

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Energy consumption of vending machines

Consommation d'énergie des distributeurs automatiques



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ELECTROTECHNICAL
COMMISSION

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CONTENTS

FOREWORD	4
1 Scope	6
2 Normative references	6
3 Terms and definitions	7
3.1 Terms relating specifically to the vending process	7
3.2 Terms relating to the tests	8
4 General requirements	9
4.1 Applicability	9
4.2 Test room	9
4.3 Instruments, measuring equipment and measuring accuracy	10
4.4 Power supply	10
5 Conditions for the tests	10
5.1 General	10
5.2 Equipment location for test	11
5.3 Energy consumption and recording	11
5.4 M-cans	11
5.5 Product loading for test	11
5.6 Product storage temperatures	12
5.7 Stabilization	12
6 Energy consumption measurement	12
6.1 General	12
6.2 Loading and pull-down test	13
6.2.1 Test procedure	13
6.2.2 Loading for loading and pull-down test	13
6.2.3 Measurement for loading and pull-down test	14
6.3 Ready mode, energy-saving mode and recovery period measurements	14
6.3.1 General	14
6.3.2 Test procedure	15
6.3.3 Measurement	15
6.4 Measurement of the net volume	16
7 Calculations – Energy consumption	16
8 Marking plate	17
Annex A (informative) Test timeline	18
Annex B (informative) Test report template	19
Bibliography	23
Figure A.1 – Test timeline	18
Figure B.1 – Location of machine	20
Figure B.2 – Spiral machine	21
Figure B.3 – Glass fronted can/bottle machine	21
Figure B.4 – Carousel or drum machine	22
Figure B.5 – Combined snack and vertical stack can machine	22

Table 1 – Vending machine categories	6
Table 2 – Description of vending machine categories.....	9
Table 3 – Product loading temperatures for reloading and pull-down test.....	14
Table 4 – Permitted loading times	14
Table B.1 – Data to be reported	19

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ENERGY CONSUMPTION OF VENDING MACHINES

FOREWORD

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International Standard IEC 63252 has been prepared by IEC technical committee 59: Performance of household and similar electrical appliances.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
59/730/FDIS	59/736/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

ENERGY CONSUMPTION OF VENDING MACHINES

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 of machines shown in Table 1.

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 and 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 document:

- 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 can also be made individually for the study of a particular characteristic.

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

2 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.

IEC 60335-1, *Household and similar electrical appliances – Safety – Part 1: General requirements*

IEC 60335-2-75, *Household and similar electrical appliances – Safety – Part 2-75: Particular requirements for commercial dispensing appliances and vending machines*

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*

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

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1 Terms relating specifically to the vending process

3.1.1

cabinet

enclosure within a vending machine in which the product is held ready to be sold

3.1.2

automatic energy-saving mode

mode of a vending machine in which energy-reducing measures are automatically applied as a result of operational controls fitted by the manufacturer

Note 1 to entry: These could include light or movement sensors.

Note 2 to entry: Timers or other controls that can be adjusted by the company operating the machine do not qualify as automatic, unless they have a permanent minimum configuration level that cannot be overridden by the company, in which case they may be operational at their minimum configuration for the automatic energy-saving mode test.

3.1.3

health control cut-out function

function fitted in machines intended entirely for the storage and vending of perishable foodstuffs, or with a compartment for the storage and vending of such foodstuffs, that prevents vending of foodstuff if the machine or compartment experiences a time/temperature condition outside that permitted under food safety regulations

3.1.4

loading

filling

process of putting products into the vending machine

Note 1 to entry: This can require the door of the machine to be open.

3.1.5

manufacturer's instructions

instructions that accompany the machine, including advice on installation of the machine at the final operating location

3.1.6

perishable foodstuffs

foods, such as dairy products, sandwiches and plated meals that are required to be kept chilled under food safety regulations

Note 1 to entry: Requirements vary between countries.