</p>		
Decision	<p>Surge protective devices shall be disconnected before performing the tests of 19.11.4.3 and 19.11.4.4 (unless they incorporate spark gaps),</p>		
Explanatory notes			


ECS operational staff meeting household appliances decision sheet			OSM HA N° 08/2020
Sub cl.	Meeting	Agenda item	Document
22.17	OSMHA 2020	5.1.6	IMQ-04-2020
Standard	EN 60335-1:2012 +A11:2014+A13:2017 +A1:2019 +A2:2019 +A14:2019	Date	2020-10-21
Question	<p><i>Spacers intended to prevent the appliance from overheating walls shall be fixed so that it is not possible to remove them from the outside of the appliance by hand or by means of a screwdriver or a spanner. Compliance is checked by inspection and by manual test.</i></p> <p>If, during the manual test, it's possible to remove the spacers, then we carry out the heating test of clause 11 with the spacers removed from the appliance and measuring the walls' temperature rise in this condition. Do you think this is applicable also for feet (see an example in the photo below) and the consequent temperature rise of the floor?</p> 		
Decision	No, Feet are not considered as spacers, therefore the feet are not to be removed.		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N° 01/2021
Sub cl.	Meeting	Agenda item	Document
22.12	OSMHA 2021	5.1.8	FR/01/2021
Standard	EN 60335-1:2012 +A11:2014+A13:2017 +A1:2019 +A2:2019 +A14:2019	Date	2021-10-07
Question	<p>§22.12 Handles, knobs, grips, levers and similar parts shall be fixed in a reliable manner so that they will not work loose in normal use if loosening could result in a hazard. [...]</p> <p><i>Compliance is checked by inspection, by manual test and by trying to remove the part by applying an axial force of 15 N or 30N.'</i></p> 		
Decision	30 N since an axial pull (since it can be gripped) is likely to be applied in normal use based on the pictures shown. In order to define when an axial pull is likely to be applied , §22.11 can be considered (10mm in the direction of the removal).		
Explanatory notes	It is not clear in the standard , what a reliable maaner is and when loosening could result in a hazard.		

ECS operational staff meeting household appliances decision sheet			OSM HA N° 02/2021
Sub cl.	Meeting	Agenda item	Document
25.7,25.15	OSMHA 2021	5.1.1	CERTIF/01/2021
Standard	EN 60335-1:2012 +A11:2014+A13:2017 +A1:2019 +A2:2019 +A14:2019	Date	2021-10-07
Question	<p><u>Q1</u>: If an appliance has water containers (e.g. coffee machines, vacuum cleaners, liquid blenders) the measurement of the weight of the appliance (for clauses 25.7 and 25.15), shall be done with the containers filled with their rated capacity?</p> <p><u>Q2</u>: Appliances with other types of loads (e.g. oil in deep fat fryers or flour + water in food processors) shall be weighted loaded?</p>		
Decision	<p>Q1) for §25.14 and 25.7 the mass of the appliance is determined with any container filled to their rated capacity. (the worst possible condition in normal use (§5.5)) and then tested accordingly</p> <p>Q2) see Q1</p>		
Explanatory notes			

ECS operational staff meeting household appliances decision sheet			OSM HA N° 02/2021
Sub cl.	Meeting	Agenda item	Document
29.1,29.2	OSMHA 2021	5.9.2	SIQ/01/2021
Standard	EN 60335-1:2012 +A11:2014+A13:2017 +A1:2019 +A2:2019 +A14:2019	Date	2021-10-07
Question	<p>What are required clearances and creepage distances inside the heating elements including different altitudes?</p> <p>§ 29.1.1. : clearances at the terminals of tubular sheathed heating elements may be reduced to 1,0 mm if the microenvironment is pollution degree 1.</p> <p>Can this be applied also for distances inside the tubular sheathed heating element between heating wire and the sheath of the heating element?</p>  <p>Photo of the construction</p> <p>Usually, the distance between the wire and the sheath of heating element is min. 1,5 mm which is minimal distance for clearance and creepage for pollution degree 1 for altitude up to 2000 m. For altitude up to 4000 m the min. clearances need to be at least <math>1,5 \times 1,29 = 1,935</math> mm.</p> <p>Shall this distance be maintained inside the tubular sheathed heating element, between heating wire and the sheath or it is sufficient that reduced distance of 1,29 mm is assured. The value of 1,29 mm is increased value of 1,0 mm, for altitude up to 4000 m, for terminals of tubular sheathed heating elements</p>		
Decision	Inside the tubular heating element (based on the photo) , there are no cr/cl. distances only distance through insulation		
Explanatory notes			



ECS operational staff meeting household appliances decision sheet			OSM HA N° 01/2022
Sub cl.	Meeting	Agenda item	Document
7.13/7.10	OSMHA 2022	5.1.3	FR/04/2022
Standard	EN 60335-1:2012 +A11:2014+A13:2017 +A1:2019 +A2:2019 +A14:2019	Date	2022-04-26
Question	<p>It is a household appliance with the controls positions marked “Push”, Pulse” and numbers from 0 to 4, as shown on the picture. The requirement of the clause 7.13 is as follows: “Instructions and other text required by this standard shall be written in an official language of the country in which the appliance is to be sold.”</p> <p><b>Questions:</b> Should those markings on the appliance be in official language of the country in which the appliance is to be sold? Or, it is enough that the meaning is explained in the instructions manual?</p> 		
Decision	<p>If a position of a switch is marked by a word, in order to comply with §7.10, this word is considered as text required by the standard. Consequently shall comply with §7.13</p> <p>Rationale : If the marking of a switch that may give rise to a hazard when operated , indicates the part of the appliance which it controls, it shall be comprehensible without a knowledge of foreign languages as stated under §7.9 , Only the official language or symbols shall be used (which are explained in the instructions).</p> <p>Words are not always considered as equal to letters or symbols , since symbols and letters will force the user to read the instructions in the official language, while words could be misinterpreted and not consulted in the instructions</p>		
Explanatory notes			