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Energy consumption of vending machines

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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English Version

Energy consumption of vending machines

Consommation d'énergie des distributeurs automatiques

Energieverbrauch von Verkaufsautomaten

This European Standard was approved by CENELEC on 2018-07-23. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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EN 50597:2018 (E)

European foreword

This document (EN 50597:2018) was prepared by CLC/TC 59X, "Performance of household and similar electrical appliances", WG11, "Power consumption of vending machines".

The following dates are fixed:

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This document supersedes EN 50597:2015.

standards conflicting with this document

EN 50597:2018 includes the following significant technical changes with respect to EN 50597:2015:

The ambient test conditions have been harmonised with those in other related standards. The order of tests has been modified to make the testing less time consuming and more efficient. This revised standard includes an extra category of machine: one divided vertically into two compartments each with different functions.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

STN EN 50597: 2019

EN 50597:2018 (E)

Introduction

Vending machines are included in the European Commission's eco-design study on ENER Lot 12. It is foreseen that an Ecodesign Regulation implementing Directive 2009/125/EC on the eco-design of energy-related products will be adopted in the future, and a corresponding standardization request will be issued to CEN and CENELEC accordingly. The development of the present European Standard was deemed necessary in order to anticipate the above-mentioned developments.

1 Scope

This document defines methods for the measurement of energy consumption of vending machines, whether or not fitted with refrigerating appliances.

The standard applies (but is not limited) to the categories shown in Table 1 of machine types.

Table 1 — Vending machine categories

CATEGORY	MACHINE TYPE		
1	Refrigerated closed fronted can and bottle machines where the products are held in stacks		
2	Refrigerated glass fronted can and bottle, confectionery & snack machines		
3	Refrigerated glass fronted machines entirely for perishable foodstuffs		
4	Refrigerated dual-temperature glass fronted machines		
5	Confectionery and snack machines that are not refrigerated		
6	Combination machines consisting of two different categories of machine in the same housing and powered by one chiller		

The following types of vending machine are excluded from this standard:

- drink machines dispensing hot and/or cold drinks into cups;
- machines with a food heating function;
- vending machines operating at temperatures below 0 °C; or
- any machine including one or more of these compartments.

For verification purposes, it is essential to apply all of the tests specified to a single unit. The tests may also be made individually for the study of a particular characteristic.

This standard does not deal with any characteristics of machine design other than energy consumption.

Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50564, Electrical and electronic household and office equipment — Measurement of low power consumption

EN 60335-1, Household and similar electrical appliances — Safety — Part 1: General requirements (IEC 60335-1)

EN 60335-2-75, Household and similar electrical appliances — Safety — Part 2-75: Particular requirements for commercial dispensing appliances and vending machines (IEC 60335-2-75)

ISO 5149-2, Refrigerating systems and heat pumps — Safety and environmental requirements — Part 2: Design, construction, testing, marking and documentation

ISO 5149-3, Refrigerating systems and heat pumps — Safety and environmental requirements — Part 3: Installation site