

LVD ADCO

Recommendation

May 2010

Regarding hot, touchable, non-functional surfaces

At the 24th meeting of the LVD Administrative Cooperation working group (ADCO) held in Luxembourg on December the 1st – 2nd 2009, Member States' Authorities agreed to set up a working group to realize a Recommendation regarding hot, touchable, non-functional surfaces.

The Recommendation is intended to assist economic operators in understanding how such products should be expected to be viewed by market surveillance authorities.

The Recommendation is within the framework of the current Directive and as such does not represent any change in either the Directive or in any implementing National Legislation.

I. Recommendation

The LVD ADCO Group regards CENELEC Guide 29 as state of the art. Hence, for products in the scope of the Low Voltage Directive, the national market surveillance authorities are applying CENELEC Guide 29 to assess the risk posed by hot, touchable, non-functional surfaces.

With a view to establish more certainty in conformity assessment also for manufacturers when placing products on the market, the LVD ADCO Group wishes to point out that the essential safety requirements of the Low Voltage Directive in respect of hazards posed by hot, touchable, non-functional surfaces on electric equipment must be met. By applying the requirements of CENELEC Guide 29 this objective can be achieved.

II. Background

In 1999 and 2000 there were several complaints in Europe about products with hot touchable non-functional surfaces. One of the hazards posed by using these products was burns to the skin that came into contact with the hot surfaces.

In order to take into account these facts, the relevant standard EN 60335-2-9 at the list of harmonised standards was supplemented with a note, restricting its presumption of conformity in respect of paragraph 11 (temperatures). The EU Commission's opinion of 30th March 2000 (2000/C 104/07) was published simultaneously. The EU Commission's opinion was preceded by a safeguard clause issued by a Member State in the year 1999, which was confirmed by the other Member States. In the year 2000, the standardisation organisation CENELEC was informed of the facts, in order to remedy the deficiencies identified in standards EN 60335-1 and EN 60335-2-9.

It should, however, be pointed out that application of the standard is in principle voluntary and that the requirements of the Directive (Directive 73/23/EC at that time and Directive 2006/95/EC, currently) must be fulfilled. Directive 2006/95/EC defines that, pursuant to Annex I, point 2 a) and b) of the aforementioned Directive, measures of a technical nature should be prescribed for technical equipment, so that persons and domestic animals are adequately protected against the dangers of physical injury or other harm which might be caused by direct or indirect contact, and that measures of a technical nature should be prescribed to ensure that temperatures, arcs or radiation which might cause a danger are not produced.

In spite of this, repeatedly incidents happened in the following period with products which touchable non-functional surface temperatures caused users to suffer burns.

As no adjustment of the standards had been undertaken by the standardisation body CENELEC, the EU Commission issued mandate M346 to CENELEC in 2004. The mandate was to provide the basis for drawing up a standard or a guide for risk assessment of hot touchable, non-functional surfaces. The guide to be elaborated was to be addressed to the standardisation body (standards originator) and manufacturers of such products.

In 2002, 2003 and 2006 further safeguard clause notifications were drawn up in respect of products with hot, touchable, non-functional surfaces. It made it clear that not only products covered by standard EN 60335-1 (household appliances), but also products within the scope of standard EN 60598-1 (luminaires) were affected by the problems of hot, touchable, non-functional surfaces.

In 2007 the "CENELEC Guide 29, Temperatures of hot surfaces, likely to be touched - Guidance document for Technical Committees and Manufacturers" was published and released.

The Guide makes the following specification: "The present Guide has been developed in response to EC Standardisation Mandate M/346 in the field of the Low Voltage Directive 2006/95/EC addressing surface temperatures of accessible non-functional surfaces. The CENELEC Technical Board approved this Guide in April 2007".

The necessary revision of the standards under the Low Voltage Directive has not yet advanced to a stage where the identified lacunae have been removed from the various standards affected (EN 60335-2-2, EN 60335-2-9, EN 60335-2-13; EN 60335-2-23, etc.). Even standards under revision or amending that do not implement or do not extensively implement the concerns contained in the Guide already have still failing to meet the requirements of the Low Voltage Directive. Standard EN 60335-2-9 A12, which is completely inadequate, may be cited as an example here.

Note:

When a standard does not exist or in the case of hazards that are not addressed in a Harmonised standard or are not adequately handled or covered by this standard there is no possible presumption of conformity when this standard is applied for a product containing one or more of these hazards. Hence, corresponding risk analyses must be performed in respect of these hazards, in order to comply with the protection objectives of the relevant Directive(s).

Example: Standard EN 60335-2-9 A12 excludes various surfaces for assessment in respect of temperature limit values for the physical/ medical burn threshold, specifies limit values above the physical/ medical burn threshold or increases limit values above the physical/ medical burn threshold, depending on the adjustable baking temperature. Hence, for the surfaces that have not been assessed or have been incorrectly assessed, there is no presumption of conformity in respect of compliance with the basic safety requirements of the Low Voltage Directive with regard to the existing burn hazard on hot, touchable, non-functional surfaces of electrical equipment. A separate assessment in respect of the aforementioned hazard therefore needs to be carried out in order to furnish proof of conformity with the requirements of the Directive.