

CTL DECISION SHEET

Standard(s): CISPR 14-1 /2002	Sub clause(s): 7.3.4.11	DSH: 594
Subject: Discontinuous disturbances produced by iron with boiler station.	Key words: - steam iron - clicks rate - mode of operation	Decision approved by the CTL plenary meeting 2007
<p>Question: How to consider the case of a steam iron with boiler station concerning the test of discontinuous interferences CISPR14-1:2002? :</p> <p>The clause 7.3.4.11 defines the testing conditions for irons (dry or steam), but there are no precisions regarding the boiler part actuated manually.</p> <p>The standard defines in clause 4.2.3.1 that individual switching operations are generally not taken into account for this test, and gives requirements in clauses 7.2.3 & 7.3.2.4 of specific apparatus for which repetitive switching manual operations are taken into consideration (sewing machines, calculating machines, soldering equipment, etc.). But nothing is said about steam boiler station of iron.</p> <p>Do we have to apply strictly the standard (only clause 7.3.4.11) or to test the boiler station with a cycle of manual operation for steam generation ?</p> <p>Proposal: This appliance has to be test with iron settled at the max temperature (worst case and according sub-clause 7.3.4.11), boiler switched on and making 10 second of steam production and 10 second of stand by (according to normal use stated in IEC 60335.2.3).</p> <p>Explanatory Notes: CTL- ETF 10 considers that the boiler part should be tested. The procedure for starting switches, speed controls etc. is described in sub-clause 7.2.3 where the click rate is determined for a number of switches. Since this kind of boiler is not mentioned, one can compare the procedure for other equipment and find that in most cases, the maximum operating switching rate shall be used..</p> <p>The section 4.2.3.1 seems not applicable as the use is restricted to:</p> <ul style="list-style-type: none"> a) the purpose of mains connection or disconnection only; b) the purpose of programme selection only; c) the control of energy or speed by switching between a limited number of fixed positions; d) the changing of the manual setting of a continuously adjustable control such as a variable speed device for water extraction or electronic thermostats, is to be disregarded for the purpose of testing the appliance for compliance with the limits of radio disturbance set out in this standard. <p>According the standard, if the type of appliance under test (iron + steam boiler) is not listed into the tables A1 and A2, the modality is indicated in § 7.4.2.2.</p> <p>According this paragraph, the modality is:</p> <ol style="list-style-type: none"> 1) searching of maximum rate of click (worst case condition): searching of worst case of iron temperature, searching of worst case of steam distribution time, etc... 2) N is calculated from the formula: $N = n1/T$, where n1 is the number of clicks and T is the observation time in minutes 		

